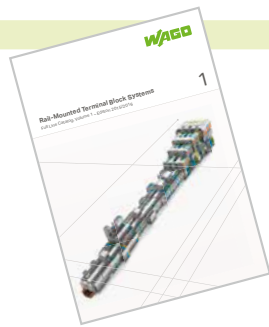




# WAGO Full Line Catalogs



## Volume 1, Rail-Mounted Terminal Block Systems

- Rail-Mounted Terminal Blocks
- Rail-Mounted Terminal Blocks with Pluggable Connector (X-COM®-SYSTEM and X-COM®S-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



## Volume 2, PCB Terminal Blocks and Connectors

- PCB Terminal Blocks
- SMD PCB Terminal Blocks
- MULTI CONNECTION SYSTEM (MCS)
- Pluggable PCB Terminal Blocks
- Feedthrough Terminal Blocks
- Specialty Connectors
- Empty Housings



## Volume 3, Automation Technology

- Software
- Operating & Monitoring – PERSPECTO®
- Controllers
- Modular I/O-SYSTEM, IP20/IP67
- Industrial Switches
- Radio Technology, TO-PASS® Telecontrol Technology
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors













## Volume 4, Interface Electronic

- Relay and Optocoupler Modules
- JUMPFLEX® Signal Conditioners and Isolation Amplifiers
- Current and Energy Measurement Technology
- EPSITRON® Power Supply System
- Interface Modules and System Wiring
- Overvoltage Protection
- Interface Modules with Specialty Functions
- Empty Housings



## Volume 5, WINSTA® – The Pluggable Connection System

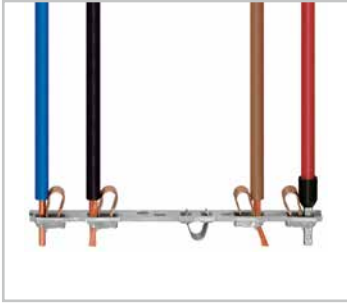
- WINSTA® MINI – Pluggable Connectors
- WINSTA® MINI special – Pluggable Connectors
- WINSTA® MIDI – Pluggable Connectors
- WINSTA® MIDI special – Pluggable Connectors
- WINSTA® MAXI – Pluggable Connectors
- WINSTA® RD – Cable Assemblies
- WINSTA® KNX – Pluggable Connectors
- WINSTA® IDC – Flat Cable Systems
- WINSTA® – Distribution Boxes

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	<b>Power Supply Connectors for Lighting and Equipment</b> 272, 293, 294, 862 Series	10	1
	<b>Lighting Connectors – Linect®</b> 294 Series Linect® <b>Pluggable Connectors – Linect®</b> 770 Series	36	2
	<b>WINSTA® - The Pluggable Connection System</b> MINI, MIDI, KNX	56	3
	<b>Pluggable Lighting Connectors</b> 267, 272, 277, 873 Series	254	4
	<b>MCS – MULTI CONNECTION SYSTEM</b> MICRO, MINI, MIDI	278	5
	<b>PCB Terminal Blocks</b> 235, 236, 250, 251, 253, 256, 735, 744, 804, 805, 2059, 2060, 2061 Series	380	6
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	<b>Technical Section</b> Electrical Engineering Laboratory, Technical Information, Approvals - User Guide, Item Number Index, WAGO Addresses	520	10

## Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions:

### PUSH-IN CAGE CLAMP®



Push-in CAGE CLAMP® terminates the following copper conductors:  
solid



stranded



fine-stranded,  
also with tinned  
single strands



fine-stranded,  
tip-bonded



fine-stranded,  
with ferrule  
(gastight crimped)



fine-stranded,  
with pin terminal  
(gastight crimped)

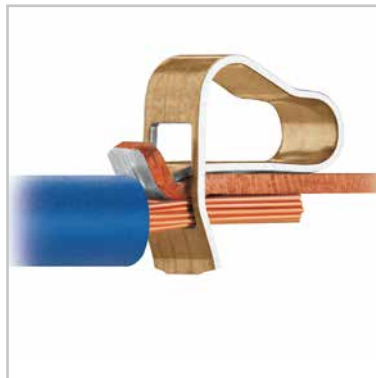
### The universal connection with an additional advantage: Push-in connection

Terminate solid and stranded, as well as ferruled conductors, by simply pushing them in – no operating tool needed.

Easily terminate all conductor types:

- Open the clamping unit
- Insert conductor
- Release the clamp – done!

### CAGE CLAMP®



CAGE CLAMP® terminates the following copper conductors:  
solid



stranded



fine-stranded,  
also with tinned  
single strands



fine-stranded,  
tip-bonded



fine-stranded,  
with ferrule  
(gastight crimped)



fine-stranded,  
with pin terminal  
(gastight crimped)

### The universal connection for solid, stranded and fine-stranded conductors

To use:

- Open the clamping unit
- Insert conductor
- Release the clamp – done!

## Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions:

### POWER CAGE CLAMP®



**POWER CAGE CLAMP**  
terminates the following  
copper conductors:  
solid



stranded



fine-stranded,  
also with tinned  
single strands



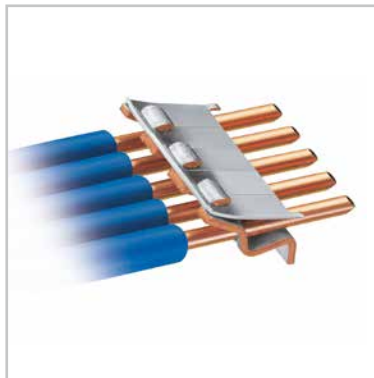
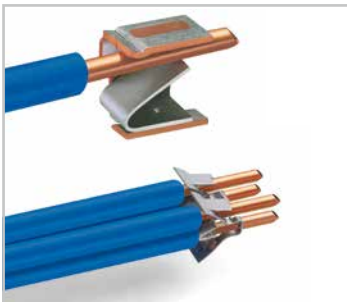
fine-stranded,  
with ferrule  
(gastight crimped)

**The universal connection for conductors larger than 2 AWG (35 mm<sup>2</sup>)**

To use:

- Open clamp by turning an Allen wrench counter-clockwise.
- Press the integrated latch to open clamping unit for hands-free wiring.
- Insert conductor.
- A small counter-clockwise rotation closes the clamp, securing conductor.

### PUSH WIRE®



**PUSH WIRE®**  
terminates the following  
copper conductors:  
solid

**PUSH WIRE® connection for solid and stranded conductors (depending on the model used)**

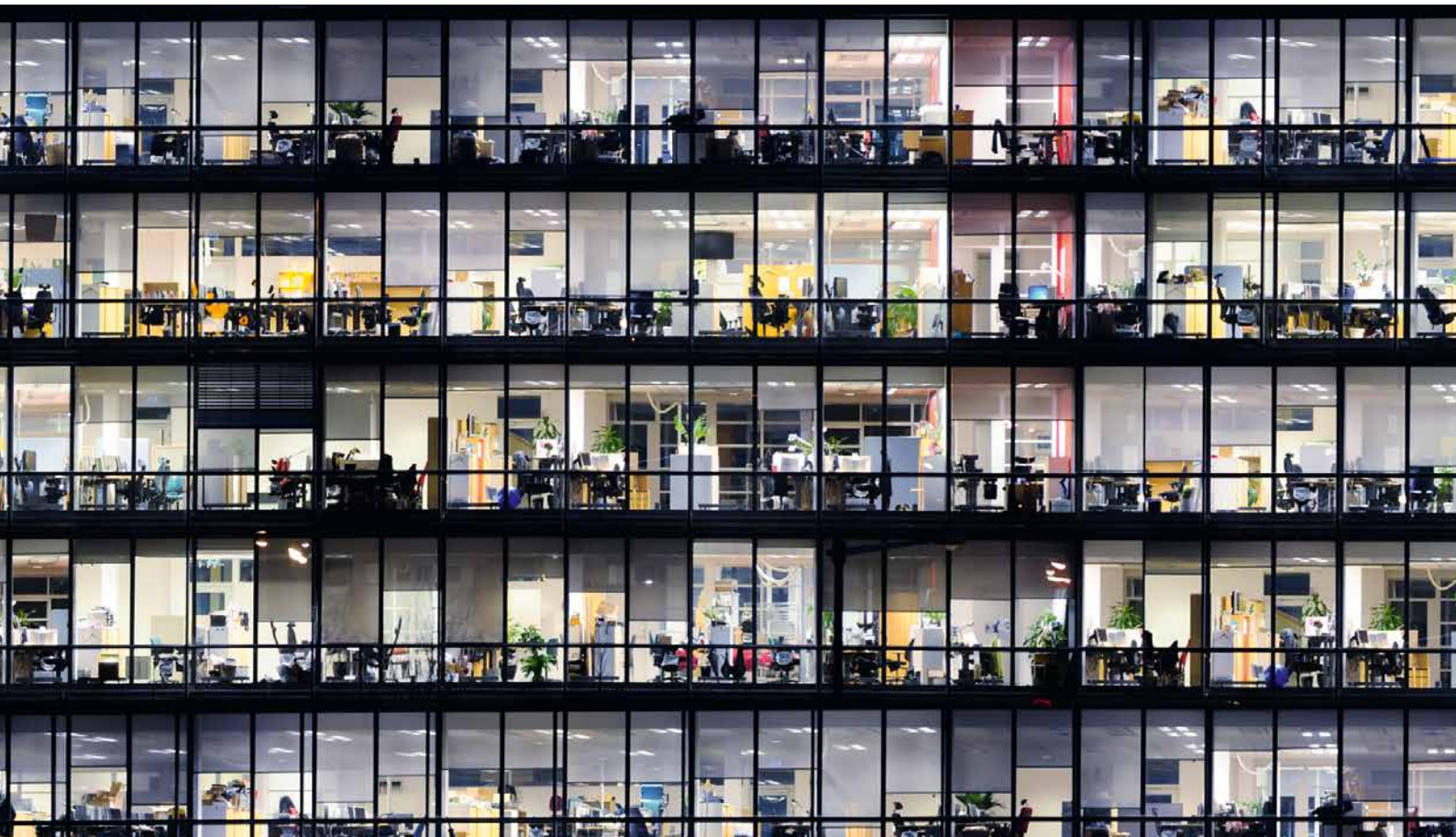
Easy to use:

Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into unit.

# WAGO Lighting Technology

Today, modern lighting technology bridges the gap between well-being and economical operation, without excluding aesthetics. Thereby, advanced connection technologies are an important part of every light. Ingeniously designed, they guarantee fast and reliable electrical connection, as well as trouble-free operation over the entire lifetime of the lights.

With innovative products, WAGO creates new connection technologies for artificial lighting – via industry-proven, tool-free and maintenance-free CAGE CLAMP® technology. They also provide added value through cost-effectiveness and high quality standard, achieved by WAGO via certified manufacturing processes according to DIN ISO 9001.



Skillfully set up lighting scenes with WAGO: e.g., when installing technical lights, electronic control gears, LED modules (which will become increasingly significant in the future), or custom solutions for luminaire trunking systems. You, too, can benefit from well-established connection systems, that are not only preferred as standard by leading manufacturers, but also by planners, electrical installers, system engineers and operators.

# Highlights in Connection Technology

## WAGO provides you with the right connection technology for every lighting application

### Luminaire trunking systems

Luminaire trunking systems provide maximum adaptability and numerous combination possibilities.



### Technical lights

Due to highly diverse mounting and lighting types, these lights provide optimum illumination of entrance areas and walkways.



### Residential luminaires

Residential luminaires offer a wide range of decorative interior lights – suitable for every housing situation and style.



### Electronic ballasts (ECGs)

WAGO provides the right connection technology for integrated or independent electronic ballasts (ECGs).



### Light management

Residential and commercial buildings account for more than 40% of total energy consumption. Building automation contributes to considerable gains in "energy-efficiency."



### LED

LED technology opens up new possibilities for designing LED lights.



### Linect®

The universal lighting connection system features the standardized Linect® interface that can be used by any lighting manufacturer worldwide.



## More than 50 Years of Innovation



### 1951

The First  
WAGO Spring Clamp  
Terminal Block

Since its establishment in 1951, WAGO has pioneered multiple innovative connection systems for both electrical and electronic engineering applications. The idea for a screwless termination system was born in 1951; the first terminal blocks with spring clamp termination technology were presented at the Hanover Fair the same year.



### 1974

WAGO PUSH WIRE®  
Connector for Junction  
Boxes

Precisely designed and manufactured, spring clamp terminal blocks not only guarantee a faster and easier connection, but also offer greater safety because the contact quality is largely independent of operator skill.



### 1977

CAGE CLAMP® Rail-  
Mounted Terminal Blocks

Now, WAGO is meeting virtually all of the industry's needs as both the leader in Spring Pressure Connection Technology and a pioneer in automation technology. In 1977, the success story of the CAGE CLAMP® began with "vibration-proof, fast and maintenance-free connections." Safe operation for countless devices, systems and installation depends on the unconditional reliability of our products.

### 1985

Pluggable Electronic Modules  
for Rail-Mounted Terminal Blocks



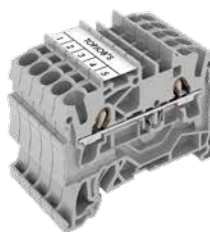
### 1998

POWER  
CAGE CLAMP®



### 2003

TOPJOB® S  
Rail-Mounted Terminal  
Blocks



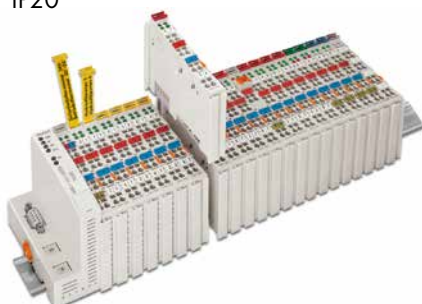
### 2005

WAGO SPEEDWAY 767,  
Modular I/O-SYSTEM, IP67



### 1995

WAGO-I/O-SYSTEM, 750/753  
Series Modular I/O-System,  
IP20



### 2001

WINSTA® -  
The Pluggable Connection  
System



### 2004

CLASSIC Splicing  
Connectors for All  
Conductor Types,  
222 Series



### 2006

WAGO JUMPFLEX® -  
Signal Conditioners and  
Pluggable Relay Modules





# Recognized and Approved Worldwide



2008

TO-PASS® - Scalable  
Telecontrol Technology



2010

PERSPECTO® -  
Touch and Control Panels



2014

COMPACT Splicing  
Connectors for All  
Conductor Types,  
221 Series



2015

PFC200 -  
Controllers



2009

X-COM®S-SYSTEM



2010

PUSH WIRE®  
Connectors for  
Junction Boxes,  
2273 Series



2014

Shield Clamping  
Saddles



2015

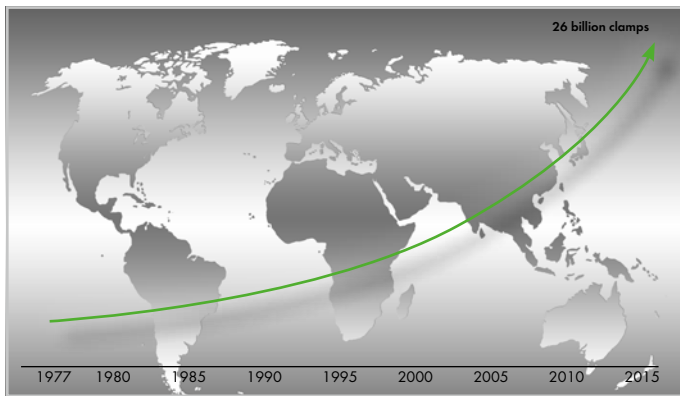
e!COCKPIT Software  
Integrated Engineering



## From Pioneer to Leader

When the first screwless terminal blocks debuted at the Hanover Fair in 1951, they represented a significant advancement in manufacturing. At the time, manufacturing terminal blocks was not possible because the carbon steel available then did not meet the high quality requirements.

However, WAGO was quite active in the years leading up to the 1977 debut of the first series of CAGE CLAMP®-equipped rail-mounted terminal blocks from 28 ... 6 AWG (0.08 ... 16 mm<sup>2</sup>).



Number of CAGE CLAMP® springs produced to date

With numerous developments – from the Suprafix banana plug product family up to the first range of rail-mounted terminal blocks for conductors up to 6 AWG (16 mm<sup>2</sup>) – WAGO has firmly established itself as an innovator.

With this reputation and the desire for “vibration-proof, fast and maintenance-free” connections, CAGE CLAMP® quickly outperformed all previous connection technologies to become a worldwide industrial standard.

Today, CAGE CLAMP® technology has several imitators, yet it remains unmatched. And WAGO continues to set new standards with further developments, such as CAGE CLAMP® Compact (1996) for ultra-compact applications and the WAGO POWER CAGE CLAMP (1998) for a rated cross-section up to 350 kcmil (185 mm<sup>2</sup>). Figures speak for themselves: More than 26 billion CAGE CLAMP® springs have been sold worldwide, and every day, millions of clamps are added to that number.

In 1951, WAGO was founded in Minden, Germany. Now, the WAGO Group consists of 32 companies with more than 6,700 employees, worldwide operations and global sales of 706 million euros (2015).

The first factory was located in Minden, Germany, which is also our headquarters. As part of WAGO’s global expansion, additional factories have been built: 1977 in Domdidier (Switzerland), 1979 in Milwaukee (USA), 1995 in Sondershausen (Germany) and Delhi (India), 1997 in Tianjin (China) and Wroclaw (Poland).

Products manufactured locally for domestic and foreign markets create the starting point for localized distribution networks that cover WAGO’s complete product portfolio. Such organization enables WAGO subsidiaries and sales offices to develop and deliver custom-designed products that comply with local regulations and meet local demand. More than half of WAGO’s global staff of 6,700 is employed outside of Germany.

# WAGO Worldwide



WAGO Minden, Germany – Global Headquarters



WAGO Sondershausen, Germany



WAGO Switzerland



WAGO Poland



WAGO India



WAGO USA



WAGO China



# Power Supply Connectors for Lighting and Equipment



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## Power Supply Connectors for Lighting and Equipment

294 Series

12



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## Dividable Terminal Strips and Compact Terminal Blocks

272 Series

28



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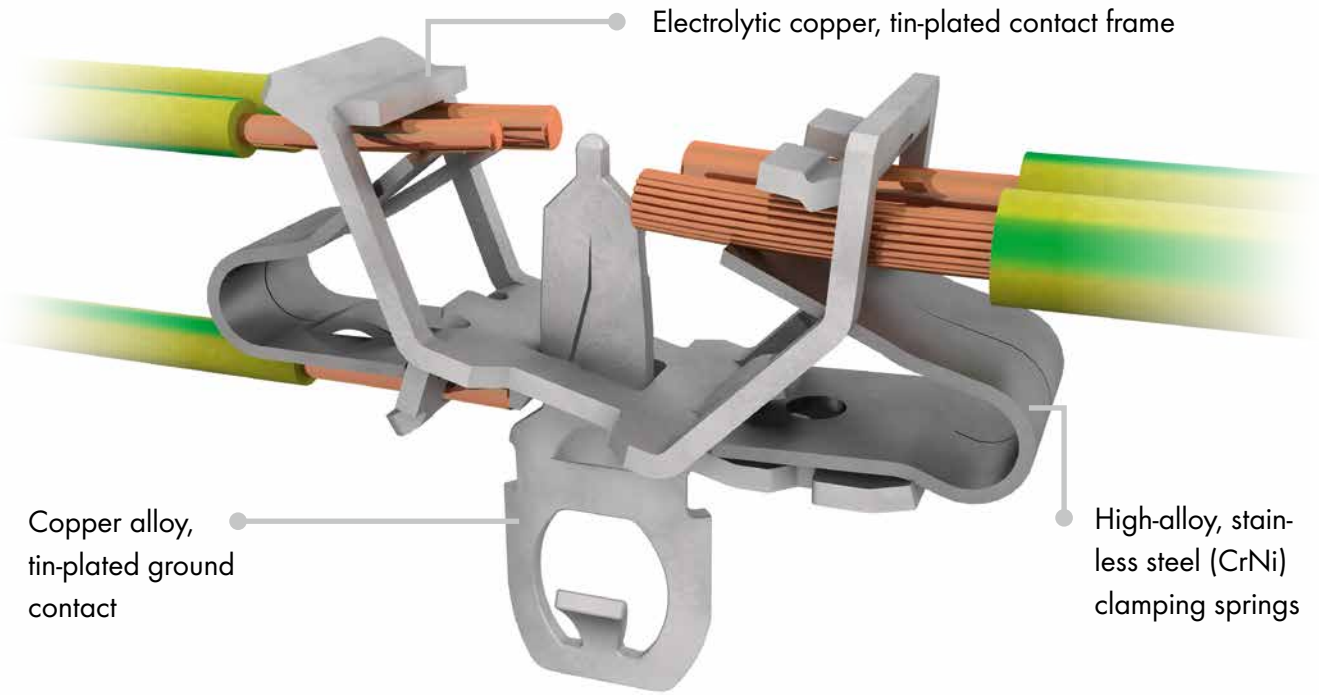
## 4-Conductor, Chassis-Mount Terminal Strips

862 Series

32

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Contact Technology:



**Internal connection:**

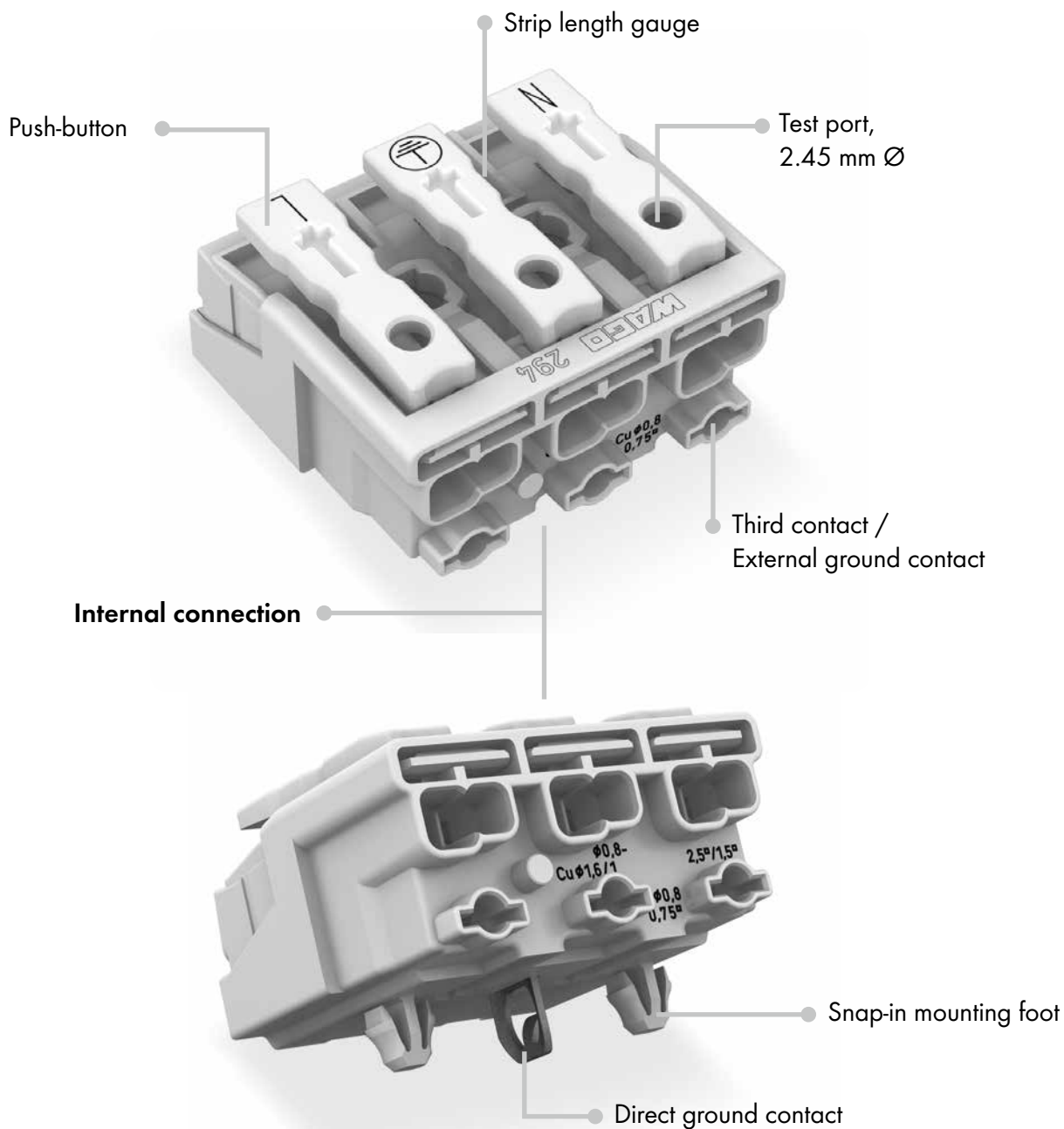
PUSH WIRE® for internal wiring with solid conductors.

<b>EUROPE</b>
1 x 0.5 ... 2.5 mm <sup>2</sup> "sol."
1 x 0.5 ... 1.5 mm <sup>2</sup> "sol."
1 x 0.5 ... 0.75 mm <sup>2</sup> "sol."
<b>AMERICA</b>
1 x AWG 18 ... 14 "sol."
1 x AWG 18 ... 16 "sol."
1 x AWG 18 "sol."
<b>JAPAN</b>
1 x 0.8 ... 1.6 mm $\phi$ "sol."
1 x 0.8 ... 1.0 mm $\phi$ "sol."
1 x 0.8 mm $\phi$ "sol."

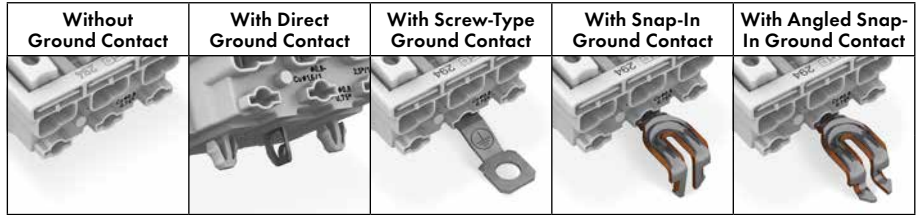
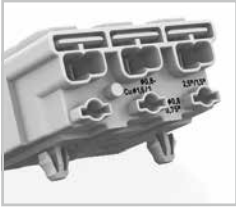
**External connection:**


Push-in CAGE CLAMP® for power supply connections for all conductor types.


<b>EUROPE</b>
2 x 0.5 ... 2.5 mm <sup>2</sup> "sol., str., f-str."
<b>AMERICA</b>
2 x AWG 18 ... 12 "sol."
2 x AWG 18 ... 14 "str., f-str."
<b>JAPAN</b>
2 x 0.8 ... 2.0 mm $\phi$ "sol."
2 x 0.5 ... 2.0 mm <sup>2</sup> "str., f-str."





# 294 Series With Two Snap-In Mounting Feet



Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
 2	without	294-5002	- - -	- - -	- - -	- - -
	N L	294-5012	- - -	- - -	- - -	- - -
	N' L'	294-5022	- - -	- - -	- - -	- - -
	DA- DA+	294-5032	- - -	- - -	- - -	- - -
	- +	294-5072	- - -	- - -	- - -	- - -
	1 N	294-5052	- - -	- - -	- - -	- - -
	2 1	294-5042	- - -	- - -	- - -	- - -

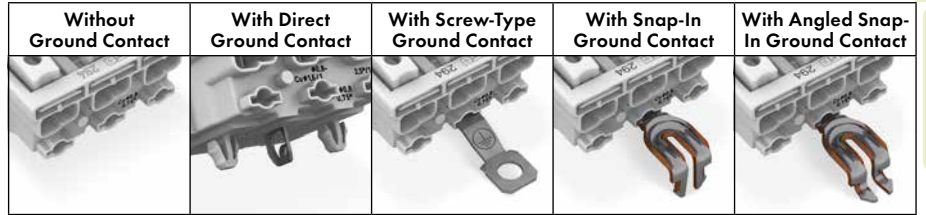
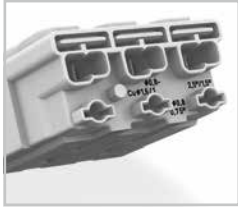
 3	without	294-5003	- - -	- - -	- - -	- - -
	N ⊕ L	294-5013	294-5113	294-5413	294-5213	294-5313
	N' ⊕ L'	294-5023	294-5123	294-5423	294-5223	294-5323
	1 ⊕ N	294-5053	294-5153	294-5453	294-5253	294-5353
	3 2 1	294-5043	- - -	- - -	- - -	- - -

 4	without	294-5004	- - -	- - -	- - -	- - -
	1/L' 2/L ⊕ N	294-5024	294-5124	294-5424	294-5224	294-5324
	1 2 ⊕ N	294-5014	294-5114	294-5414	294-5214	294-5314
	4 3 2 1	294-5044	- - -	- - -	- - -	- - -

 5	without	294-5005	- - -	- - -	- - -	- - -
	L3 L2 L1 ⊕ N	294-5015	- - -	294-5415	294-5215	294-5315
	L' N' L ⊕ N	294-5025	- - -	294-5425	294-5225	294-5325
	DA+ DA- L ⊕ N	294-5035	- - -	294-5435	294-5235	294-5335
	DA- N ⊕ L DA+	294-5075	294-5175	294-5475	294-5275	294-5375
	3 N ⊕ 1 2	294-5055	294-5155	294-5455	294-5255	294-5355
	5 4 3 2 1	294-5045	- - -	- - -	- - -	- - -



# 294 Series Without Snap-In Mounting Feet



Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
2	without	294-4002	- - -	- - -	- - -	- - -
	N L	294-4012	- - -	- - -	- - -	- - -
	N' L'	294-4022	- - -	- - -	- - -	- - -
	DA- DA+	294-4032	- - -	- - -	- - -	- - -
	- +	294-4072	- - -	- - -	- - -	- - -
	1 N	294-4052	- - -	- - -	- - -	- - -
	2 1	294-4042	- - -	- - -	- - -	- - -

3	without	294-4003	- - -	- - -	- - -	- - -
	N ⊕ L	294-4013	- - -	294-4413	294-4213	294-4313
	N' ⊕ L'	294-4023	- - -	294-4423	294-4223	294-4323
	1 ⊕ N	294-4053	- - -	294-4453	294-4253	294-4353
	3 2 1	294-4043	- - -	- - -	- - -	- - -

4	without	294-4004	- - -	- - -	- - -	- - -
	1/L' 2/L ⊕ N	294-4024	- - -	294-4424	294-4224	294-4324
	1 2 ⊕ N	294-4014	- - -	294-4414	294-4214	294-4314
	4 3 2 1	294-4044	- - -	- - -	- - -	- - -

5	without	294-4005	- - -	- - -	- - -	- - -
	L3 L2 L1 ⊕ N	294-4015	- - -	294-4415	294-4215	294-4315
	L' N' L ⊕ N	294-4025	- - -	294-4425	294-4225	294-4325
	DA+ DA- L ⊕ N	294-4035	- - -	294-4435	294-4235	294-4335
	DA- N ⊕ L DA+	294-4075	- - -	294-4475	294-4275	294-4375
	3 N ⊕ 1 2	294-4055	- - -	294-4455	294-4255	294-4355
	5 4 3 2 1	294-4045	- - -	- - -	- - -	- - -

6	without	294-4006	- - -	- - -	- - -	- - -

7	without	294-4007	- - -	- - -	- - -	- - -

# Power Supply Connectors for Lighting and Equipment 294 Series



- External connection of solid, stranded and fine-stranded connectors
- Universal conductor termination (AWG, metric)
- Third contact located at the bottom of internal connector end
- Strain relief plate can be retrofitted

**Technical data:**

	IEC/EN 60998-1	IEC/EN 60998-2-2	
Rating per	IEC/EN 60998-1	IEC/EN 60998-2-2	
Overvoltage category	II	II	
Pollution degree	2	2	
Rated voltage	500 V	500 V	
Rated surge voltage	4 kV	4 kV	
Nominal current	24 A	24 A	
Temperature rating	T 85	T 85	

**Conductor data (external connection):**

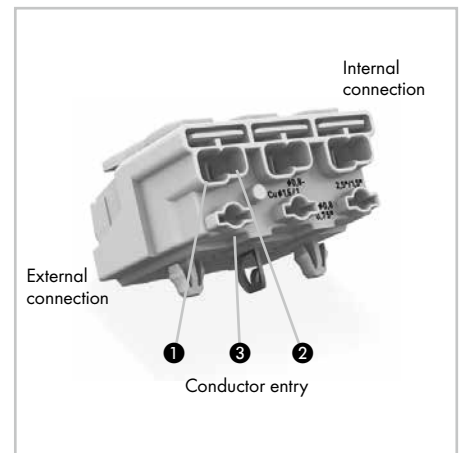
Connection technology	<b>Push-in CAGE CLAMP®</b>
Conductor size: solid, stranded or fine-stranded	2 x 0.5 ... 2.5 mm <sup>2</sup>
Conductor size: with ferrule	2 x 0.5 ... 1.5 mm <sup>2</sup>
AWG: solid	2 x 18 ... 12
AWG: fine-stranded and stranded	2 x 18 ... 14
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

**Conductor data (internal connection):**

Connection technology	<b>PUSH WIRE®</b>
<b>Conductor entry ①</b>	
Conductor size: solid	0.5 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
Conductor size: fine-stranded	0.5 ... 1.0 mm <sup>2</sup> (with insulated ferrule)
AWG: solid	18 ... 14
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
<b>Conductor entry ②</b>	
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1.0 mm <sup>2</sup> (with uninsulated ferrule)
Conductor size: fine-stranded	0.5 ... 0.75 mm <sup>2</sup> (with insulated ferrule)
AWG: solid	18 ... 16
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
<b>Conductor entry ③</b>	
Conductor size: solid	0.5 ... 0.75 mm <sup>2</sup>
AWG: solid	18
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

**Material data:**

Material group	IIIa
Insulating material	Polycarbonate (PC)
Temperature stability	Relative temperature index (RTI) of 120 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>C</sub> )
Contact plating	tin-plated
16 mm-high versions are available upon request.	



**Accessories:**

**Page:**

Operating tools	496
Disconnection tool	25
Assembly tool	25
Strain relief for multicore cables	25
Strain relief for single strands	25
Pin terminals	519

# Power Supply Connectors for Lighting and Equipment

## 2-Pole

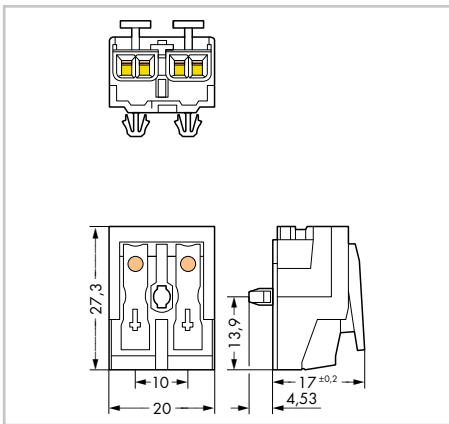
### 294 Series

PUSH-IN CAGE CLAMP®

1  
17

1

Without ground contact



#### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit
<b>Power supply connector for lighting and equipment without ground contact, 2-pole</b>		
without	294-5002	1000
N L	294-5012	1000
N' L'	294-5022	1000
DA- DA+	294-5032	1000
- +	294-5072	1000
2 1	294-5042	1000
1 N	294-5052	1000

#### Versions without snap-in mounting feet:

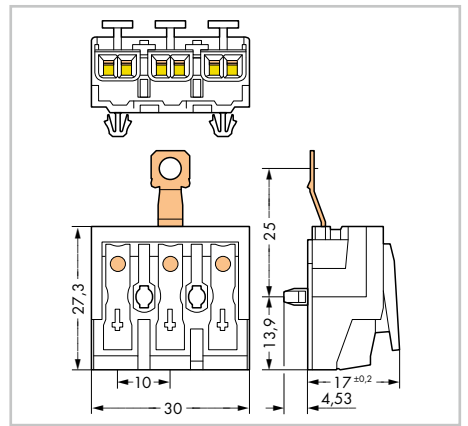
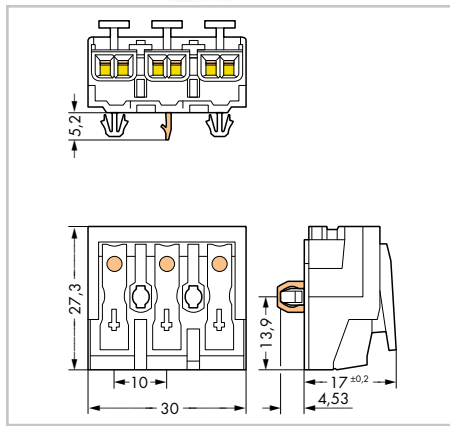
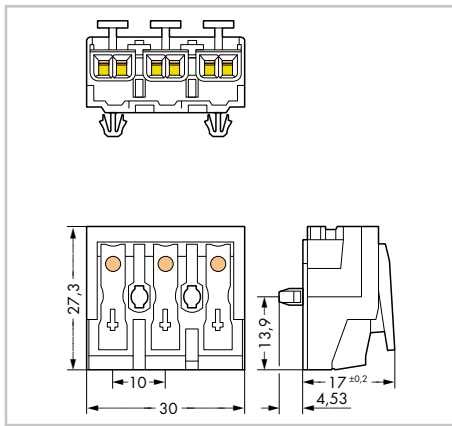
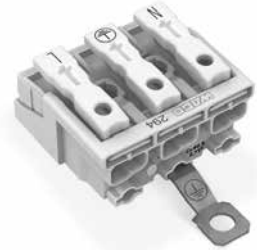
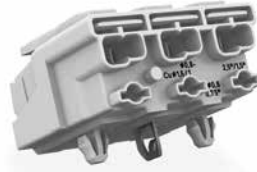
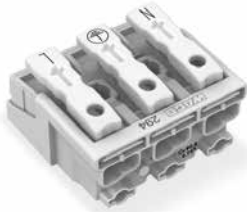
Marking	Item No.	Pack. Unit
<b>Power supply connector for lighting and equipment without ground contact, 2-pole</b>		
without	294-4002	1000
N L	294-4012	1000
N' L'	294-4022	1000
DA- DA+	294-4032	1000
- +	294-4072	1000
2 1	294-4042	1000
1 N	294-4052	1000

# Power Supply Connectors for Lighting and Equipment

## 3-Pole

### 294 Series

Without ground contact	With direct ground contact	With screw-type ground contact
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#### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 3-pole			Power supply connector for lighting and equipment with direct ground contact, 3-pole			Power supply connector for lighting and equipment with screw-type ground contact, 3-pole		
without	294-5003	500						
N ⊕ L	294-5013	500	N ⊕ L	294-5113	500	N ⊕ L	294-5413	500
N' ⊕ L'	294-5023	500	N' ⊕ L'	294-5123	500	N' ⊕ L'	294-5423	500
1 ⊕ N	294-5053	500	1 ⊕ N	294-5153	500	1 ⊕ N	294-5453	500
3 2 1	294-5043	500						

#### Versions without snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 3-pole						Power supply connector for lighting and equipment with screw-type ground contact, 3-pole		
without	294-4003	500						
N ⊕ L	294-4013	500				N ⊕ L	294-4413	500
N' ⊕ L'	294-4023	500				N' ⊕ L'	294-4423	500
1 ⊕ N	294-4053	500				1 ⊕ N	294-4453	500
3 2 1	294-4043	500						

Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.

# Power Supply Connectors for Lighting and Equipment

## 3-Pole

### 294 Series

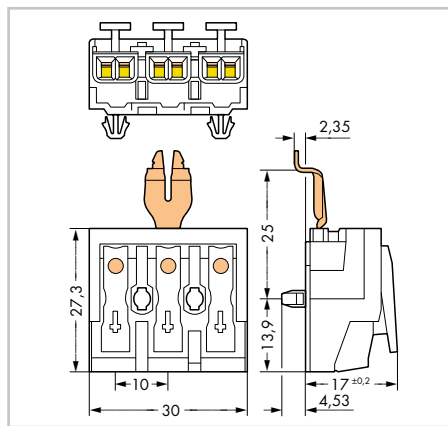
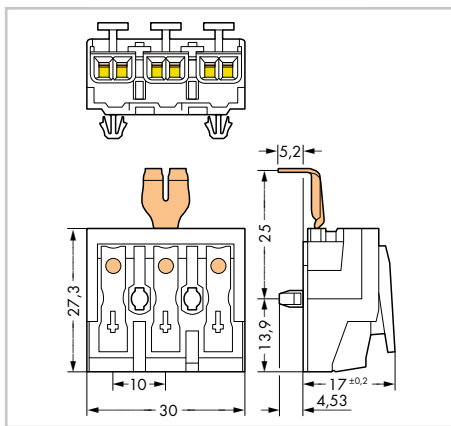
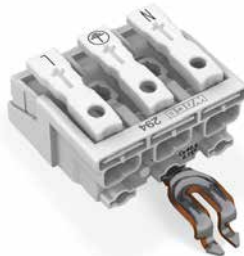
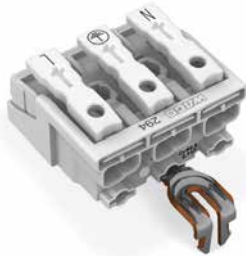
PUSH-IN CAGE CLAMP®

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With snap-in ground contact

With angled snap-in ground contact



#### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment with snap-in ground contact, 3-pole			Power supply connector for lighting and equipment with angled snap-in ground contact, 3-pole		
N ⊕ L	294-5213	500	N ⊕ L	294-5313	500
N' ⊕ L'	294-5223	500	N' ⊕ L'	294-5323	500
1 ⊕ N	294-5253	500	1 ⊕ N	294-5353	500

#### Versions without snap-in mounting feet:

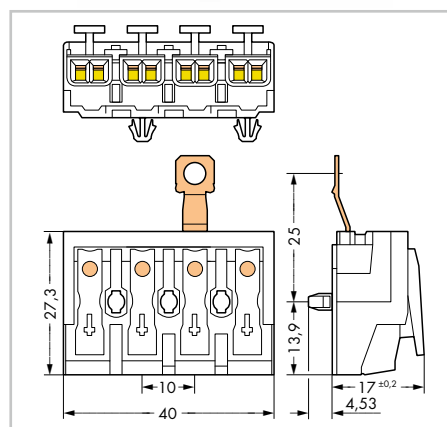
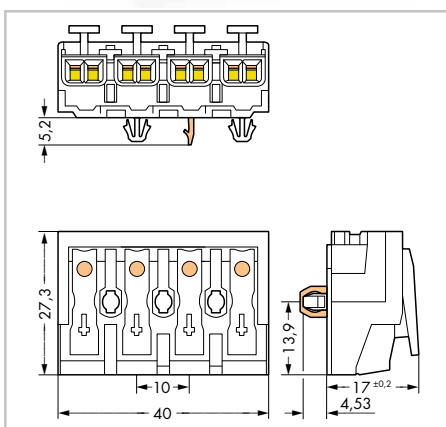
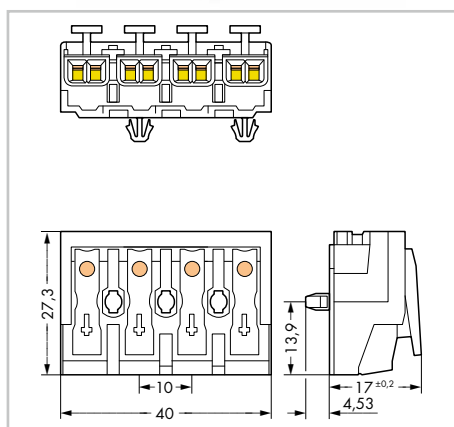
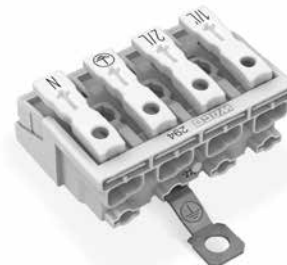
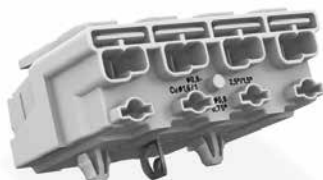
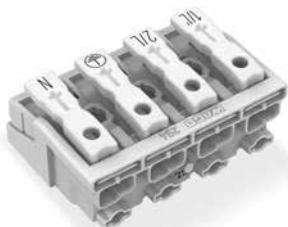
Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment with snap-in ground contact, 3-pole			Power supply connector for lighting and equipment with angled snap-in ground contact, 3-pole		
N ⊕ L	294-4213	500	N ⊕ L	294-4313	500
N' ⊕ L'	294-4223	500	N' ⊕ L'	294-4323	500
1 ⊕ N	294-4253	500	1 ⊕ N	294-4353	500

# Power Supply Connectors for Lighting and Equipment

## 4-Pole

### 294 Series

Without ground contact	With direct ground contact	With screw-type ground contact
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#### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 4-pole			Power supply connector for lighting and equipment with direct ground contact, 4-pole			Power supply connector for lighting and equipment with screw-type ground contact, 4-pole		
without	294-5004	500						
1/L' 2/L' ⊕ N	294-5024	500	1/L' 2/L' ⊕ N	294-5124	500	1/L' 2/L' ⊕ N	294-5424	500
1 2 ⊕ N	294-5014	500	1 2 ⊕ N	294-5114	500	1 2 ⊕ N	294-5414	500
4 3 2 1	294-5044	500						

#### Versions without snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 4-pole						Power supply connector for lighting and equipment with screw-type ground contact, 4-pole		
without	294-4004	500						
1/L' 2/L' ⊕ N	294-4024	500				1/L' 2/L' ⊕ N	294-4424	500
1 2 ⊕ N	294-4014	500				1 2 ⊕ N	294-4414	500
4 3 2 1	294-4044	500						

Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.

# Power Supply Connectors for Lighting and Equipment

## 4-Pole

### 294 Series

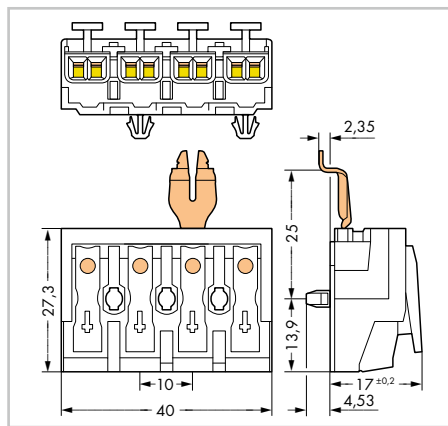
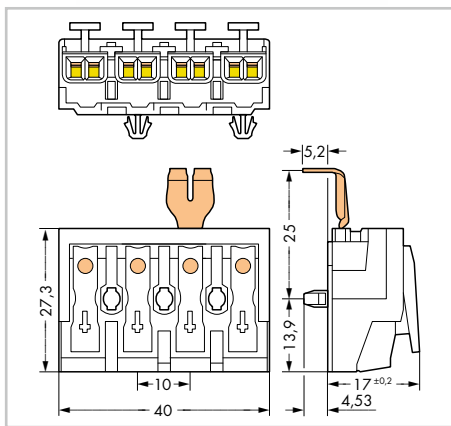
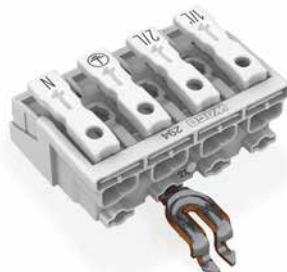
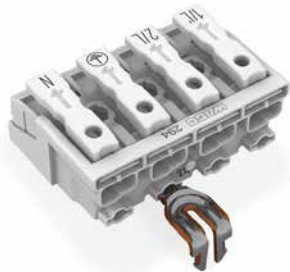
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With snap-in ground contact

With angled snap-in ground contact



#### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment with snap-in ground contact, 4-pole			Power supply connector for lighting and equipment with angled snap-in ground contact, 4-pole		
1/L' 2/L ⊕ N	294-5224	500	1/L' 2/L ⊕ N	294-5324	500
1 2 ⊕ N	294-5214	500	1 2 ⊕ N	294-5314	500

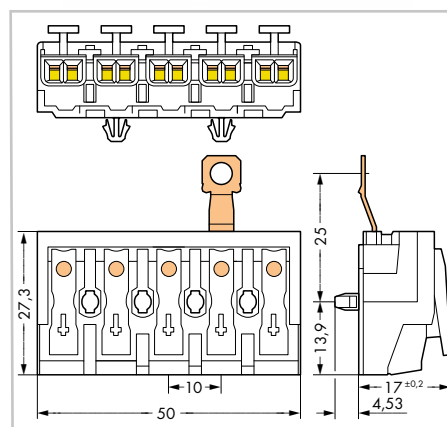
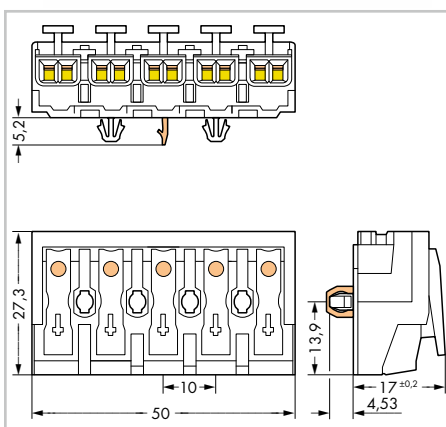
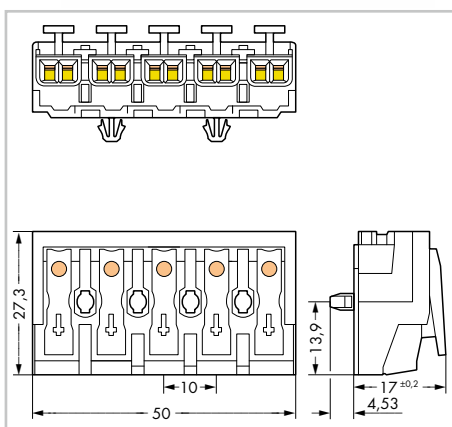
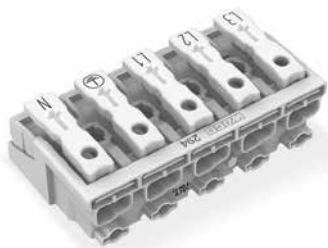
#### Versions without snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment with snap-in ground contact, 4-pole			Power supply connector for lighting and equipment with angled snap-in ground contact, 4-pole		
1/L' 2/L ⊕ N	294-4224	500	1/L' 2/L ⊕ N	294-4324	500
1 2 ⊕ N	294-4214	500	1 2 ⊕ N	294-4314	500

# Power Supply Connectors for Lighting and Equipment

## 5-Pole 294 Series

Without ground contact	With direct ground contact	With screw-type ground contact
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### Versions with snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 5-pole			Power supply connector for lighting and equipment with direct ground contact, 5-pole			Power supply connector for lighting and equipment with screw-type ground contact, 5-pole		
without	294-5005	250						
L3 L2 L1 ⊕ N	294-5015	250				L3 L2 L1 ⊕ N	294-5415	250
L' N' L ⊕ N	294-5025	250				L' N' L ⊕ N	294-5425	250
DA+ DA- L ⊕ N	294-5035	250				DA+ DA- L ⊕ N	294-5435	250
DA- N ⊕ L DA+	294-5075	250	DA- N ⊕ L DA+	294-5175	250	DA- N ⊕ L DA+	294-5475	250
3 N ⊕ 1 2	294-5055	250	3 N ⊕ 1 2	294-5155	250	3 N ⊕ 1 2	294-5455	250
5 4 3 2 1	294-5045	250						

### Versions without snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Power supply connector for lighting and equipment without ground contact, 5-pole						Power supply connector for lighting and equipment with screw-type ground contact, 5-pole		
without	294-4005	250						
L3 L2 L1 ⊕ N	294-4015	250				L3 L2 L1 ⊕ N	294-4415	250
L' N' L ⊕ N	294-4025	250				L' N' L ⊕ N	294-4425	250
DA+ DA- L ⊕ N	294-4035	250				DA+ DA- L ⊕ N	294-4435	250
DA- N ⊕ L DA+	294-4075	250				DA- N ⊕ L DA+	294-4475	250
3 N ⊕ 1 2	294-4055	250				3 N ⊕ 1 2	294-4455	250
5 4 3 2 1	294-4045	250						

Metal plate cutout for direct ground contact must be free of varnish and oxide films.  
Equipped with varnished metal plates upon request.



# Power Supply Connectors for Lighting and Equipment

## 5-Pole

### 294 Series

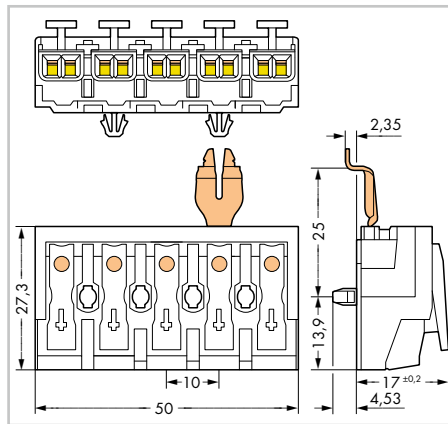
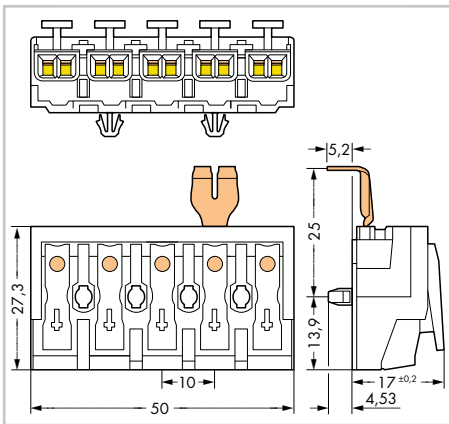
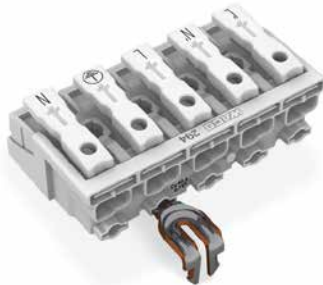
PUSH-IN CAGE CLAMP®

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With snap-in ground contact

With angled snap-in ground contact



#### Versions with snap-in mounting feet:

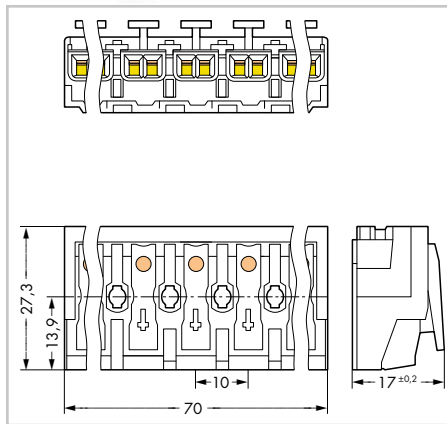
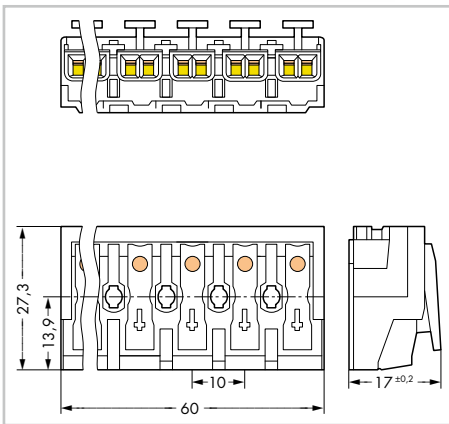
Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector with snap-in ground contact, 5-pole			Lighting connector with angled snap-in ground contact, 5-pole		
L3 L2 L1 ⊕ N	294-5215	250	L3 L2 L1 ⊕ N	294-5315	250
L' N' L ⊕ N	294-5225	250	L' N' L ⊕ N	294-5325	250
DA+ DA- L ⊕ N	294-5235	250	DA+ DA- L ⊕ N	294-5335	250
DA- N ⊕ L DA+	294-5275	250	DA- N ⊕ L DA+	294-5375	250
3 N ⊕ 1 2	294-5255	250	3 N ⊕ 1 2	294-5355	250

#### Versions without snap-in mounting feet:

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector with snap-in ground contact, 5-pole			Lighting connector with angled snap-in ground contact, 5-pole		
L3 L2 L1 ⊕ N	294-4215	250	L3 L2 L1 ⊕ N	294-4315	250
L' N' L ⊕ N	294-4225	250	L' N' L ⊕ N	294-4325	250
DA+ DA- L ⊕ N	294-4235	250	DA+ DA- L ⊕ N	294-4335	250
DA- N ⊕ L DA+	294-4275	250	DA- N ⊕ L DA+	294-4375	250
3 N ⊕ 1 2	294-4255	250	3 N ⊕ 1 2	294-4355	250

6-pole, without ground contact

7-pole, without ground contact



### Versions without snap-in mounting feet:

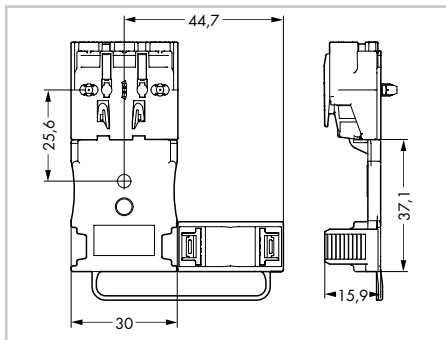
Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
	Power supply connector for lighting and equipment without ground contact, 6-pole			Power supply connector for lighting and equipment without ground contact, 7-pole	
without	294-4006	250	without	294-4007	200

# Accessories 294 Series

Strain relief plate	Disconnection tool, for removing conductors from PUSH WIRE® connections	Assembly tool
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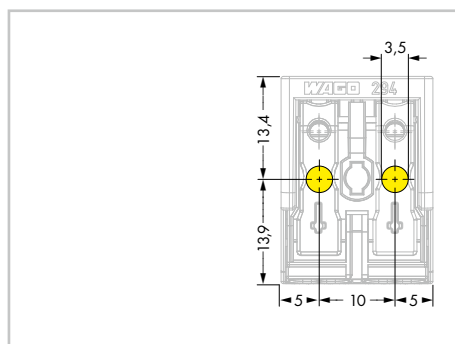
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Strain relief plate, with locking clip</b>		<b>Disconnection tool, suitable for 294 Series</b>		<b>Assembly tool, suitable for 294 Series, with two functions:</b> - For pressing the snap-in mounting feet into the mounting plate - For safe and easy fitting of ground contacts	
for multicore cable: 1 x outer diameter 5.2 ... 12 mm		<b>206-294</b>		<b>294-199</b>	
○ white	<b>294-364</b>		50		1
for flat cables and individual conductors: min. 3 x 0.5 mm <sup>2</sup> , max. 5 x 2.5 mm <sup>2</sup> or 7 x 1.5 mm <sup>2</sup>					
○ white	<b>294-384</b>				
	50				



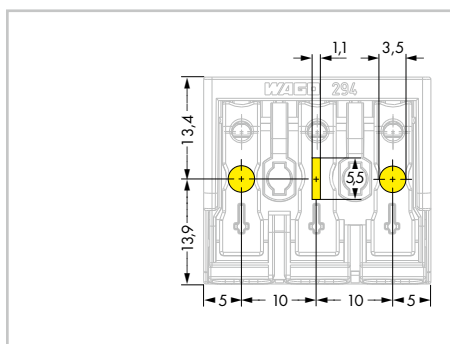
Conductor removal: Slide disconnection tool beneath the conductor and pull conductor out.

# Drilled-Hole Patterns for Snap-In Mounting Feet 294 Series

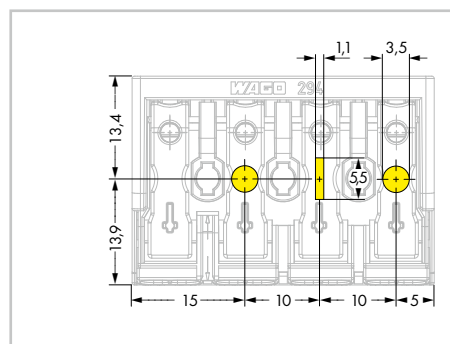
<b>2-pole</b>	<b>3-pole</b>	<b>4-pole</b>
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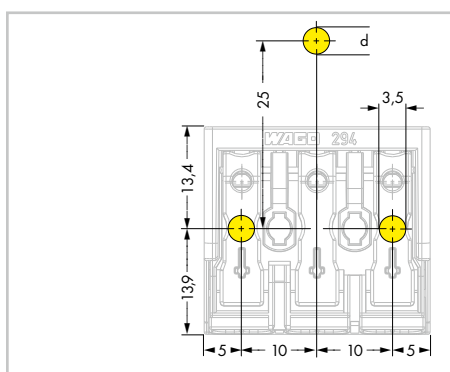
Without ground contact



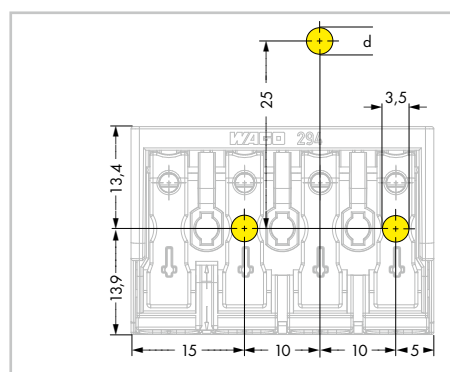
With direct ground contact



With direct ground contact

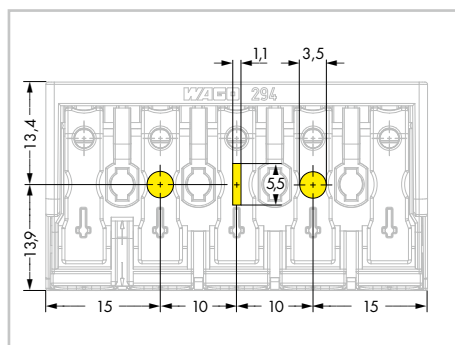


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

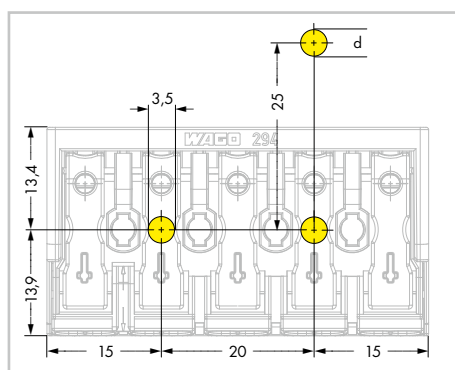
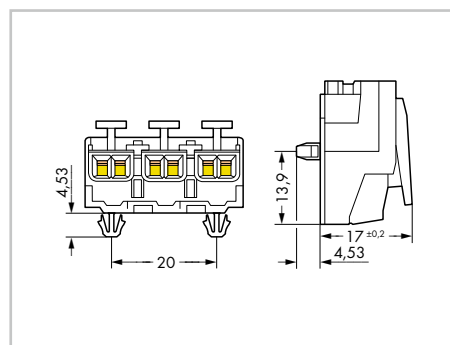
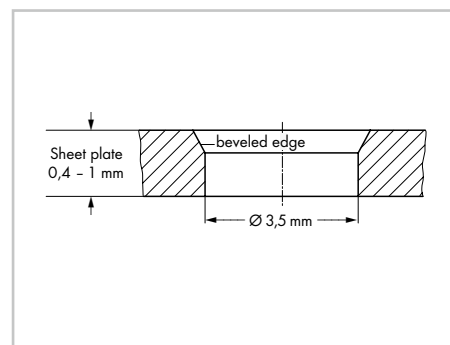


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

<b>5-pole</b>	<b>Drilled hole for snap-in mounting foot</b>	<b>Snap-in mounting foot</b>
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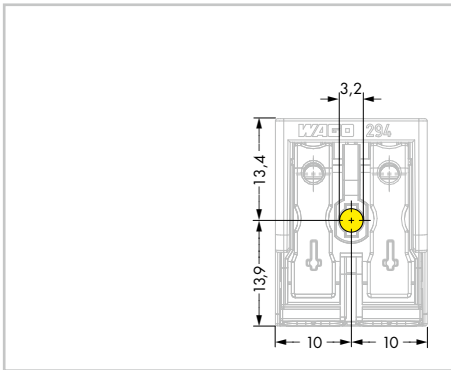
With direct ground contact



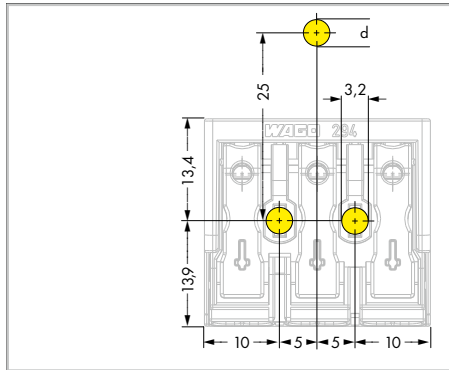
With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

# Drilled-Hole Patterns for Screw Mounting 294 Series

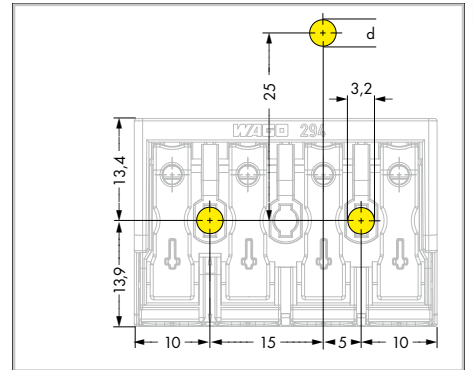
2-pole	3-pole	4-pole
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Without ground contact

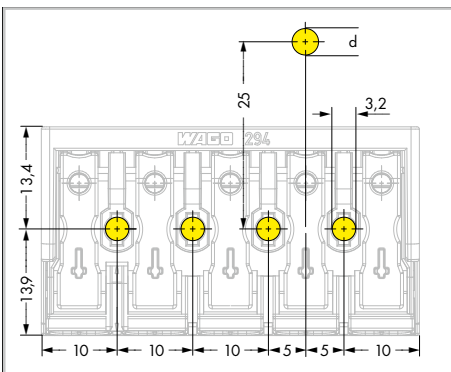


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

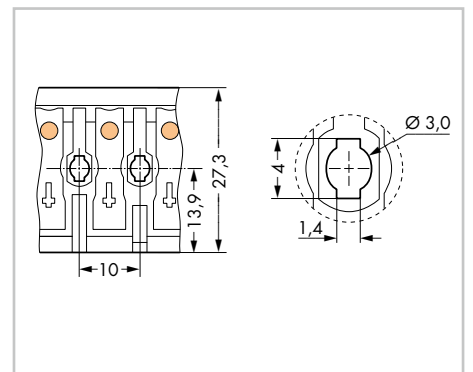
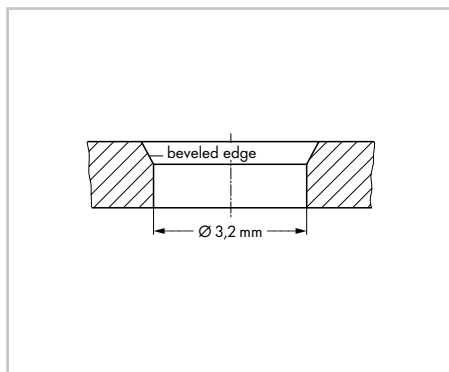


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm

5-pole	Drilled hole for screw	Hole for screw mount
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


With snap-in ground contact,  $d = 4.9$  mm  
With screw-type ground contact,  $d \leq 4.1$  mm



**Notice:** The maximum thread diameter for self-tapping screws is 3.0 mm.

# 1 Dividable Terminal Strips







<p>* gray terminal block side ** white terminal block side</p>	<p>2 x 0.5 ... 1.5 mm<sup>2</sup> "s" 2 x 0.5 ... 2.5 mm<sup>2</sup> "s" 380 V~, size B I<sub>N</sub> 18 A</p>	<p>2 x AWG 20 ... 16 "s" 2 x AWG 20 ... 14 "s" 300 V, 10 A 300 V</p>	 <p>8 ... 9 mm / 0.33 in.</p>
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- ① For tool-free installation
- ② For wiring on white terminal block side only
- ③ Factory-assembled ground contacts (please indicate position when ordering)

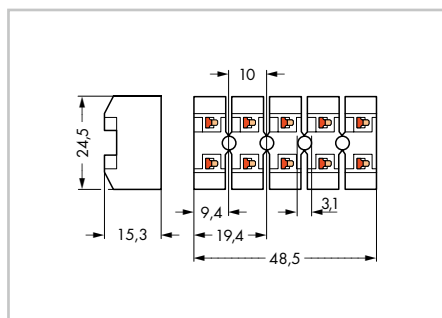
Description	Pole No.	Item No.	Pack. Unit
<b>Dividable terminal strips,</b>		<b>Terminal strips without push-buttons, white</b>	
with additional push-wire connection for	1	<b>272-101</b>	1000
0.5/0.75 mm <sup>2</sup> H07V-U (NYA) per pole,	2	<b>272-102</b>	1000
for screw or screwless mounting (WAGO pins).	3	<b>272-103</b>	500
Ground contact, for screw/riquet or snap-in contact	4	<b>272-104</b>	500
(pluggable)	5	<b>272-105</b>	500
	12	<b>272-112</b>	40
		With screw-type ground contact ③	
	3	<b>272-103/1 .-.000</b>	500
	4	<b>272-104/1 .-.000</b>	500
	5	<b>272-105/1 .-.000</b>	500
		With snap-in ground contact ③	
	3	<b>272-103/2 .-.000</b>	500
	4	<b>272-104/2 .-.000</b>	500
	5	<b>272-105/2 .-.000</b>	500

## Accessories (For marking accessories, see Section 3)

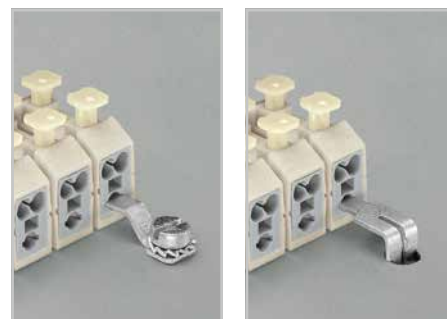
	<b>Pins,</b> 1 mm	<b>271-702</b>	1000
	for plate thickness 1 mm ①	<b>271-711 ①</b>	1000
	1.5 mm ①	<b>271-712 ①</b>	1000
	<b>Operating lever, loose,</b> for retrofitting	<b>271-120</b>	1000
	<b>Pin</b> green, (0.5/0.75) mm <sup>2</sup> <b>terminals, white,</b> (1/1.5) mm <sup>2</sup> insulated blue, (1.5/2.5) mm <sup>2</sup>		
	<b>Crimping tool, for</b> pin terminals, crimping range of 0.5 - 2.5 mm <sup>2</sup>		
	<b>Operating tool,</b> for terminal blocks with snap-in ground contact	<b>249-100</b>	1
	<b>Felt-tip pen,</b> for direct, permanent manual marking	<b>210-110</b>	1

## Dimensions

Pole No.	Length (mm)
1	8.5
2	18.5
3	28.5
4	38.5
5	48.5
12	118.5

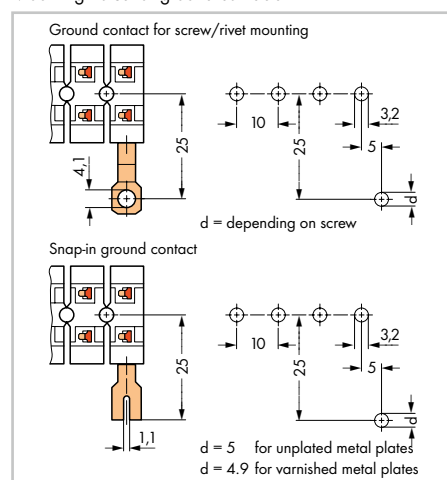


2 x 0.5 ... 1.5 mm <sup>2</sup> "s" 2 x 0.5 ... 2.5 mm <sup>2</sup> "s" 380 V~, size B I <sub>N</sub> 18 A	2 x AWG 20 ... 16 "s" 2 x AWG 20 ... 14 "s" 300 V, 10 A 300 V Ⓢ	2 x 0.5 ... 1.5 mm <sup>2</sup> "s" 2 x 0.5 ... 2.5 mm <sup>2</sup> "s" 380 V~, size B I <sub>N</sub> 18 A	2 x AWG 20 ... 16 "s" 2 x AWG 20 ... 14 "s" 300 V, 10 A 300 V Ⓢ
8 ... 9 mm / 0.33 in.		8 ... 9 mm / 0.33 in.	

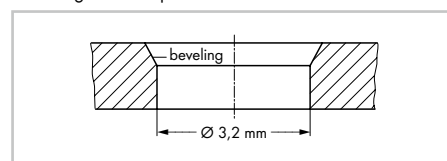


Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Terminal strips with push-buttons on both sides, white</b>			<b>Terminal strips with standard marking, without push-buttons, white</b>		
1	272-301	500		Marking: L1, N	
2	272-302	500	2	272-102/001-000	1000
3	272-303	500		Marking: ⊕, N, L1	
4	272-304	500	3	272-103/001-000	500
5	272-305	500		Marking: ⊕, N, L1, L2	
12	272-312	40	4	272-104/001-000	500
With screw-type ground contact				Marking: ⊕, N, L1, L2, L3	
3	272-303/1...000	500	5	272-105/001-000	500
4	272-304/1...000	500	Ordering examples for terminal strips with ground contacts, see below.		
5	272-305/1...000	500			
With snap-in ground contact					
3	272-303/2...000	500			
4	272-304/2...000	500			
5	272-305/2...000	500			
	271-702	1000		271-702	1000
	271-711	1000		271-711	1000
	271-712	1000		271-712	1000
	271-120	1000		271-120	1000
I <sub>N</sub> 6/8 A	209-151	100	<b>Ordering examples for 3-pole terminal strip without push-buttons:</b>		
I <sub>N</sub> 10/16 A	209-164	100	<b>a) Without printing:</b>		
I <sub>N</sub> 16/20 A	209-157	100	without ground contact 272-103		
	210-176	1	<b>b) With printing ⊕; N; L1:</b>		
	249-100	1	without ground contact 272-103/001-000		
			with snap-in ground contact 272-103/201-000		
			with screw-type ground contact 272-103/101-000		
	210-110	1			

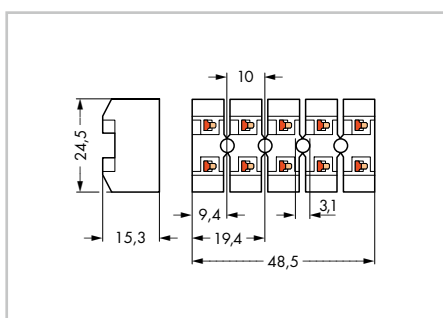
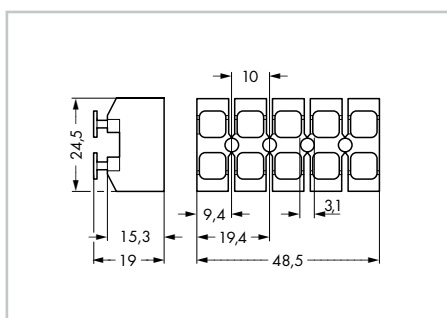
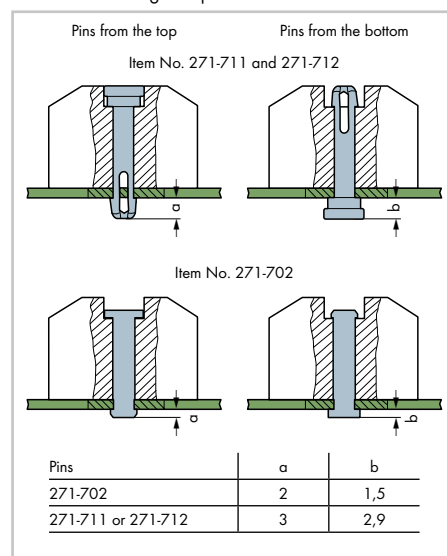
Mounting holes for ground contacts



Mounting holes for pins



Screwless mounting with pins



# Dividable Terminal Strips, Compact Terminal Blocks

* gray terminal block side ** white terminal block side	1 x 0.5 ... 0.75 mm <sup>2</sup> "s" 1 x 0,5 ... 2,5 mm <sup>2</sup> "s" 2 x 0.5 ... 2.5 mm <sup>2</sup> "s" 380 V~, size B; I <sub>N</sub> 26 A	1 x AWG 20 - 18 "s" 1 x AWG 20 - 14 "s" 2 x AWG 20 - 14 "s" 300 V  300 V	1 x 0.5 ... 0.75 mm <sup>2</sup> "s" 1 x 0,5 ... 2,5 mm <sup>2</sup> "s" 2 x 0.5 ... 2.5 mm <sup>2</sup> "s" 380 V~, size B; I <sub>N</sub> 26 A	1 x AWG 20 ... 18 "s" 1 x AWG 20 ... 14 "s" 2 x AWG 20 ... 14 "s" 300 V
	8 ... 9 mm / 0.33 in.		8 ... 9 mm / 0.33 in.	

- ① Item no. suffix for standard printings: 001-000
- ② For tool-free mounting
- ③ Factory-assembled ground contacts (please indicate position when ordering)



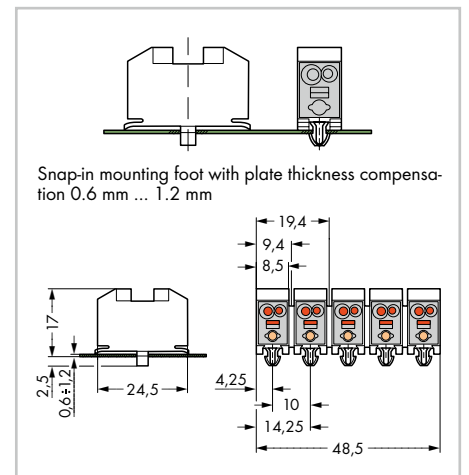
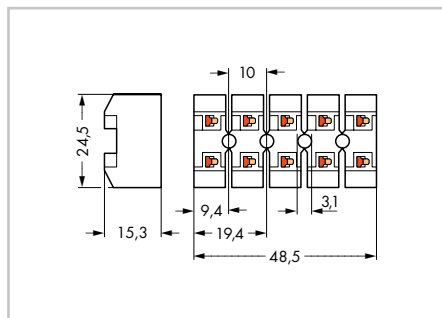
Description	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Dividable terminal strips,</b>	<b>Terminal strips without push-buttons, white</b>			<b>Terminal strips with snap-in mounting feet, white</b>		
with additional push-wire connection for 0.5/0.75 mm <sup>2</sup> H07V-U (NYA) per pole,	1	272-581	1000	1	272-681	1000
for screw or screwless mounting (WAGO pins);	2	272-582 ①	1000	2	272-682 ①	1000
with snap-in mounting foot for mounting holes	3	272-583 ①	500	3	272-683 ①	500
3.5 mm Ø, mounting plate 0.6 - 1.2 mm thick.	4	272-584 ①	500	4	272-684 ①	500
Ground contact, for screw/rievet or snap-in contact (pluggable)	5	272-585 ①	500	5	272-685 ①	500
	12	272-592	40	12	272-692	40
	With screw-type ground contact ③			With screw-type ground contact ③		
	3	272-583/1 .-.000	500	3	272-683/1 .-.000	500
	4	272-584/1 .-.000	500	4	272-684/1 .-.000	500
	5	272-585/1 .-.000	500	5	272-685/1 .-.000	500
	With snap-in ground contact ③			With snap-in ground contact ③		
	3	272-583/2 .-.000	500	3	272-683/2 .-.000	500
	4	272-584/2 .-.000	500	4	272-684/2 .-.000	500
	5	272-585/2 .-.000	500	5	272-685/2 .-.000	500

## Accessories (For marking accessories, see Section 3)



	<b>Pins,</b> 1 mm	271-702	1000		
	for plate thickness 1 mm ②	271-711 ②	1000		
	1.5 mm ②	271-712 ②	1000		
	<b>Operating lever, loose,</b>				
	for retrofitting	271-120	1000	271-120	1000
	<b>Operating tool,</b>				
	for terminal blocks with snap-in ground contact	249-100	1	249-100	1
	<b>Felt-tip pen,</b>				
	for direct, permanent manual marking	210-110	1	210-110	1

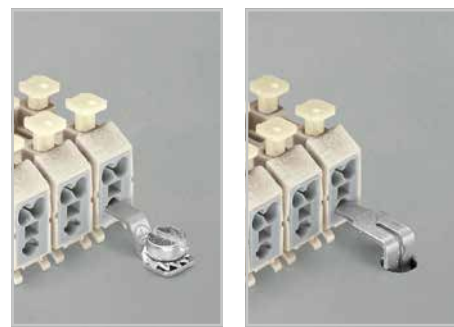
## Dimensions

Pole No.	Length (mm)
1	8.5
2	18.5
3	28.5
4	38.5
5	48.5
12	118.5



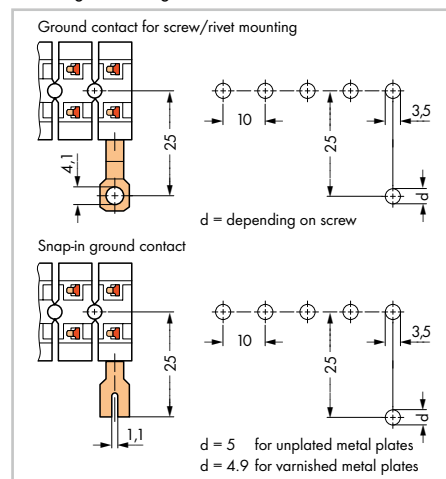


2 x 0.5 ... 1.5 mm <sup>2</sup> "s" 2 x 0.5 ... 2.5 mm <sup>2</sup> "s" 380 V~, size B I <sub>N</sub> 18 A	2 x AWG 20 ... 16 "s" 2 x AWG 20 ... 14 "s" 300 V, 10 A 300 V	2 x 0.5 - 2.5 mm <sup>2</sup> "s" 380 V~, size B I <sub>N</sub> 26 A	2 x AWG 20 - 14 "s" 300 V, 10 A 300 V
 8 ... 9 mm / 0.33 in.		 8 ... 9 mm / 0.33 in.	

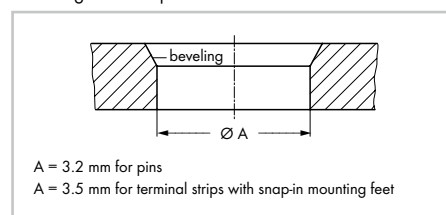


Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Terminal strips with snap-in mounting feet, white</b>			<b>Compact terminal blocks with snap-in mounting feet, white,</b>		
1	272-131	1000	for cutouts, plate thickness up to 1 mm,		
2	272-132 ①	1000	with additional push-wire connection for		
3	272-133 ①	500	0.5/0.75 mm <sup>2</sup> H07 V-U (NYA) per pole		
4	272-134 ①	500	5	272-122	500
5	272-135 ①	500	With printing: L1, L2 (upper level)		
12	272-142	40	L3, N, ⊕ (lower level)		
With screw-type ground contact ③			5	272-122/001-000	500
3	272-133/1 .-.000	500			
4	272-134/1 .-.000	500			
5	272-135/1 .-.000	500			
With snap-in ground contact ③					
3	272-133/2 .-.000	500			
4	272-134/2 .-.000	500			
5	272-135/2 .-.000	500			
271-120		1000			
249-100		1			
210-110		1			

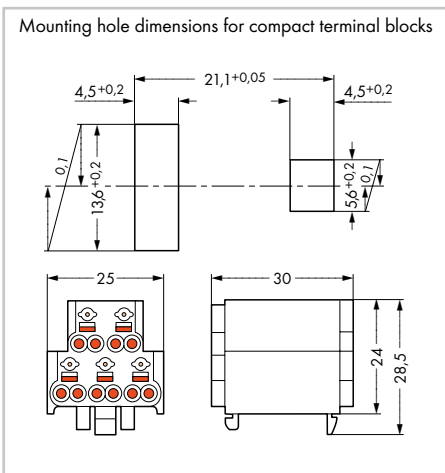
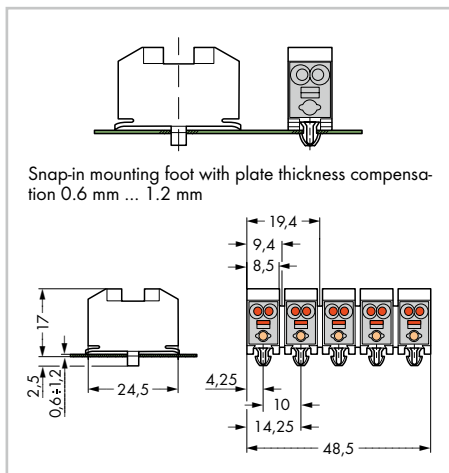
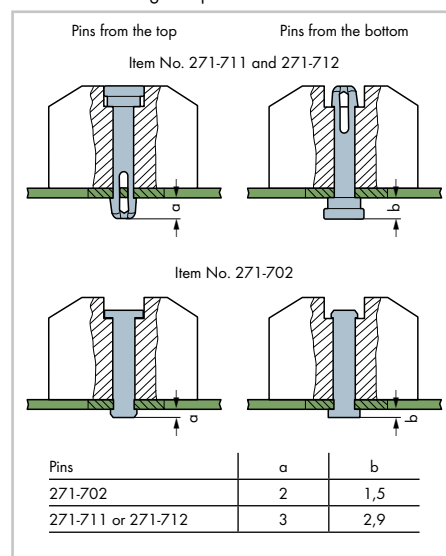
Mounting holes for ground contacts



Mounting holes for pins

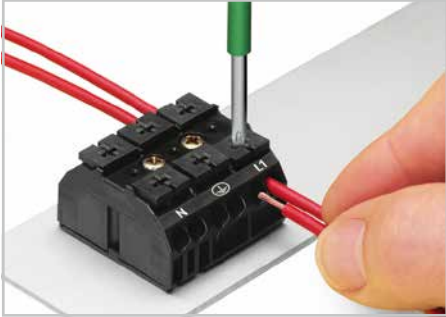


Screwless mounting with pins



# 4-Conductor, Chassis-Mount Terminal Strips, 862 Series – Description and Handling –

## Conductor termination



Four conductors per pole for solid and fine-stranded conductors

## Marking



Marking by direct, one-side printing and/or marker strips

## Testing



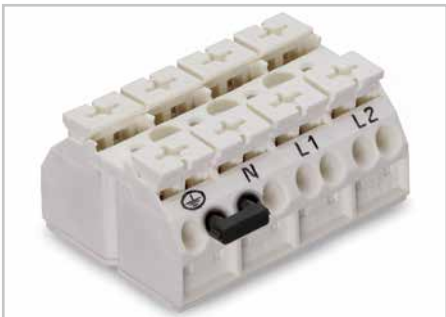
Testing with test plug 2 mm Ø.

## Ground contact (PE contact)

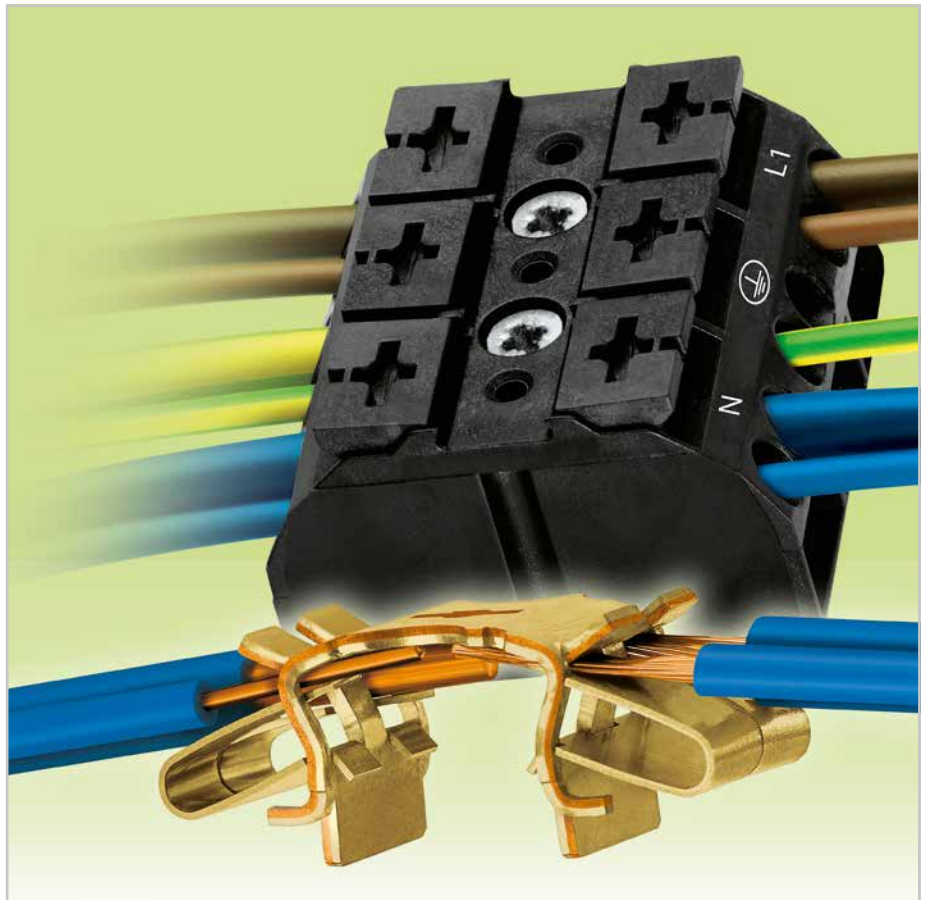


Makes an automatic contact to the mounting plate. The varnish coating is penetrated automatically.

## Commoning



Commoning with comb-style jumper bar



## Cost-effective features:

The 862 Series chassis-mount terminal strips were developed specifically to minimize wiring costs, while accommodating requirements for easy mounting, multiple connection points, marking and handling:

- The 862 Series equipped with CAGE CLAMP®S connects up to four conductors sized 0.5 mm<sup>2</sup> to 4 mm<sup>2</sup> (AWG 20 ... 12). Due to multiple connection points per pole, different conductor sizes can be used within the same terminal block position.
- CAGE CLAMP®S termination technology allows solid conductors, fine-stranded conductors with ferrules or ultrasonically bonded conductors from 0.5 mm<sup>2</sup> to 4 mm<sup>2</sup> (AWG 20 ... 12) to be connected by simply pushing the conductor into contact. (Length of bonded wire end min. 10 mm/0.39 in).

- Convenient automatic grounding contact available as an option.
- Snap-in mounting feet for fast assembly.
- Push-buttons for easy handling with an operating tool or by hand.
- Built-in test points simplify testing with test plug 2 mm Ø.
- Flexible marking options with standard marking (pre-marked), marker strip or custom marked for large quantity orders.

## CAGE CLAMP®S clamps the following copper conductors:\*

solid                      stranded

fine-stranded,  
also with tinned  
single strands

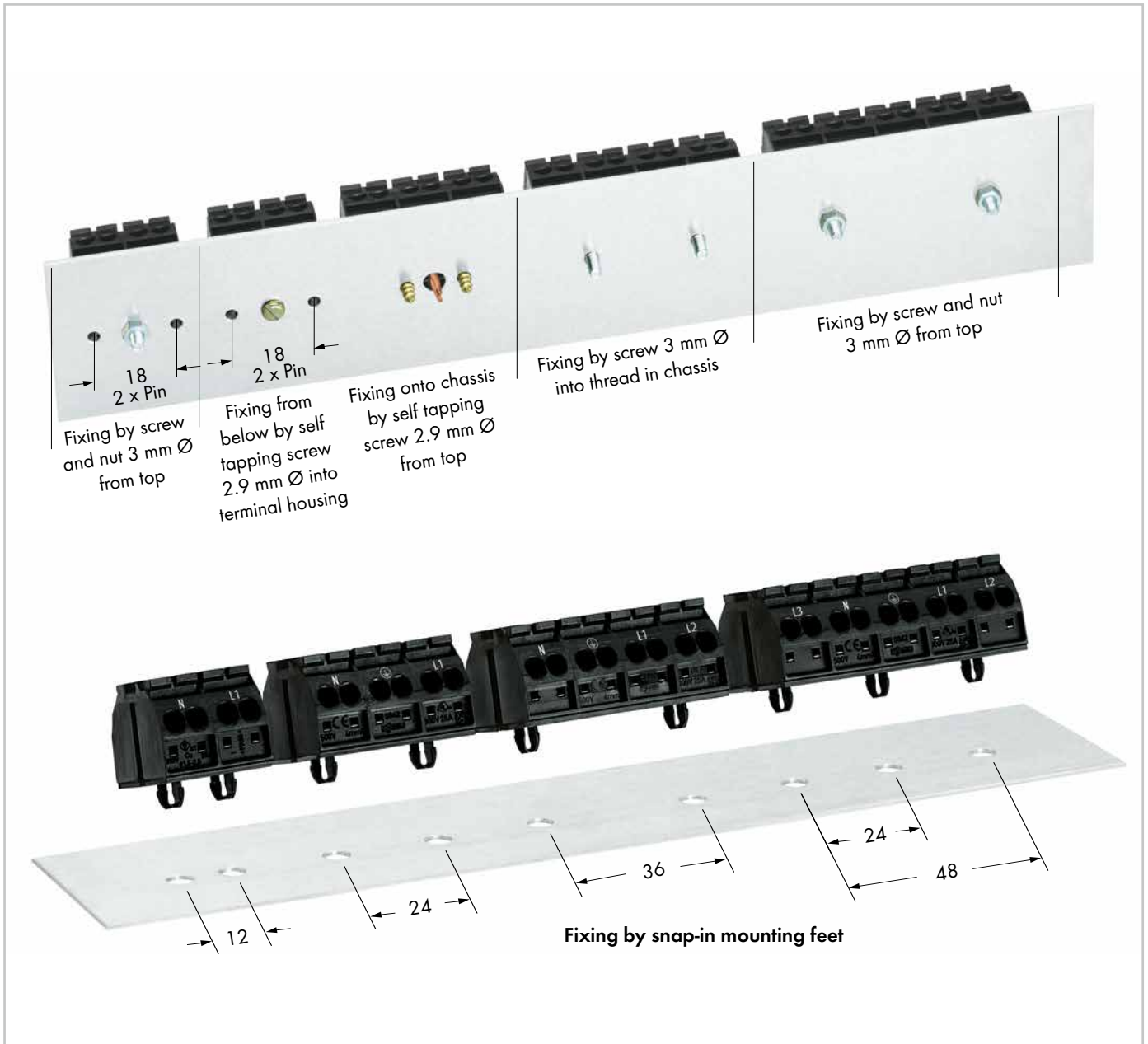
fine-stranded,  
tip-bonded

fine-stranded,  
with ferrule ①  
(gastight crimped)

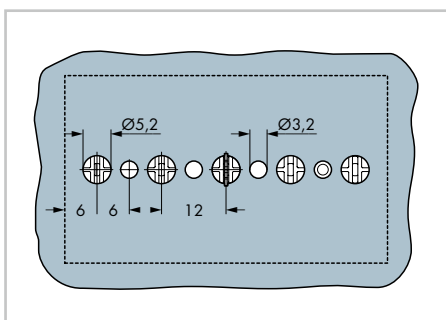
fine-stranded,  
with pin terminal  
(gastight crimped)

\* For aluminum conductors, see page 511.

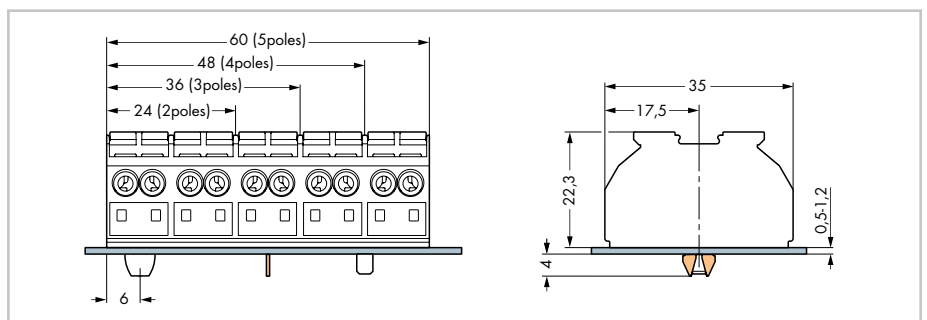
① When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.



Dimensions in mm



Dimensions in mm for ground contact and snap-in mounting foot 5.2 mm Ø.









Dimensions in mm for chassis-mount terminal strips

# 4-Conductor, Chassis-Mount Terminal Strips

## 2- and 3-Pole, 4 mm<sup>2</sup>

### 862 Series

	<b>0.5 ... 4 mm<sup>2</sup> ①</b> 500 V/6 kV/3 I <sub>N</sub> 32 A	AWG 20 ... 12 300 V, 20 A  300 V, 20 A 
	<b>0.5 ... 4 mm<sup>2</sup> ①</b> 500 V/6 kV/3 I <sub>N</sub> 32 A	AWG 20 ... 12 300 V, 20 A  300 V, 20 A 
	 10 ... 11 mm / 0.41 in.	 10 ... 11 mm / 0.41 in.
	② Approvals	② Approvals

① Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s + F-st";  
 Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and  
 0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"








Available in black and white.

2-pole

3-pole

	without Ground contact (PE contact)	with Ground contact (PE contact)	Item No. black	Item No. white	Pack. Unit	Item No. black	Item No. white	Pack. Unit
<b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b>								
	plain		● 862-0552	○ 862-0652	500			
	L1-N		● 862-1552	○ 862-1652	500			
	N-L1		● 862-2552	○ 862-2652	500			
<b>For self-tapping screw 2.9 mm Ø from below</b>								
	plain		● 862-0562	○ 862-0662	500			
	L1-N		● 862-1562	○ 862-1662	500			
	N-L1		● 862-2562	○ 862-2662	500			
<b>1 snap-in foot per pole</b>								
	plain		● 862-0532	○ 862-0632	500			
	L1-N		● 862-1532	○ 862-1632	500			
	N-L1		● 862-2532	○ 862-2632	500			
<b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b>								
	plain					● 862-0503	○ 862-0603	250
	⊕-N-L1					● 862-1503	○ 862-1603	250
	N-⊕-L1					● 862-2503	○ 862-2603	250
		N-⊕-L1				● 862-8503	○ 862-8603	250
		⊕-N-L1				● 862-9503	○ 862-9603	250
<b>1 snap-in foot per pole</b>								
	plain					● 862-0533	○ 862-0633	250
	⊕-N-L1					● 862-1533	○ 862-1633	250
	N-⊕-L1					● 862-2533	○ 862-2633	250
		N-⊕-L1				● 862-8533	○ 862-8633	250
		⊕-N-L1				● 862-9533	○ 862-9633	250
<b>Snap-in foot at pos. 1+3</b>								
	plain					● 862-0593	○ 862-0693	250
	⊕-N-L1					● 862-1593	○ 862-1693	250
	N-⊕-L1					● 862-2593	○ 862-2693	250
		N-⊕-L1				● 862-8593	○ 862-8693	250
		⊕-N-L1				● 862-9593	○ 862-9693	250

#### 862 Series Accessories

<b>Comb-style jumper bar</b> , simply push into conductor entry hole  I <sub>N</sub> 32 A <b>862-482</b> 5	<b>Test plug</b> , with 500 mm cable, 2 mm Ø  red <b>210-136</b> 50	<b>Test plug</b> , with 500 mm cable, 2.3 mm Ø  yellow <b>210-137</b> 50
<b>Operating tool with partially insulated shaft</b> , type 2, (3.5 x 0.5) mm blade  <b>210-720</b> 1	Suitable for Ex e II applications 440 V, 28 A	<b>Marking strip</b> , plain, 7.5 mm wide, 50m roll  white <b>709-178</b> 1

② Approvals are available online at: [www.wago.com](http://www.wago.com).

# 4-Conductor, Chassis-Mount Terminal Strips

## 4- and 5-Pole, 4 mm<sup>2</sup>

### 862 Series

PUSH-IN CAGE CLAMP®

	<b>0.5 ... 4 mm<sup>2</sup> ①</b> 500 V/6 kV/3 I <sub>N</sub> 32 A	4 x AWG 20 ... 12 300 V, 20 A 300 V, 20 A
	<b>0.5 ... 4 mm<sup>2</sup> ①</b> 500 V/6 kV/3 I <sub>N</sub> 32 A	4 x AWG 20 ... 12 300 V, 20 A 300 V, 20 A
	10 ... 11 mm / 0.41 in.	10 ... 11 mm / 0.41 in.
	② Approvals	② Approvals

① Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s + Fst";  
 Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and 0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



Available in black and white.

4-pole

5-pole





	without Ground contact (PE contact)	with Ground contact (PE contact)	Item No. black	Item No. white	Pack. Unit	Item No. black	Item No. white	Pack. Unit
<b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b>								
	plain		● 862-0504	○ 862-0604	200			
	⊕-N-L1-L2		● 862-1504	○ 862-1604	200			
	N-⊕-L1-L2		● 862-2504	○ 862-2604	200			
		N-⊕-L1-L2	● 862-8504	○ 862-8604	200			
		⊕-N-L1-L2	● 862-9504	○ 862-9604	200			
<b>1 snap-in foot per pole</b>								
	plain		● 862-0534	○ 862-0634	200			
	⊕-N-L1-L2		● 862-1534	○ 862-1634	200			
	N-⊕-L1-L2		● 862-2534	○ 862-2634	200			
		N-⊕-L1-L2	● 862-8534	○ 862-8634	200			
		⊕-N-L1-L2	● 862-9534	○ 862-9634	200			
<b>Snap-in foot at pos. 1+4</b>								
	plain		● 862-0594	○ 862-0694	200			
	⊕-N-L1-L2		● 862-1594	○ 862-1694	200			
	N-⊕-L1-L2		● 862-2594	○ 862-2694	200			
		N-⊕-L1-L2	● 862-8594	○ 862-8694	200			
		⊕-N-L1-L2	● 862-9594	○ 862-9694	200			
<b>For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top</b>								
	plain					● 862-0505	○ 862-0605	200
	⊕-N-L1-L2-L3					● 862-1505	○ 862-1605	200
	L3-N-⊕-L1-L2					● 862-2505	○ 862-2605	200
		L3-N-⊕-L1-L2				● 862-8505	○ 862-8605	200
		⊕-N-L1-L2-L3				● 862-9505	○ 862-9605	200
<b>1 snap-in foot per pole</b>								
	plain					● 862-0525	○ 862-0625	200
	⊕-N-L1-L2-L3					● 862-1525	○ 862-1625	200
	L3-N-⊕-L1-L2					● 862-2525	○ 862-2625	200
		L3-N-⊕-L1-L2				● 862-8525	○ 862-8625	200
		⊕-N-L1-L2-L3				● 862-9525	○ 862-9625	200
<b>Snap-in foot at pos. 1+3+5</b>								
	plain					● 862-0515	○ 862-0615	200
	⊕-N-L1-L2-L3					● 862-1515	○ 862-1615	200
	L3-N-⊕-L1-L2					● 862-2515	○ 862-2615	200
		L3-N-⊕-L1-L2				● 862-8515	○ 862-8615	200
		⊕-N-L1-L2-L3				● 862-9515	○ 862-9615	200

#### 862 Series Accessories

<b>Comb-style jumper bar</b> , simply push into conductor entry hole  I <sub>N</sub> 32 A <b>862-482</b> 5	<b>Test plug</b> , with 500 mm cable, 2 mm Ø  red <b>210-136</b> 50	<b>Test plug</b> , with 500 mm cable, 2.3 mm Ø  yellow <b>210-137</b> 50
<b>Operating tool with partially insulated shaft</b> , type 2, (3.5 x 0.5) mm blade  <b>210-720</b> 1	Suitable for Ex e II applications 440 V, 28 A	<b>Marking strip</b> , plain, 7.5 mm wide, 50m roll  white <b>709-178</b> 1

For technical explanations and abbreviations, see technical section.



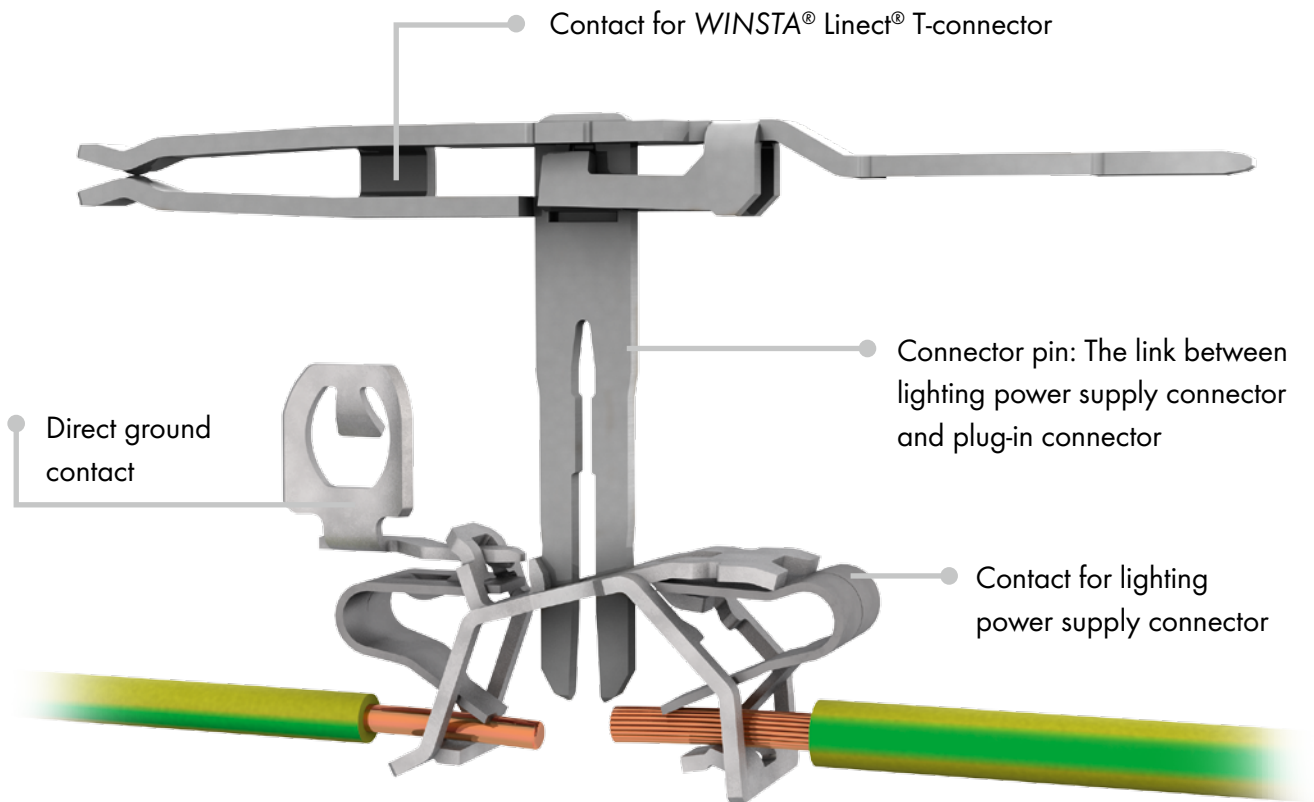
	Page
	<b>Lighting Connectors, 2- to 5-Pole</b> 294 Series Linect® <span style="float: right;">40</span>
	<b>Linect® Connectors, 3-Pole</b> 770 Series <span style="float: right;">50</span>
	<b>Strain Relief Housings, 3-Pole</b> 770 Series <span style="float: right;">52</span>
	<b>Linect® T-Connectors, 2- to 5-Pole</b> 770 Series <span style="float: right;">54</span>

## 2 For Universal Lighting Connections Linect® 294 Series

38

Lights offered under the Linect® name allow both conventional power supply connection and connection via plug-in connectors. Linect®-branded interfaces can be used by all lighting manufacturers worldwide. This enables lights carrying the Linect® logo to be connected to any Linect®-marked connectors – regardless of manufacturer!

### Contact Technology Using the Linect® Interface:



PUSH WIRE® for internal lighting wiring with solid conductors

Push-in CAGE CLAMP® for standard lighting wiring with all conductor types



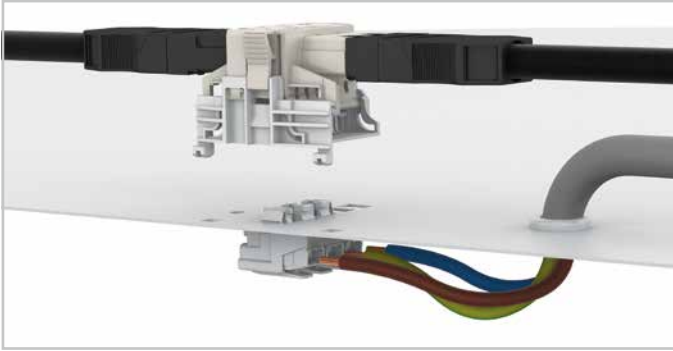
## A Perfect Combination

### On the Linect® Light:

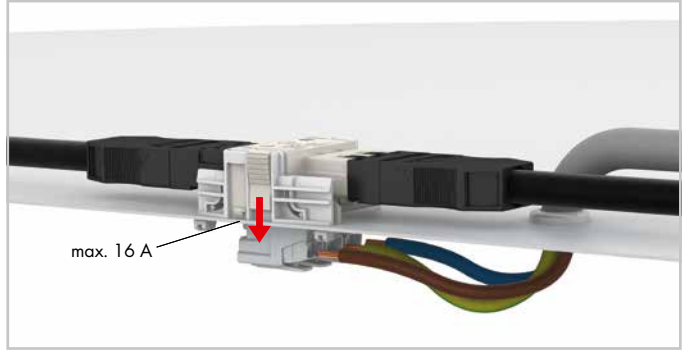
770 Series WINSTA® Linect® T-Connector with connected WINSTA® cable assembly. Touch-proof during each stage of install.

### In the Linect® Light:

Linect® 294 Series lighting connector. Standard power supply connection with CAGE CLAMP®S for all conductor types. Simple, push-in termination of solid and ferruled conductors.



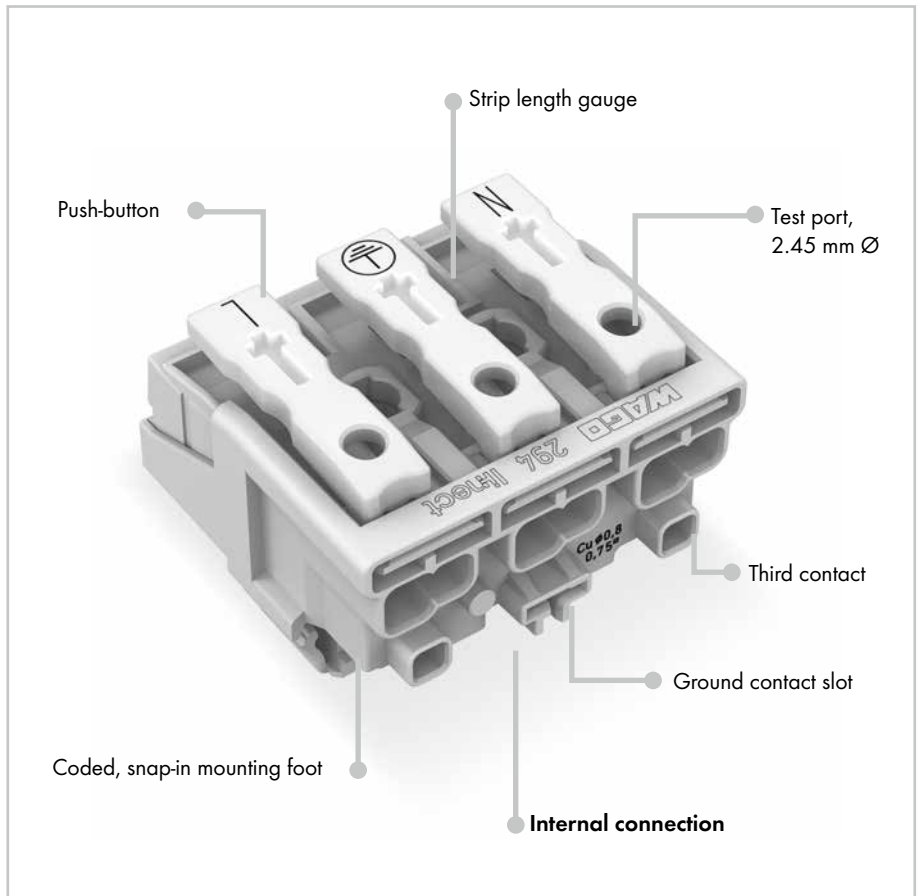
The WAGO 294 Series Lighting Connectors allow worldwide connection of luminaires via WINSTA® pluggable connectors or conventional wiring.



WAGO Linect® lighting connectors are ideal for connecting additional loads that were not originally planned, e.g., spots. The maximum current between WINSTA® Linect® T-connector and lighting connector is 16 A.



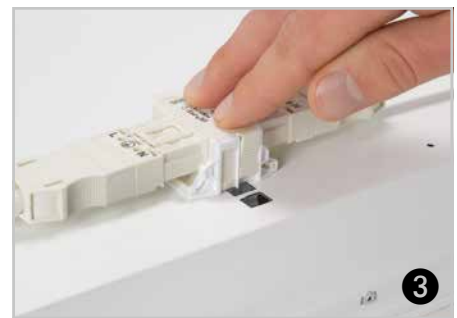
Integrated strip length gauge



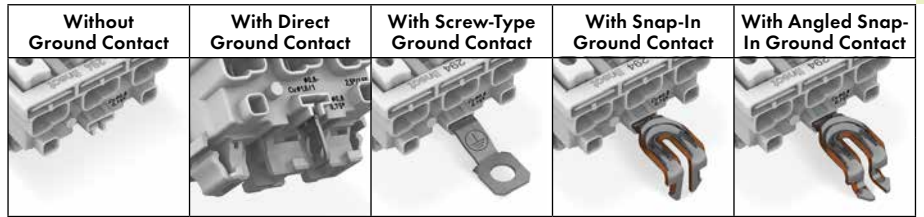
Position the T-connector within the two square recesses.







Slide the connector toward the square recesses until it stops.

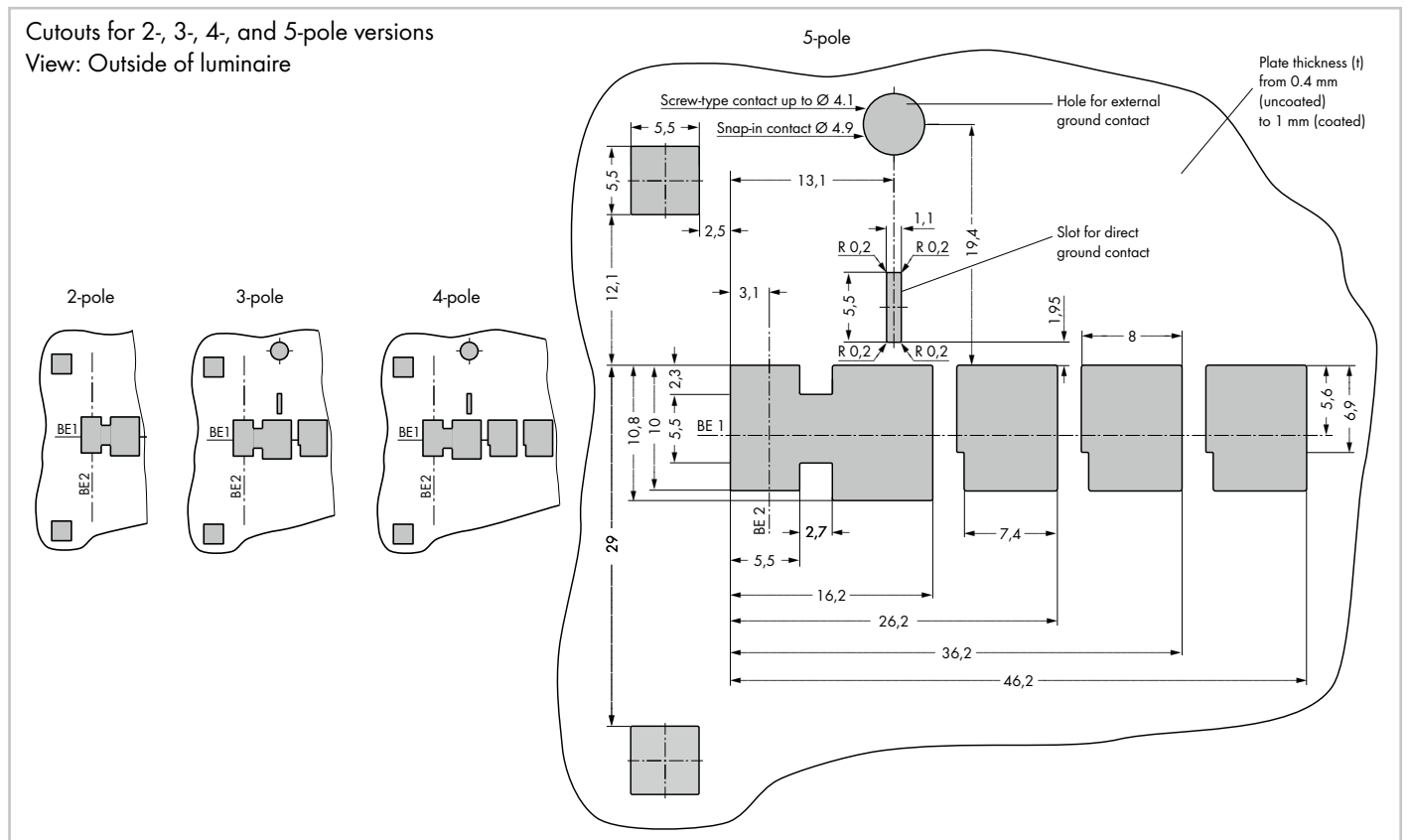


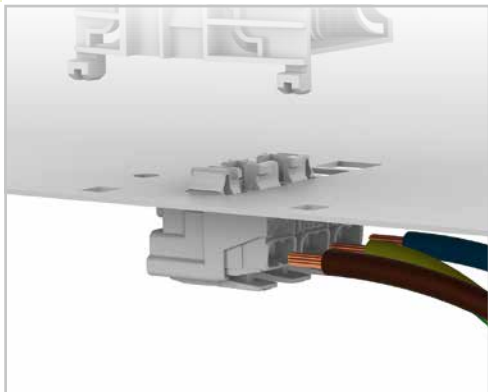
Push down until fully engaged – done!



Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
2 	N' L'	294-8022	- - -	- - -	- - -	- - -
3 	N ⊕ L (mains)	294-8013	294-8113	294-8413	294-8213	294-8313
4 	1/L' 2/L ⊕ N	294-8024	294-8124	294-8424	294-8224	294-8324
5 	DA+ DA- L ⊕ N	294-8035	294-8135	294-8435	294-8235	294-8335
	L' N' L ⊕ N	294-8025	294-8125	294-8425	294-8225	294-8325
	L3 L2 L1 ⊕ N	294-8015	294-8115	294-8415	294-8215	294-8315

Linect® lighting connectors see page 50 - 55





- External connection of solid, stranded and fine-stranded conductors
- Universal conductor termination (AWG, metric)
- Third contact located at the bottom of internal connector end
- Strain relief plate can be retrofitted

### Technical data:

Type of Connection	Conductor Connection		Linect® Plug-In Connection
	IEC/EN 60998-1	IEC/EN 60998-2-2	IEC/EN 61984
Rating per	II	II	II
Overvoltage category	2	2	2
Pollution degree	2	2	2
Rated voltage	500 V	500 V	500 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	24 A	24 A	16 A
Temperature marking	T 85	T 85	
Degree of protection			IP 2 XC
Storage temperature			-35° ... +85°
Processing temperature			-5° ... +40°

### Conductor data (external connection):

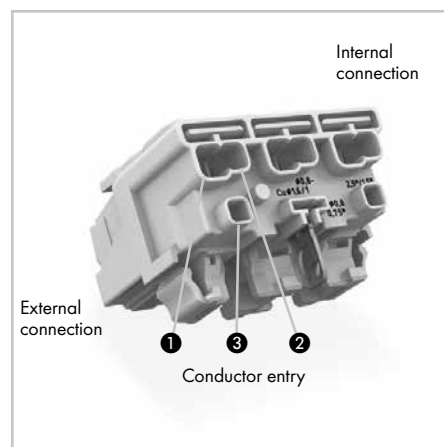
Connection technology	<b>Push-in CAGE CLAMP®</b>
Conductor size: solid, stranded or fine-stranded	2 x 0.5 ... 2.5 mm <sup>2</sup>
Conductor size: with ferrule	2 x 0.5 ... 1.5 mm <sup>2</sup>
AWG: solid	2 x 18 ... 12
AWG: stranded and fine-stranded	2 x 18 ... 14
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

### Conductor data (internal connection):

Connection technology	<b>PUSH WIRE®</b>
Conductor entry ①	
Conductor size: solid	0.5 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
Conductor size: fine-stranded	0.5 ... 1.0 mm <sup>2</sup> (with insulated ferrule)
AWG: solid	18 ... 14
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry ②	
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1.0 mm <sup>2</sup> (with uninsulated ferrule)
Conductor size: fine-stranded	0.5 ... 0.75 mm <sup>2</sup> (with insulated ferrule)
AWG: solid	18 ... 16
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry ③	
Conductor size: solid	0.5 ... 0.75 mm <sup>2</sup>
AWG: solid	18
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

### Material data:

Material group	IIIa
Insulating material	Polycarbonate (PC)
Temperature stability	Relative temperature index (RTI) of 120 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
16 mm-high versions are available upon request.	

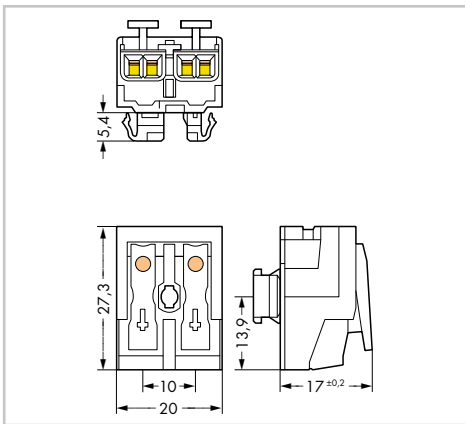


### Accessories:

### Page:

Assembly tool	25
Disconnection tool	25
Operating tools	496
Strain relief for multicore cables	25
Strain relief for single strands	25
Linect®-Connectors	50 ... 55
Pin terminals	519

Without ground contact

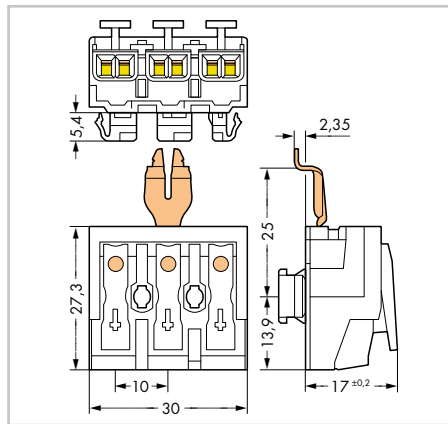
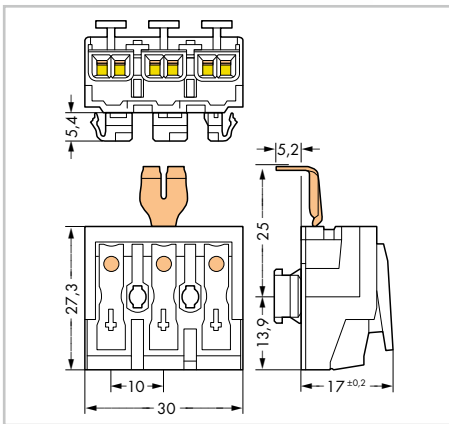
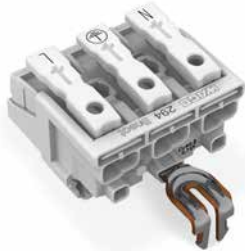


Marking	Item No.	Pack. Unit
Lighting connector without ground contact, 2-pole		
N' L'	294-8022	1000



With snap-in ground contact

With angled snap-in ground contact



Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector with snap-in ground contact, 3-pole			Lighting connector with angled snap-in ground contact, 3-pole		
N ⊕ L (mains)	294-8213	500	N ⊕ L (mains)	294-8313	500





# Lighting Connectors, 4-Pole 294 Series Linect®

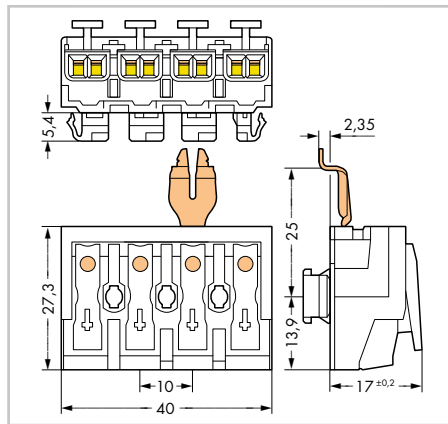
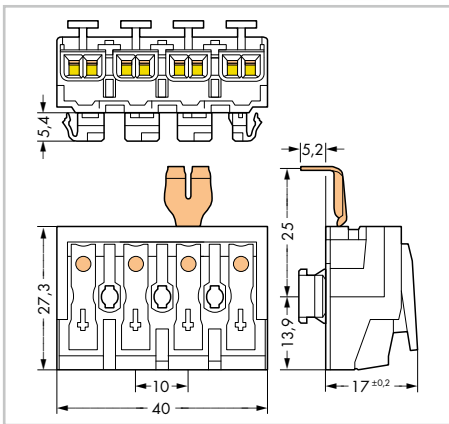
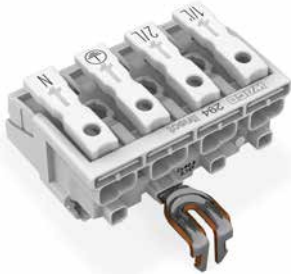
PUSH-IN CAGE CLAMP®

2

47

With snap-in ground contact

With angled snap-in ground contact



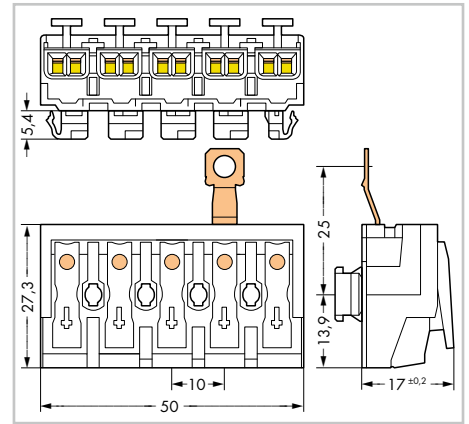
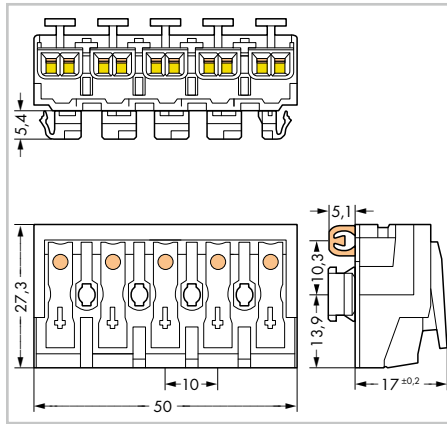
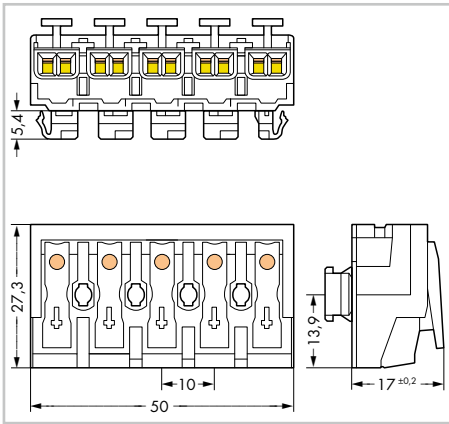
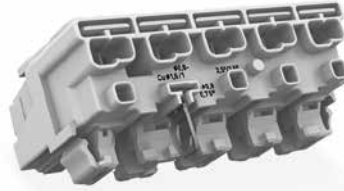
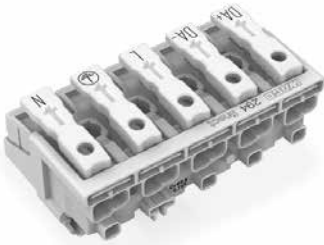
2

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector with snap-in ground contact, 4-pole			Lighting connector with angled snap-in ground contact, 4-pole		
1/L' 2/L ⊕ N	294-8224	500	1/L' 2/L ⊕ N	294-8324	500

Without ground contact

With direct ground contact

With screw-type ground contact



Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector without ground contact, 5-pole			Lighting connector with direct ground contact, 5-pole			Lighting connector with screw-type ground contact, 5-pole		
DA+ DA- L ⊕ N	294-8035	250	DA+ DA- L ⊕ N	294-8135	250	DA+ DA- L ⊕ N	294-8435	250
L' N' L ⊕ N	294-8025	250	L' N' L ⊕ N	294-8125	250	L' N' L ⊕ N	294-8425	250
L3 L2 L1 ⊕ N	294-8015	250	L3 L2 L1 ⊕ N	294-8115	250	L3 L2 L1 ⊕ N	294-8415	250

# Lighting Connectors, 5-Pole 294 Series Linect®

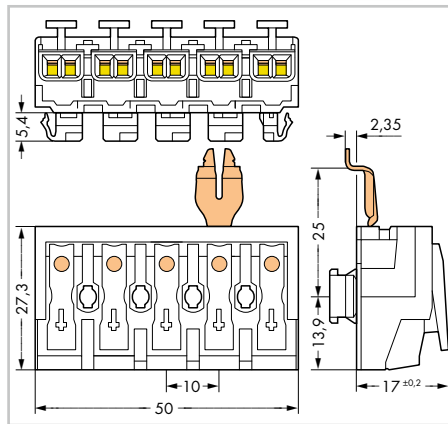
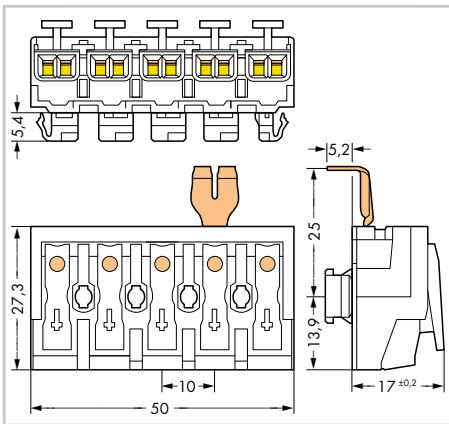
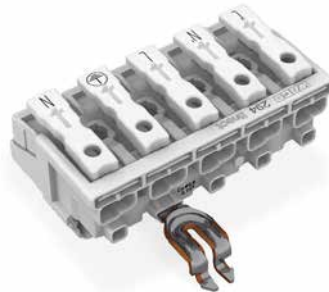
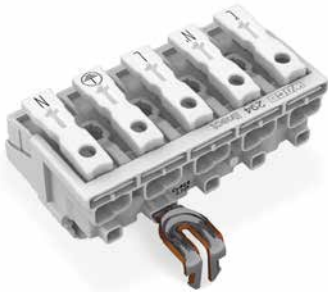
PUSH-IN CAGE CLAMP®

2

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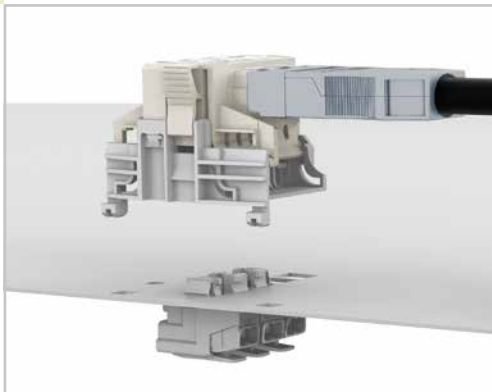
With snap-in ground contact

With angled snap-in ground contact



2

Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
Lighting connector with snap-in ground contact, 5-pole			Lighting connector with angled snap-in ground contact, 5-pole		
DA+ DA- L ⊕ N	294-8235	250	DA+ DA- L ⊕ N	294-8335	250
L' N' L ⊕ N	294-8225	250	L' N' L ⊕ N	294-8325	250
L3 L2 L1 ⊕ N	294-8215	250	L3 L2 L1 ⊕ N	294-8315	250



- Linect® connectors for conventional, external wiring
- CAGE CLAMP®S for all conductor types up to 2.5 mm<sup>2</sup> /AWG 12
- Quick and easy replacement of lights for maintenance or retrofits
- Opening the light is not necessary

#### Technical data:

Type of Connection	CAGE CLAMP®S Connection	Linect® Connection	
Rating per	<b>IEC/EN 61984</b>	<b>IEC/EN 61984</b>	
Overtoltage category	II	II	
Pollution degree	2	2	
Rated voltage	250 V	250 V	
Rated surge voltage	4 kV	4 kV	
Nominal current	24 A	16 A	
Temperature marking			
Degree of protection	IP 2 XC	IP 2 XC	
Storage temperature	-35° ... +85°	-35° ... +85°	
Processing temperature	-5° ... +40°	-5° ... +40°	

#### Conductor data:

Connection technology	<b>Push-in CAGE CLAMP®</b>
Conductor size: solid, stranded or fine-stranded	2 x 0.5 ... 2.5 mm <sup>2</sup>
Conductor size: with ferrule	2 x 0.5 ... 2.5 mm <sup>2</sup>
AWG: solid	2 x 20 ... 12
AWG: stranded and fine-stranded	2 x 20 ... 12
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

#### Material data:

Material group	IIIa
Insulating material	Polycarbonate (PC)
Temperature stability	Relative temperature index (RTI) of 120 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

#### Accessories:

#### Page:

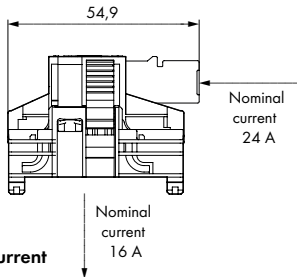
Strain relief housing	52 ... 53

# Linect® Connector, 3-Pole 770 Series



PUSH-IN CAGE CLAMP®

250 V/4 kV/3  
I<sub>N</sub> 24 A (16 A) ①

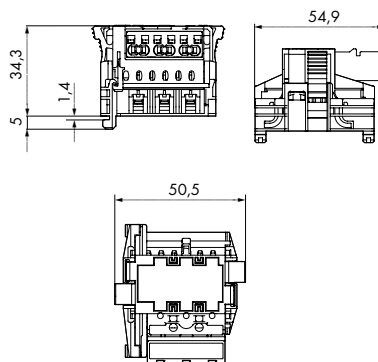


① Nominal current

Description	Color	Item No.	Pack. Unit
Linect® connector	Linect® connector, 3-pole, socket - plug		
	○ white	770-6229	25
<b>Item-Specific Accessories</b>			
		<b>Strain relief housing, for 2 cables, ②</b> 4.5 ... 8 mm diameter	
		black 770-503/023-000	50
		white 770-513/023-000	50
		<b>Strain relief housing, for 2 cables, ②</b> 8 ... 11.5 mm diameter	
		black 770-503	50
		white 770-513	50
		<b>Strain relief housing, angled, for 2 cables, ②</b> 8 ... 11.5 mm diameter	
		black 770-503/032-000	50
		white 770-513/032-000	50
		<b>Strain relief housing for 4 mm<sup>2</sup> conductors, for 1 cable, ②</b> 9 ... 13 mm diameter	
		black 770-503/021-000	50
		white 770-513/021-000	50
		<b>Strain relief housing, for quick assembly, for 1 cable, ②</b> 7 ... 11.5 mm diameter	
		black 770-503/035-000	50
		white 770-513/035-000	50
<b>Info</b>	<b>Dimensions (in mm)</b>		

② For more information, see pages 52 and 53

3-pole  
○ white      Coding A      (L ⊕ N)



# WINSTA® MIDI Strain Relief Housings, 3-Pole, for Different Cable Diameters

	<p>Snap-on type strain relief housing for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p>	<p>Snap-on type strain relief housing for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p>
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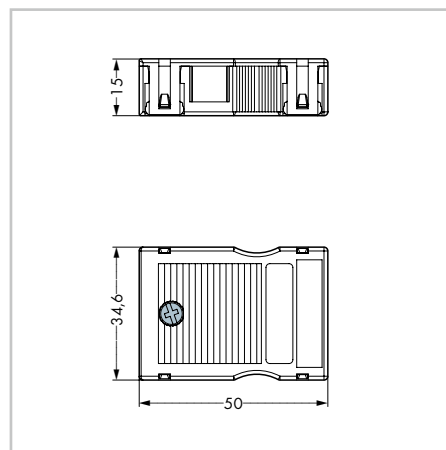
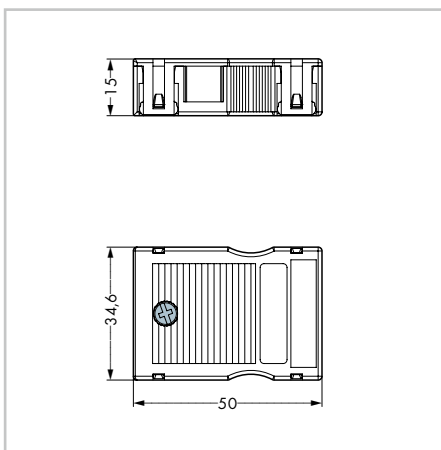
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Strain relief housings, 3-pole	Strain relief housing, for 2 cables, 4.5 ... 8 mm diameter ②, Strip length, outer insulation: 55 mm			Strain relief housing, for 2 cables, 8 ... 11.5 mm diameter ②, Strip length, outer insulation: 55 mm		
	black	770-503/023-000	50	black	770-503	50
	white	770-513/023-000	50	white	770-513	50

Item-Specific Accessories						
		<p>Marking strip, self-adhesive, on DIN A4 card, 182 mm long, 6 mm wide</p> <p><b>210-333</b> 100</p> <p>Marking area: 48 x 6.5 mm</p>			<p>Marking strip, self-adhesive, on DIN A4 card, 182 mm long, 6 mm wide</p> <p><b>210-333</b> 100</p> <p>Marking area: 48 x 6.5 mm</p>	
		<p>Shield connecting plate, for plugs and sockets, for 2 cables, 4 ... 7.5 mm diameter</p> <p><b>770-523</b> 25</p>				

Info	Dimensions (in mm)
------	--------------------

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For H05VV and NYM cables Other cables upon request!

Fire load upon request!



<b>Snap-on type strain relief housings for:</b> - 3-pole sockets - 3-pole plugs  <b>① Approvals</b>	<b>Snap-on type strain relief housings for:</b> - 3-pole sockets - 3-pole plugs  <b>① Approvals</b>	<b>Snap-on type strain relief housings for:</b> - 3-pole sockets - 3-pole plugs  <b>① Approvals</b>
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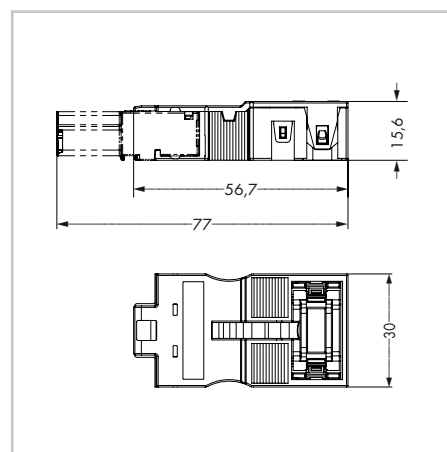
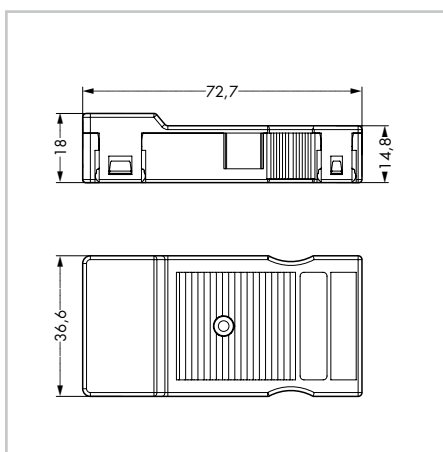
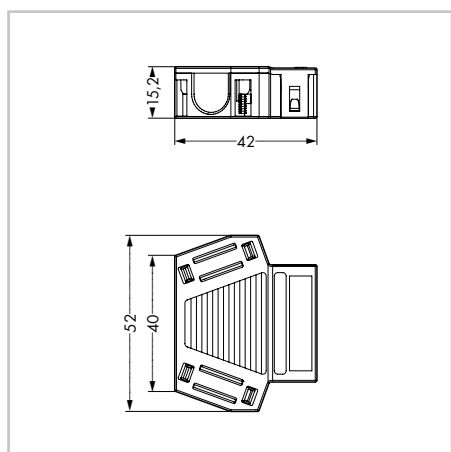


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Strain relief housing, angled</b> for 2 cables, 8 ... 11.5 mm diameter ②, Strip length, outer insulation: 55 mm			<b>Strain relief housing for 4 mm<sup>2</sup> conductors,</b> for 1 cable, 9 ... 13 mm diameter ②, Strip length, outer insulation: 71 mm			<b>Strain relief housing, for quick assembly,</b> for 1 cable, 7 ... 11.5 mm diameter ②, Strip length, outer insulation: 48 mm		
black	770-503/032-000	25	black	770-503/021-000	50	black	770-503/035-000	50
white	770-513/032-000	25	white	770-513/021-000	50	white	770-513/035-000	50

### Item-Specific Accessories

<b>Marking strip, self-adhesive, on DIN A4 carrier card,</b> 182 mm long, Strip height: 6 mm <b>210-333100</b> Marking area: 48 x 6.5 mm	<b>Marking strip, self-adhesive, on DIN A4 carrier card,</b> 182 mm long, Strip height: 6 mm <b>210-333 100</b> Marking area: 48 x 6.5 mm	

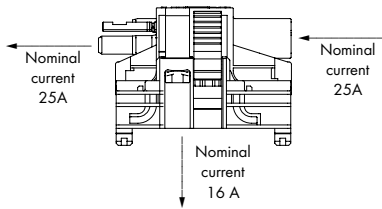
### Dimensions



# 2 WINSTA® MIDI Linect® T-Connectors, 2- and 3-Pole






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	<p>250 V/4 kV/3 I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p>	<p>250 V/4 kV/3 I<sub>N</sub> 25 A (16 A) ①</p> <p>② Approvals</p>
--	--	--



① Nominal current

Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Linect® T-connector	Linect® T-connector, 2-pole, socket - plug, white housing, dark gray cover			linect® T-connector, 3-pole, socket - plug, white housing, white cover		
	for DALI applications					
	● blue	770-7102	25	○ white	770-6223	25
	Suitable for 294-8032 lighting connector			Suitable for 294-8013 and 294-8113 lighting connectors		
for emergency power						
● dark gray	770-7502	25				
Suitable for 294-8022 lighting connector						

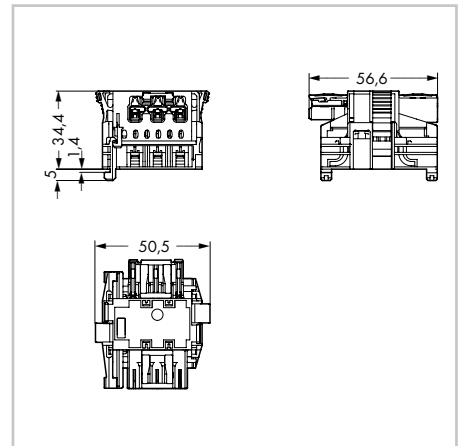
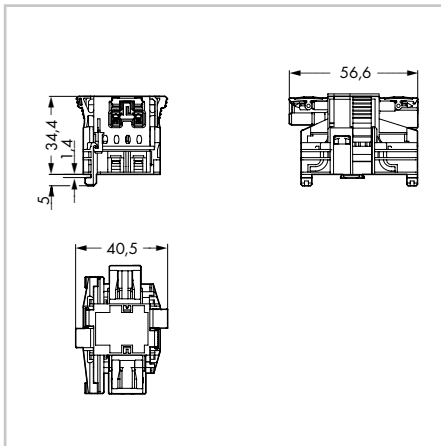
Item-Specific Accessories						
			Lockout cap, for socket, separable, 12-pole		Lockout cap, for socket, separable, 12-pole	
				black 770-201 100		black 770-201 100
				white 770-221 100		white 770-221 100
			Lockout cap, for plug, separable, 5-pole		Lockout cap, for plug, separable, 5-pole	
				yellow 770-360 100		yellow 770-360 100
					Coding pin, for plug (A and B coding)	
						gray 770-401 100

Info	Dimensions
------	------------

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- 2-pole
  - blue Coding I (DA- DA+)
  - dark gray Coding L (L' N')
- 3-pole
  - white Coding A (L ⊕ N)
- 4-pole
  - white Coding A (N 3 2/L 1/L')
- 5-pole
  - white Coding A (N 3 L1 L2 L3)
  - blue Coding I (N ⊕ L DA- DA+)
  - dark gray Coding L (N 3 L N' L')

For coding information, see page 250.  
Fire load data available upon request.

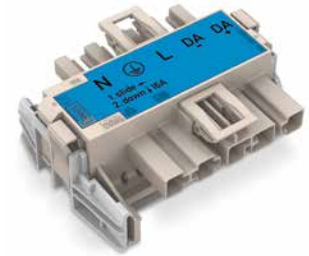
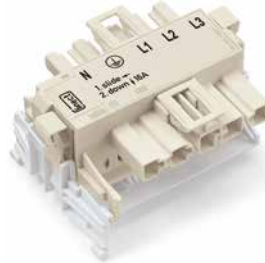




# Linect® T-Connectors, 4- and 5-Pole



400 V/6 kV/3 $I_N$ 25 A (16 A) ①  ② Approvals	400 V/6 kV/3 $I_N$ 25 A (16 A) ①  ② Approvals	400 V/6 kV/3 $I_N$ 25 A (16 A) ①  ② Approvals
--	--	--

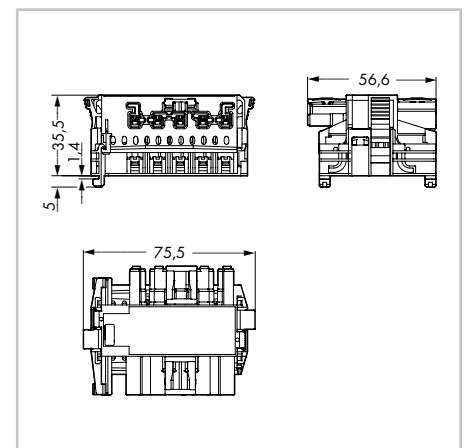
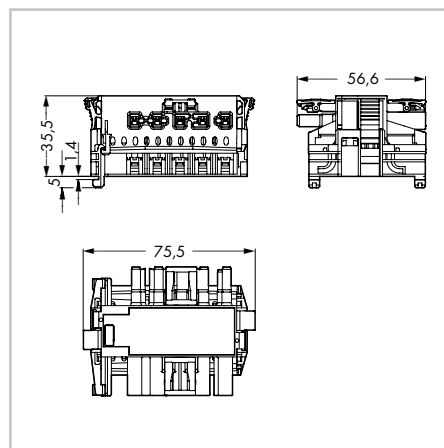
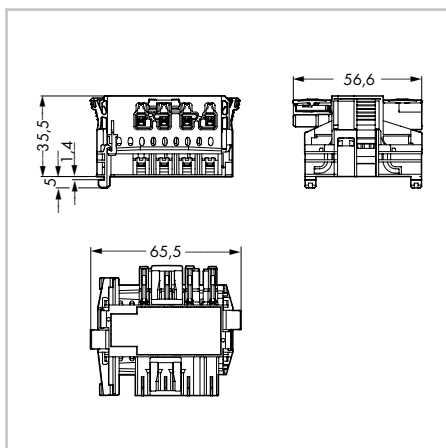


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Linect® T-connector, 4-pole, socket - plug, white housing, white cover			Linect® T-connector, 5-pole, socket - plug, white housing			Linect® T-connector, 5-pole, socket - plug, white housing		
○ white	770-6224	25	○ white	770-6225	25	● blue	770-7105	20
Suitable for 294-8024 and 294-8124 lighting connectors			Suitable for 294-8015 and 294-8115 lighting connectors			for DALI applications Suitable for 294-8035 and 294-8135 lighting connectors		
						for emergency power ● dark gray 770-7505 20 Suitable for 294-8025 and 294-8125 lighting connectors		

## Item-Specific Accessories

<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>
<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>
<b>Coding pin, for plug (A and B coding)</b>  <ul style="list-style-type: none"> <li>gray 770-401 100</li> </ul>		

## Dimensions





Page



**WINSTA® MINI** 890/891 Series; 2- to 5-Pole  
Connectors, Snap-In Device Connectors, PCB Connectors,  
Distribution Connectors, Cable Assemblies

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**WINSTA® MINI special** 890/891 Series; 2- to 5-Pole  
Connectors, Snap-In Device Connectors, PCB Connectors,  
Distribution Connectors, Cable Assemblies

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**WINSTA® MIDI** 770/771 Series; 2- to 7-Pole  
Linect® T-Connectors, Connectors, Snap-In Device Connectors,  
PCB Connectors, Distribution Connectors, Cable Assemblies



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**WINSTA® MIDI special** 770/771 Series; 2- to 5-Pole  
Connectors, Snap-In Device Connectors, PCB Connectors,  
Distribution Connectors, Cable Assemblies

210








**WINSTA® KNX** 893/894 Series; 2-Pole  
Connectors, Snap-In Device Connectors,  
Distribution Connectors, Cable Assemblies

242

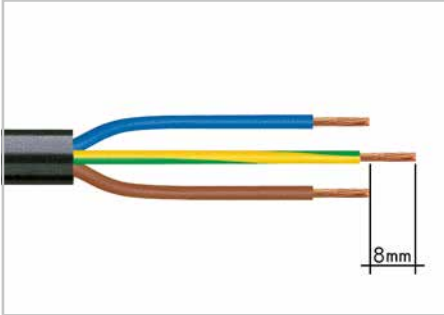


- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.

	Page	
	<b>890 Series</b>	
	<b>Connectors, 2-Pole</b>	62
	<b>Connectors, 3-Pole</b>	72
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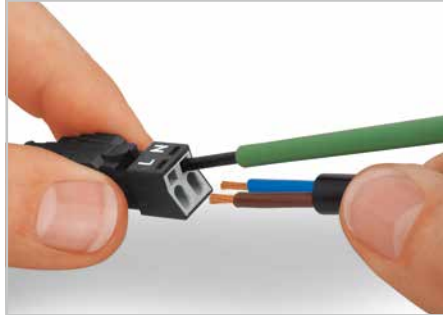
# WINSTA® MINI, 890 Series Handling:

## Preparation



1. Strip length, outer insulation = x mm <sup>❶</sup>
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

## Termination via Push-in CAGE CLAMP®



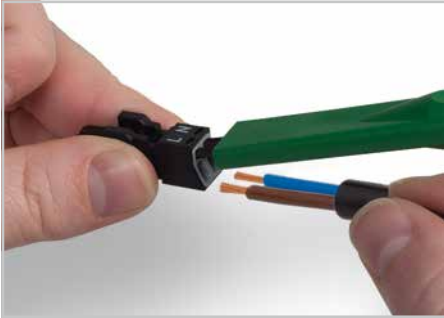
To terminate fine-stranded conductors, open clamping unit via 2.5 mm screwdriver and insert stripped conductor until it hits backstop. Solid conductors can be connected via push-in termination.

## Strain relief installation



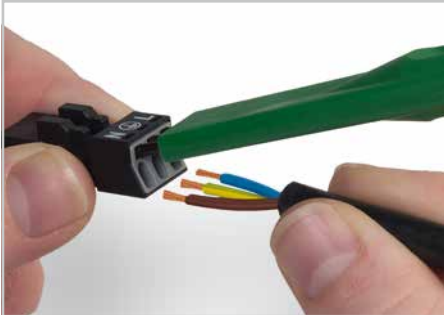
Latch wired connector onto the base of the strain relief housing.

## Conductor termination with . . .



To terminate fine-stranded conductors, open clamping units via 890-382 Operating Tool and insert stripped conductors until they hit backstop. Solid conductors can be connected via push-in termination.

## . . . operating tool



To terminate fine-stranded conductors, open clamping units via 890-383 Operating Tool and insert stripped conductors until they hit backstop. Solid conductors can be connected via push-in termination.



## Shield termination



Connector with shield termination



Apply the shield to the rubber cable.  
Strip length, outer insulation = 30 mm  
Shield length = 8 mm



Push the shield connecting plate into the connector until fully inserted.

❶ Strip length, outer insulation: 2-pole = 30 mm, 3-pole = 37 mm, 4- and 5-pole = 45 mm



Push down strain relief clamp by hand.



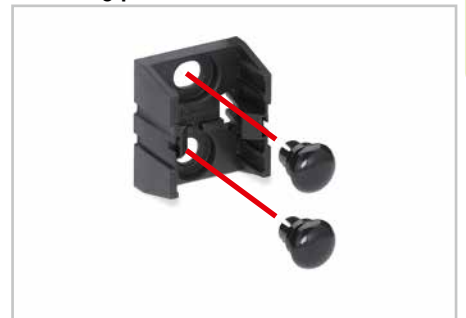
Push down strain relief clamp via 2.5 mm screwdriver alternately on both sides.



Latch the top of the strain relief housing.

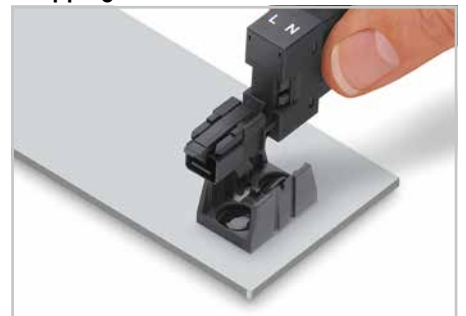


### Mounting plate installation



Securing the mounting plate via fixing pins.

### Snapping on distribution connector



The distribution connectors snap together when attached to the mounting plate.

### Locking lever assembly



First insert wired connector into strain relief housing, then snap clamp and cover.





All connectors (snap-in versions, PCB connectors, distribution connectors) for fixed installations are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

### Marking



The printed marking of the connector is clearly visible in the openings of the strain relief housing.

# WINSTA® MINI Sockets and Plugs, 2-Pole

<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p> <p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>
--	---



**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 2-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 3.8 ... 8.2 mm cable diameter, Strip length, outer insulation: 30 mm			Plug with strain relief housing, for 3.8 ... 8.2 mm cable diameter, Strip length, outer insulation: 30 mm		
	● black	890-102	50	● black	890-112	50
	○ white	890-122	50	○ white	890-132	50

**Item-Specific Accessories**

	Operating tool, partially insulated 2-way	Operating tool, partially insulated 2-way
	 890-382 1	 890-382 1

**Accessories, 890 Series**

	<p>Locking lever, for "flying leads", manually operated</p> <p>● black 890-101 100 (2x50)</p> <p>○ white 890-121 100 (2x50)</p>	<p>Locking lever, for "flying leads", tool operated</p> <p>● black 890-111 100 (2x50)</p> <p>○ white 890-131 100 (2x50)</p>
	<p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <p>● black 890-310 100</p> <p>○ white 890-311 100</p>	

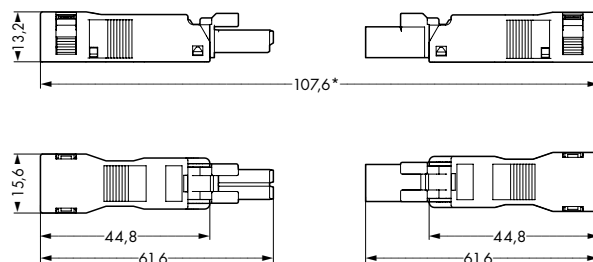
**Info**

**Dimensions**

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (L N)
- white Coding A (L N)
- blue Coding I (+ -)

For coding information, see page 250.  
Fire load data available upon request.



\* Overall length when mated

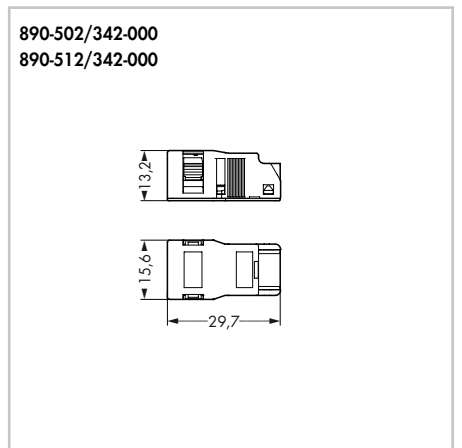
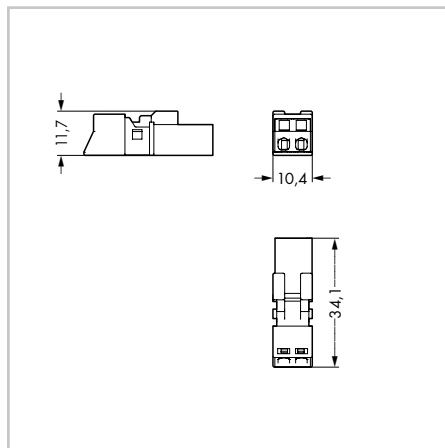
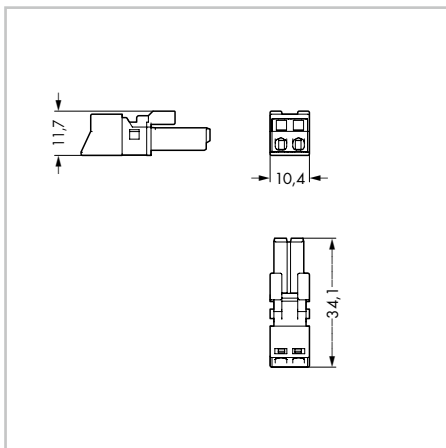
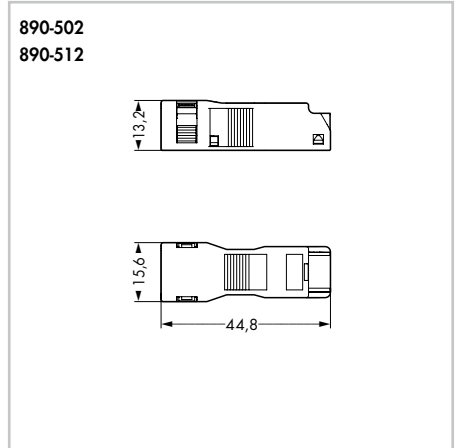


<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul>
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

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>			<b>Strain relief housing,</b> for 3.8 ... 8.2 mm cable diameter, Strip length, outer insulation: 30 mm		
● black	890-202	50	● black	890-212	50	black	890-502	50
○ white	890-222	50	○ white	890-232	50	white	890-512	50
● blue	890-1102	50	● blue	890-1112	50	<b>Short version, e.g. for LED lights,</b> Strip length, outer insulation: 17,5 mm		
						black	890-502/342-000	50
						white	890-512/342-000	50

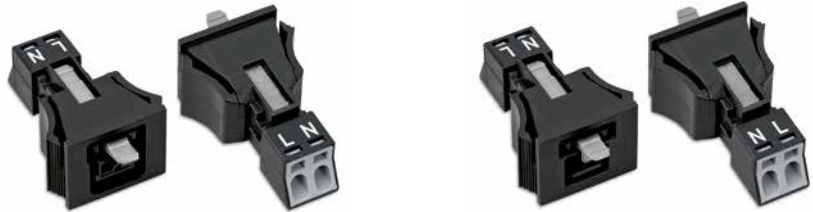
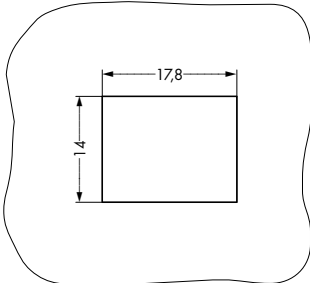
Item-Specific Accessories		
<b>Operating tool, partially insulated</b>		
	2-way	890-382 1
<b>Operating tool, partially insulated</b>		
	2-way	890-382 1
Accessories, 890 Series		
<b>Locking lever, for "flying leads",</b> manually operated		
	black	890-101 100 (2x50)
	white	890-121 100 (2x50)
<b>Locking lever, for "flying leads",</b> tool operated		
	black	890-111 100 (2x50)
	white	890-131 100 (2x50)
<b>Mounting carrier, for 2- to 5-pole</b> "flying leads"		
	black	890-310 100
	white	890-311 100
Dimensions		





# WINSTA® MINI Snap-In Sockets and Plugs, 2-Pole



PUSH-IN CAGE CLAMP®

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals			 9 mm / 0.35 in. ② Approvals



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 2-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● black	890-702	50	● black	890-712	50
	○ white	890-722	50	○ white	890-732	50
	● blue	890-2102	50	● blue	890-2112	50

Item-Specific Accessories						
	Operating tool, partially insulated 2-way 			Operating tool, partially insulated 2-way 		
		890-382	1		890-382	1

Accessories, 890 Series						
	Lockout cap, for cutout, 2-pole 			Lockout cap, for cutout, 2-pole 		
	black	890-642	100	black	890-642	100
	white	890-692	100	white	890-692	100

Info	Dimensions
------	------------

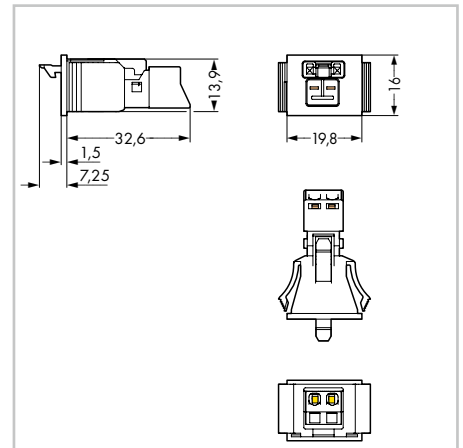
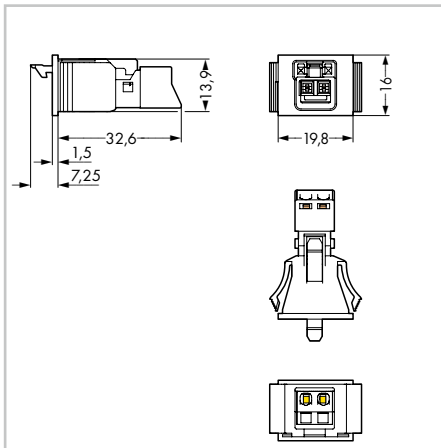
① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

● black Coding A (L N)  
○ white Coding A (L N)  
● blue Coding I (+ -)

For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MINI



## Distribution Connectors, 2-Pole

	250 V/4 kV/3 $I_N$ 16 A  ② Approvals	250 V/4 kV/3 $I_N$ 16 A  ② Approvals
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
h-distribution connector, 2-pole	h-distribution connector, unidirectional, plug/socket – socket			T-distribution connector, 1 x plug/2 x socket		
T-distribution connector, 2-pole	● black	890-1634	50	● black	890-1606	25
	○ white	890-1684	50	○ white	890-1656	25
				● blue	890-1617	25
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	● black	890-1636	50	● black	890-1615	25
	○ white	890-1686	50	○ white	890-1665	25
				● blue	890-1620	25

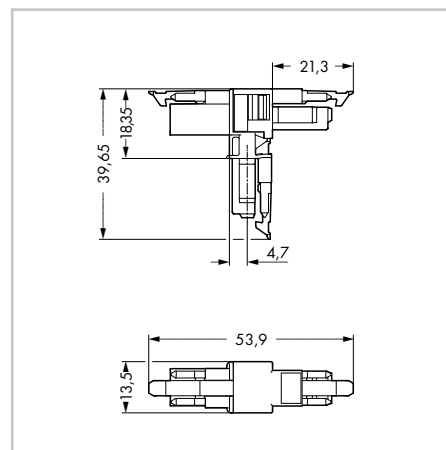
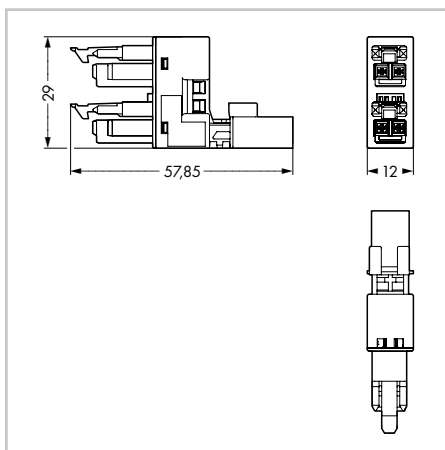
### Item-Specific Accessories

	<b>Mounting plate</b> , for distribution connectors  black 890-1622 100 white 890-1672 100	
	<b>Fixing pin</b> , for mounting plates  ③ black 890-601 250	

### Accessories, 890 Series

	<b>Locking lever</b> , for "flying leads", manually operated  black 890-101 100 (2x50) white 890-121 100 (2x50)		<b>Locking lever</b> , for "flying leads", tool operated  black 890-111 100 (2x50) white 890-131 100 (2x50)	
--	--	--	--	--

### Dimensions



# WINSTA® MINI PCB Connectors, 2-Pole

	250 V/4 kV/3 $I_N$ 16 A  ① Approvals	250 V/4 kV/3 $I_N$ 16 A  ① Approvals
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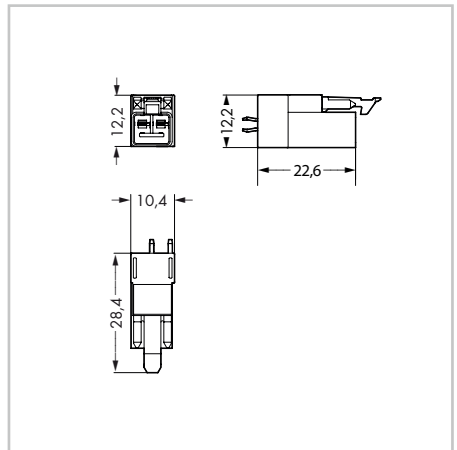
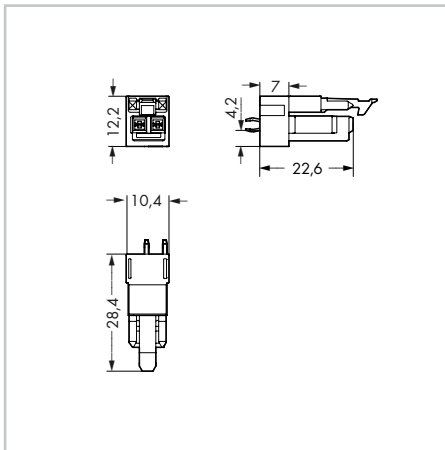


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	890-802	100	● black	890-812	100
	○ white	890-822	100	○ white	890-832	100
	● blue	890-3102	100	● blue	890-3112	100
Info	Dimensions					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (L N)
- white Coding A (L N)
- blue Coding I (+ -)

For coding information, see page 250.  
Fire load data available upon request.





# WINSTA® MINI Cable Assemblies 2 x 1 mm<sup>2</sup>

		<b>PVC</b> H05VV-F 2x1 <b>halogen-free</b> H05Z1Z1-F 2x1  <b>250 V/4 kV/3 I<sub>N</sub> 10 A</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>																																																							
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<p>① For "International Certification Organizations" and "Approvals – User Guide," see page 534.</p> <p>For other cables, please contact factory.</p> <p>● black Coding A (L N) ○ white Coding A (L N)</p> <p>For coding information, see page 250. Fire load data available upon request.</p>		<p><b>Locking lever, for "flying leads",</b> manually operated</p> <table border="1"> <tr><td>black</td><td>890-101</td><td>100 (2x50)</td></tr> <tr><td>white</td><td>890-121</td><td>100 (2x50)</td></tr> </table> <p><b>Locking lever, for "flying leads",</b> tool operated</p> <table border="1"> <tr><td>black</td><td>890-111</td><td>100 (2x50)</td></tr> <tr><td>white</td><td>890-131</td><td>100 (2x50)</td></tr> </table> <p><b>Mounting carrier, for 2- to 5-pole</b> "flying leads"</p> <table border="1"> <tr><td>black</td><td>890-310</td><td>100</td></tr> <tr><td>white</td><td>890-311</td><td>100</td></tr> </table>	black	890-101	100 (2x50)	white	890-121	100 (2x50)	black	890-111	100 (2x50)	white	890-131	100 (2x50)	black	890-310	100	white	890-311	100																																					
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	PVC	H05VV-F 2x1.5			
	halogen-free	H05Z1Z1-F 2x1.5			
	250 V/4 kV/3 I <sub>N</sub> 16 A				
	Conductor ends, bonded: 9 mm				
	① Approvals				
<b>Interconnecting cable, socket – plug</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC		halogen-free		
	1 m	891-8992/006-101	891-8992/006-102	891-8992/016-101	891-8992/016-102
	2 m	891-8992/006-201	891-8992/006-202	891-8992/016-201	891-8992/016-202
	3 m	891-8992/006-301	891-8992/006-302	891-8992/016-301	891-8992/016-302
	4 m	891-8992/006-401	891-8992/006-402	891-8992/016-401	891-8992/016-402
	5 m	891-8992/006-501	891-8992/006-502	891-8992/016-501	891-8992/016-502
	6 m	891-8992/006-601	891-8992/006-602	891-8992/016-601	891-8992/016-602
	7 m	891-8992/006-701	891-8992/006-702	891-8992/016-701	891-8992/016-702
	8 m	891-8992/006-801	891-8992/006-802	891-8992/016-801	891-8992/016-802
<b>Connecting cable, socket – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC		halogen-free		
	1 m	891-8992/106-101	891-8992/106-102	891-8992/116-101	891-8992/116-102
	2 m	891-8992/106-201	891-8992/106-202	891-8992/116-201	891-8992/116-202
	3 m	891-8992/106-301	891-8992/106-302	891-8992/116-301	891-8992/116-302
	4 m	891-8992/106-401	891-8992/106-402	891-8992/116-401	891-8992/116-402
	5 m	891-8992/106-501	891-8992/106-502	891-8992/116-501	891-8992/116-502
	6 m	891-8992/106-601	891-8992/106-602	891-8992/116-601	891-8992/116-602
	7 m	891-8992/106-701	891-8992/106-702	891-8992/116-701	891-8992/116-702
	8 m	891-8992/106-801	891-8992/106-802	891-8992/116-801	891-8992/116-802
<b>Connecting cable, plug – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC		halogen-free		
	1 m	891-8992/206-101	891-8992/206-102	891-8992/216-101	891-8992/216-102
	2 m	891-8992/206-201	891-8992/206-202	891-8992/216-201	891-8992/216-202
	3 m	891-8992/206-301	891-8992/206-302	891-8992/216-301	891-8992/216-302
	4 m	891-8992/206-401	891-8992/206-402	891-8992/216-401	891-8992/216-402
	5 m	891-8992/206-501	891-8992/206-502	891-8992/216-501	891-8992/216-502
	6 m	891-8992/206-601	891-8992/206-602	891-8992/216-601	891-8992/216-602
	7 m	891-8992/206-701	891-8992/206-702	891-8992/216-701	891-8992/216-702
	8 m	891-8992/206-801	891-8992/206-802	891-8992/216-801	891-8992/216-802
<b>Accessories</b>					
<b>Locking lever, for "flying leads",</b>					
manually operated					
		black	<b>890-101</b>	100 (2x50)	
		white	<b>890-121</b>	100 (2x50)	
<b>Locking lever, for "flying leads",</b>					
tool operated					
		black	<b>890-111</b>	100 (2x50)	
		white	<b>890-131</b>	100 (2x50)	
<b>Mounting carrier, for 2- to 5-pole</b>					
"flying leads"					
		black	<b>890-310</b>	100	
		white	<b>890-311</b>	100	

		PVC H05VV-F 2x1.5 halogen-free H05Z1Z1-F 2x1.5  250 V/4 kV/3 I <sub>N</sub> 16 A  Conductor ends, bonded: 9 mm ① Approvals				
<b>Interconnecting cable, socket – plug</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding I, e.g., for dimming function (DALI)				
		PVC		halogen-free		
		1 m	891-8982/006-101	891-8982/006-102	891-8982/016-101	891-8982/016-102
		2 m	891-8982/006-201	891-8982/006-202	891-8982/016-201	891-8982/016-202
		3 m	891-8982/006-301	891-8982/006-302	891-8982/016-301	891-8982/016-302
		4 m	891-8982/006-401	891-8982/006-402	891-8982/016-401	891-8982/016-402
		5 m	891-8982/006-501	891-8982/006-502	891-8982/016-501	891-8982/016-502
		6 m	891-8982/006-601	891-8982/006-602	891-8982/016-601	891-8982/016-602
		7 m	891-8982/006-701	891-8982/006-702	891-8982/016-701	891-8982/016-702
		8 m	891-8982/006-801	891-8982/006-802	891-8982/016-801	891-8982/016-802
<b>Connecting cable, socket – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding I, e.g., for dimming function (DALI)				
		PVC		halogen-free		
		1 m	891-8982/106-101	891-8982/106-102	891-8982/116-101	891-8982/116-102
		2 m	891-8982/106-201	891-8982/106-202	891-8982/116-201	891-8982/116-202
		3 m	891-8982/106-301	891-8982/106-302	891-8982/116-301	891-8982/116-302
		4 m	891-8982/106-401	891-8982/106-402	891-8982/116-401	891-8982/116-402
		5 m	891-8982/106-501	891-8982/106-502	891-8982/116-501	891-8982/116-502
		6 m	891-8982/106-601	891-8982/106-602	891-8982/116-601	891-8982/116-602
		7 m	891-8982/106-701	891-8982/106-702	891-8982/116-701	891-8982/116-702
		8 m	891-8982/106-801	891-8982/106-802	891-8982/116-801	891-8982/116-802
<b>Connecting cable, plug – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding I, e.g., for dimming function (DALI)				
		PVC		halogen-free		
		1 m	891-8982/206-101	891-8982/206-102	891-8982/216-101	891-8982/216-102
		2 m	891-8982/206-201	891-8982/206-202	891-8982/216-201	891-8982/216-202
		3 m	891-8982/206-301	891-8982/206-302	891-8982/216-301	891-8982/216-302
		4 m	891-8982/206-401	891-8982/206-402	891-8982/216-401	891-8982/216-402
		5 m	891-8982/206-501	891-8982/206-502	891-8982/216-501	891-8982/216-502
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<b>Info</b>		<b>Accessories</b>				
① For "International Certification Organizations" and "Approvals – User Guide", see page 534.  For other cables, please contact factory.  ● blue Coding I (+ -)		Locking lever, for "flying leads", manually operated black 890-101 100 (2x50) white 890-121 100 (2x50)				
		Locking lever, for "flying leads", tool operated black 890-111 100 (2x50) white 890-131 100 (2x50)				
		Mounting carrier, for 2- to 5-pole "flying leads" black 890-310 100 white 890-311 100				
For coding information, see page 250. Fire load data available upon request.						





# WINSTA® MINI Sockets and Plugs, 3-Pole

<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>
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**Notice:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).






Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 3-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 4.5 ... 10 mm cable diameter, Strip length, outer insulation: 37 mm			Plug with strain relief housing, for 4.5 ... 10 mm cable diameter, Strip length, outer insulation: 37 mm		
	● black	890-103	50	● black	890-113	50
	○ white	890-123	50	○ white	890-133	50

**Item-Specific Accessories**

	<p>Operating tool, partially insulated 3-way</p> <p> 890-383 1</p>	<p>Operating tool, partially insulated 3-way</p> <p> 890-383 1</p>
		<p>Shield connecting plate, for plugs and sockets 3-way</p> <p> 890-523 50</p>

**Accessories, 890 Series**

	<p>Locking lever, for "flying leads", manually operated</p> <p> black 890-101 100 (2x50) white 890-121 100 (2x50)</p>	<p>Locking lever, for "flying leads", tool operated</p> <p> black 890-111 100 (2x50) white 890-131 100 (2x50)</p>
	<p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <p> black 890-310 100 white 890-311 100</p>	

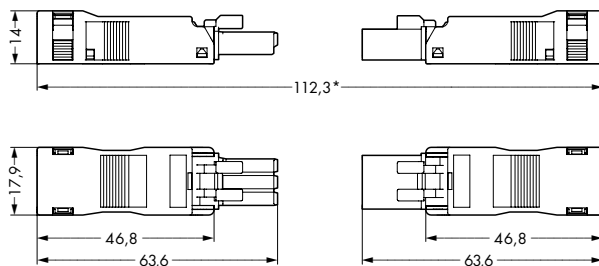
**Info**

**Dimensions**

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.



\* Overall length when mated

<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul>
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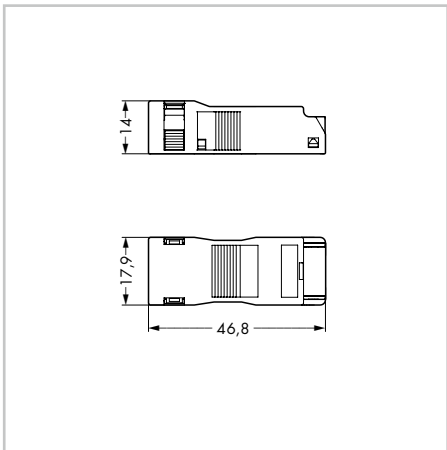
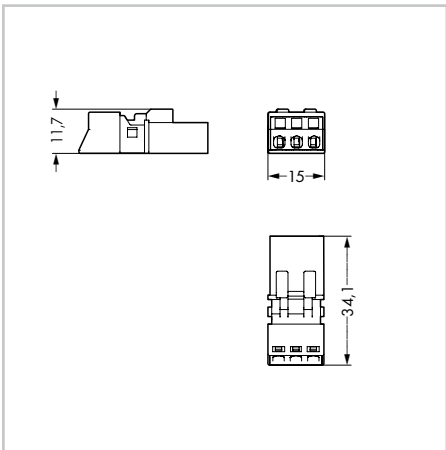
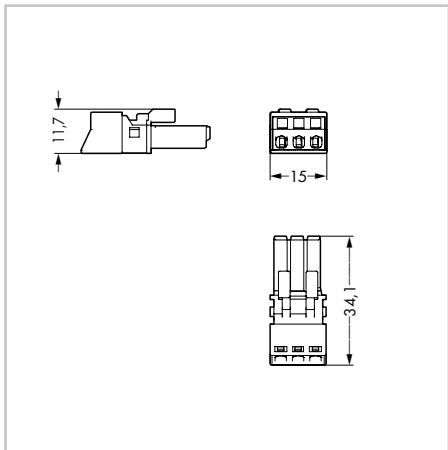


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>			<b>Strain relief housing,</b> for 4.5 ... 10 mm cable diameter, Strip length, outer insulation: 37 mm		
● black	890-203	50	● black	890-213	50	black	890-503	50
○ white	890-223	50	○ white	890-233	50	white	890-513	50

Item-Specific Accessories								
<b>Operating tool, partially insulated</b> 3-way			<b>Operating tool, partially insulated</b> 3-way			<b>Shield connecting plate, for plugs and sockets</b>		
	890-383	1		890-383	1		890-523	50



Accessories, 890 Series								
<b>Locking lever, for "flying leads",</b> manually operated			<b>Locking lever, for "flying leads",</b> tool operated					
	black 890-101	100 (2x50)		black 890-111	100 (2x50)			
	white 890-121	100 (2x50)		white 890-131	100 (2x50)			
<b>Mounting carrier, for 2- to 5-pole</b> "flying leads"								
	black 890-310	100						
	white 890-311	100						

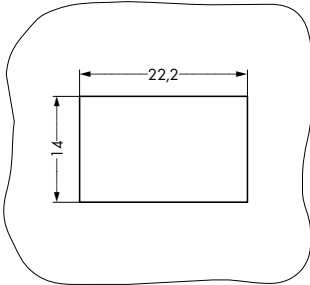
**Dimensions**





# WINSTA® MINI Snap-In Sockets and Plugs, 3-Pole



PUSH-IN CAGE CLAMP®

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	



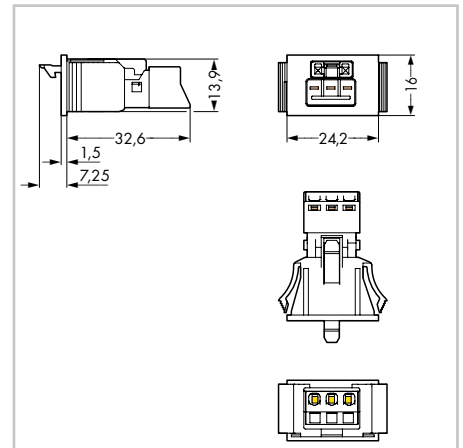
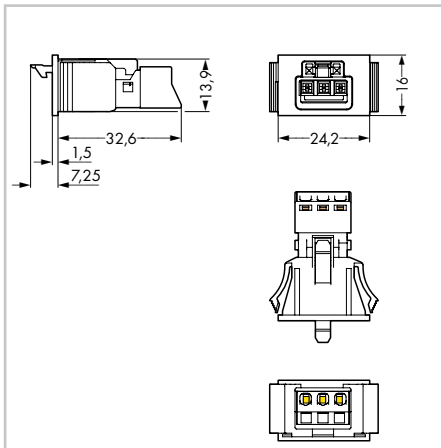
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 3-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● black	890-703	50	● black	890-713	50
	○ white	890-723	50	○ white	890-733	50
	without locking lever, for lighting installation with intermediate coupler			without locking lever, for lighting installation with intermediate coupler		
	● black	890-703/006-000	50	● black	890-713/006-000	50
	○ white	890-723/006-000	50	○ white	890-733/006-000	50

Item-Specific Accessories						
		Operating tool, partially insulated 3-way 		Operating tool, partially insulated 3-way 		
		890-383	1	890-383	1	

Accessories, 890 Series						
		Lockout cap, for cutout, 3-pole 		Lockout cap, for cutout, 3-pole 		
		black	890-643 100	black	890-643 100	
		white	890-693 100	white	890-693 100	

Info	Dimensions
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- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
- black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)
- For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MINI



## Intermediate Coupler and Distribution Connectors, 3-Pole

250 V/4 kV/3 I <sub>N</sub> 16 A  ② Approvals	250 V/4 kV/3 I <sub>N</sub> 16 A  ② Approvals	250 V/4 kV/3 I <sub>N</sub> 16 A  ② Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Intermediate coupler , 1 x plug/1 x socket</b>			<b>h-distribution connector, unidirectional, plug/socket - socket</b>			<b>T-distribution connector, 1 x plug/2 x socket</b>		
● black	<b>890-603</b>	50	● black	<b>890-634</b>	50	● black	<b>890-606</b>	25
○ white	<b>890-653</b>	50	○ white	<b>890-684</b>	50	○ white	<b>890-656</b>	25
At least one snap-in connector <b>WITHOUT</b> locking lever is required on one side when connecting two lights directly via intermediate coupler (see page 74).			for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
● black	<b>890-636</b>	50	● black	<b>890-636</b>	50	● black	<b>890-615</b>	25
○ white	<b>890-686</b>	50	○ white	<b>890-686</b>	50	○ white	<b>890-665</b>	25

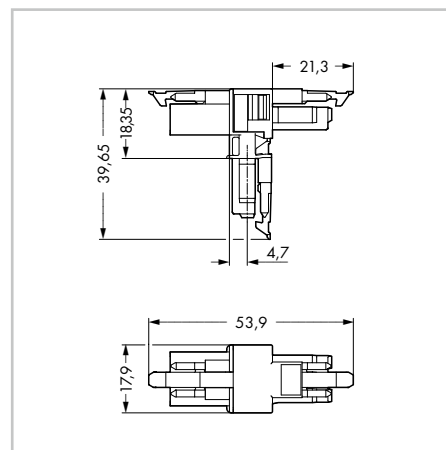
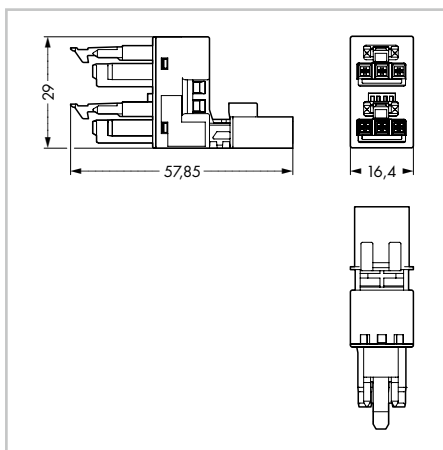
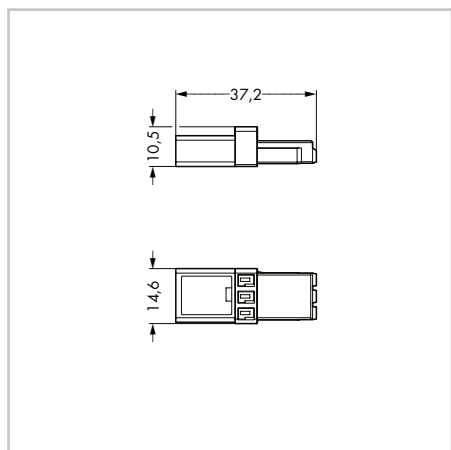
### Item-Specific Accessories

<b>Mounting plate</b> , for distribution connectors		
	black	<b>890-623</b> 100
	white	<b>890-673</b> 100
<b>Fixing pin</b> , for mounting plates		
	● black	<b>890-601</b> 250

### Accessories, 890 Series

<b>Locking lever</b> , for "flying leads", manually operated			<b>Locking lever</b> , for "flying leads", tool operated		
	black	<b>890-101</b> 100 (2x50)		black	<b>890-111</b> 100 (2x50)
	white	<b>890-121</b> 100 (2x50)		white	<b>890-131</b> 100 (2x50)

### Dimensions



	250 V/4 kV/3 $I_N$ 16 A  ① Approvals	250 V/4 kV/3 $I_N$ 16 A  ① Approvals
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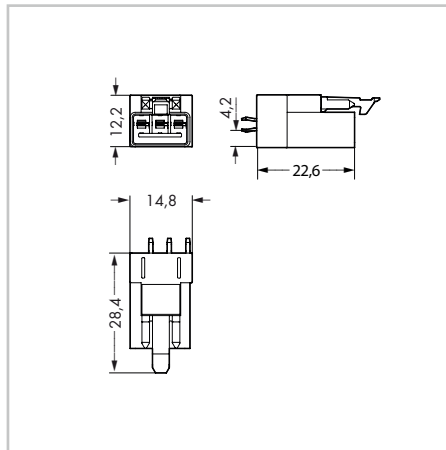
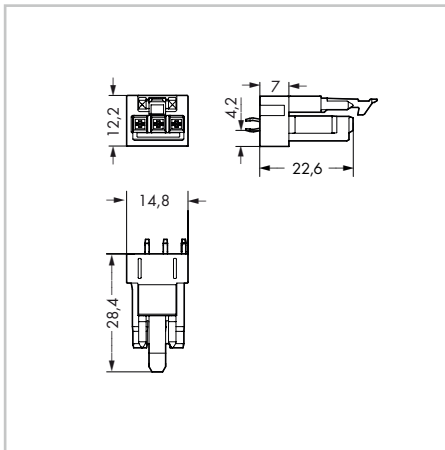


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	890-803	100	● black	890-813	100
	○ white	890-823	100	○ white	890-833	100
Info	Dimensions					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black      Coding A      (L ⊕ N)
- white      Coding A      (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.

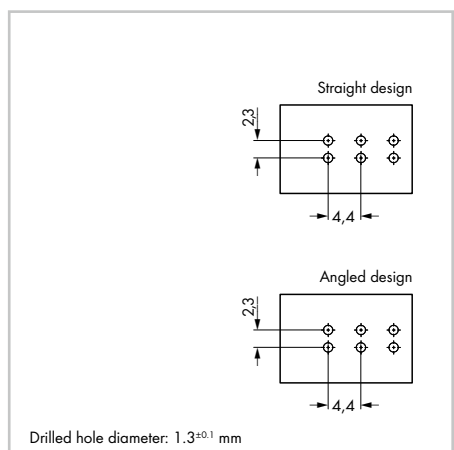
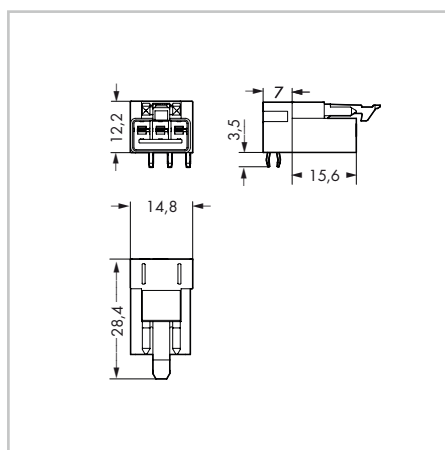
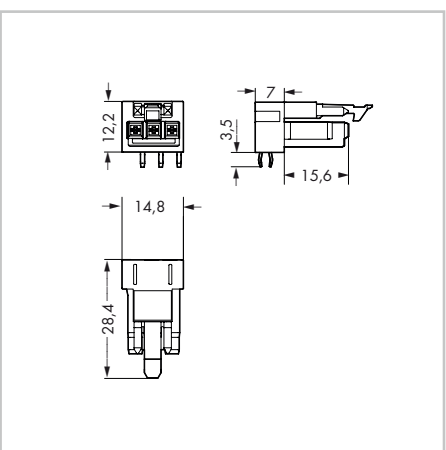


250 V/4 kV/3 $I_N$ 16 A  ① Approvals	250 V/4 kV/3 $I_N$ 16 A  ① Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
● black	890-803/011-000	100	● black	890-813/011-000	100
○ white	890-823/011-000	100	○ white	890-833/011-000	100

<b>Dimensions</b>	<b>Hole patterns</b>
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# WINSTA® MINI Cable Assemblies 3 x 1 mm<sup>2</sup>

PVC	H05VV-F 3G1
halogen-free	H05Z1Z1-F 3G1
250 V/4 kV/3	I <sub>N</sub> 10 A
Conductor ends, bonded: 9 mm	
① Approvals	

**Interconnecting cable, socket – plug**

Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	891-8993/005-101	891-8993/005-102	891-8993/015-101	891-8993/015-102
2 m	891-8993/005-201	891-8993/005-202	891-8993/015-201	891-8993/015-202
3 m	891-8993/005-301	891-8993/005-302	891-8993/015-301	891-8993/015-302
4 m	891-8993/005-401	891-8993/005-402	891-8993/015-401	891-8993/015-402
5 m	891-8993/005-501	891-8993/005-502	891-8993/015-501	891-8993/015-502
6 m	891-8993/005-601	891-8993/005-602	891-8993/015-601	891-8993/015-602
7 m	891-8993/005-701	891-8993/005-702	891-8993/015-701	891-8993/015-702
8 m	891-8993/005-801	891-8993/005-802	891-8993/015-801	891-8993/015-802

**Connecting cable, socket – free end**

Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	891-8993/105-101	891-8993/105-102	891-8993/115-101	891-8993/115-102
2 m	891-8993/105-201	891-8993/105-202	891-8993/115-201	891-8993/115-202
3 m	891-8993/105-301	891-8993/105-302	891-8993/115-301	891-8993/115-302
4 m	891-8993/105-401	891-8993/105-402	891-8993/115-401	891-8993/115-402
5 m	891-8993/105-501	891-8993/105-502	891-8993/115-501	891-8993/115-502
6 m	891-8993/105-601	891-8993/105-602	891-8993/115-601	891-8993/115-602
7 m	891-8993/105-701	891-8993/105-702	891-8993/115-701	891-8993/115-702
8 m	891-8993/105-801	891-8993/105-802	891-8993/115-801	891-8993/115-802

**Connecting cable, plug – free end**

Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	891-8993/205-101	891-8993/205-102	891-8993/215-101	891-8993/215-102
2 m	891-8993/205-201	891-8993/205-202	891-8993/215-201	891-8993/215-202
3 m	891-8993/205-301	891-8993/205-302	891-8993/215-301	891-8993/215-302
4 m	891-8993/205-401	891-8993/205-402	891-8993/215-401	891-8993/215-402
5 m	891-8993/205-501	891-8993/205-502	891-8993/215-501	891-8993/215-502
6 m	891-8993/205-601	891-8993/205-602	891-8993/215-601	891-8993/215-602
7 m	891-8993/205-701	891-8993/205-702	891-8993/215-701	891-8993/215-702
8 m	891-8993/205-801	891-8993/205-802	891-8993/215-801	891-8993/215-802

**Info**

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

For other cables, please contact factory.

● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.



**Accessories**

<b>Locking lever, for "flying leads",</b>			
	manually operated		
	black	890-101	100 (2x50)
	white	890-121	100 (2x50)
<b>Locking lever, for "flying leads",</b>			
	tool operated		
	black	890-111	100 (2x50)
	white	890-131	100 (2x50)
<b>Mounting carrier, for 2- to 5-pole</b>			
	"flying leads"		
	black	890-310	100
	white	890-311	100



	<p>PVC H05VV-F 3G1.5 halogen-free H05Z1Z1-F 3G1.5</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																																							
<b>Interconnecting cable, socket – plug</b>	<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● ○ Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8993/006-101</td> <td>891-8993/006-102</td> <td>891-8993/016-101</td> <td>891-8993/016-102</td> </tr> <tr> <td>2 m</td> <td>891-8993/006-201</td> <td>891-8993/006-202</td> <td>891-8993/016-201</td> <td>891-8993/016-202</td> </tr> <tr> <td>3 m</td> <td>891-8993/006-301</td> <td>891-8993/006-302</td> <td>891-8993/016-301</td> <td>891-8993/016-302</td> </tr> <tr> <td>4 m</td> <td>891-8993/006-401</td> <td>891-8993/006-402</td> <td>891-8993/016-401</td> <td>891-8993/016-402</td> </tr> <tr> <td>5 m</td> <td>891-8993/006-501</td> <td>891-8993/006-502</td> <td>891-8993/016-501</td> <td>891-8993/016-502</td> </tr> <tr> <td>6 m</td> <td>891-8993/006-601</td> <td>891-8993/006-602</td> <td>891-8993/016-601</td> <td>891-8993/016-602</td> </tr> <tr> <td>7 m</td> <td>891-8993/006-701</td> <td>891-8993/006-702</td> <td>891-8993/016-701</td> <td>891-8993/016-702</td> </tr> <tr> <td>8 m</td> <td>891-8993/006-801</td> <td>891-8993/006-802</td> <td>891-8993/016-801</td> <td>891-8993/016-802</td> </tr> </tbody> </table>	Length	Item No. black	Item No. white	Item No. black	Item No. white	● ○ Coding A					PVC		halogen-free			1 m	891-8993/006-101	891-8993/006-102	891-8993/016-101	891-8993/016-102	2 m	891-8993/006-201	891-8993/006-202	891-8993/016-201	891-8993/016-202	3 m	891-8993/006-301	891-8993/006-302	891-8993/016-301	891-8993/016-302	4 m	891-8993/006-401	891-8993/006-402	891-8993/016-401	891-8993/016-402	5 m	891-8993/006-501	891-8993/006-502	891-8993/016-501	891-8993/016-502	6 m	891-8993/006-601	891-8993/006-602	891-8993/016-601	891-8993/016-602	7 m	891-8993/006-701	891-8993/006-702	891-8993/016-701	891-8993/016-702	8 m	891-8993/006-801	891-8993/006-802	891-8993/016-801	891-8993/016-802
Length	Item No. black	Item No. white	Item No. black	Item No. white																																																				
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PVC		halogen-free																																																						
1 m	891-8993/006-101	891-8993/006-102	891-8993/016-101	891-8993/016-102																																																				
2 m	891-8993/006-201	891-8993/006-202	891-8993/016-201	891-8993/016-202																																																				
3 m	891-8993/006-301	891-8993/006-302	891-8993/016-301	891-8993/016-302																																																				
4 m	891-8993/006-401	891-8993/006-402	891-8993/016-401	891-8993/016-402																																																				
5 m	891-8993/006-501	891-8993/006-502	891-8993/016-501	891-8993/016-502																																																				
6 m	891-8993/006-601	891-8993/006-602	891-8993/016-601	891-8993/016-602																																																				
7 m	891-8993/006-701	891-8993/006-702	891-8993/016-701	891-8993/016-702																																																				
8 m	891-8993/006-801	891-8993/006-802	891-8993/016-801	891-8993/016-802																																																				
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# WINSTA® MINI Sockets and Plugs, 4-Pole

<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p> <p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>
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**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

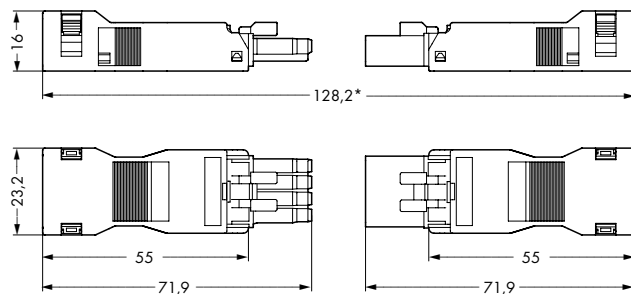


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Connectors, 4-pole, with Push-in CAGE CLAMP® connection</b>	<b>Socket with strain relief housing,</b> for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm			<b>Plug with strain relief housing,</b> for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm		
	● black	<b>890-104</b>	50	● black	<b>890-114</b>	50
	○ white	<b>890-124</b>	50	○ white	<b>890-134</b>	50
<b>Item-Specific Accessories</b>						
	<b>Operating tool, partially insulated</b> 4-way 			<b>Operating tool, partially insulated</b> 4-way 		
		<b>890-384</b>	1		<b>890-384</b>	1
<b>Accessories, 890 Series</b>						
	<b>Locking lever, for "flying leads",</b> manually operated 			<b>Locking lever, for "flying leads",</b> tool operated 		
	black	<b>890-101</b>	100 (2x50)	black	<b>890-111</b>	100 (2x50)
	white	<b>890-121</b>	100 (2x50)	white	<b>890-131</b>	100 (2x50)
	<b>Mounting carrier, for 2- to 5-pole</b> "flying leads" 					
	black	<b>890-310</b>	100			
	white	<b>890-311</b>	100			
<b>Info</b>	<b>Dimensions</b>					

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (N ⊕ 2|L 1|L)
- white Coding A (N ⊕ 2|L 1|L)

For coding information, see page 250.  
Fire load data available upon request.





\* Overall length when mated

<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 4-pole sockets</li> <li>- 4-pole plugs</li> </ul>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>			<b>Strain relief housing,</b> for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm		
● black	890-204	50	● black	890-214	50	black	890-504	50
○ white	890-224	50	○ white	890-234	50	white	890-514	50

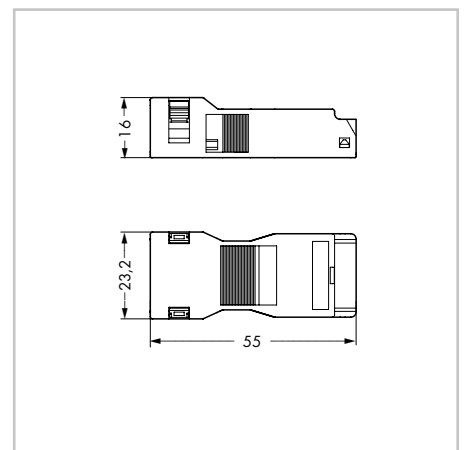
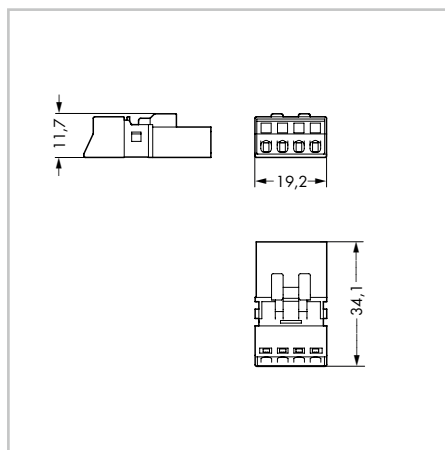
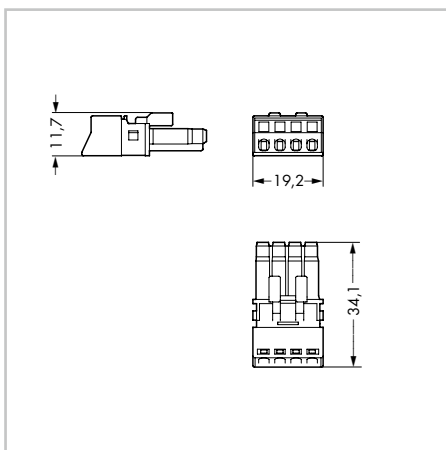
**Item-Specific Accessories**

<p><b>Operating tool, partially insulated</b> 4-way</p>  <p>890-384 1</p>	<p><b>Operating tool, partially insulated</b> 4-way</p>  <p>890-384 1</p>
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**Accessories, 890 Series**



<p><b>Locking lever, for "flying leads",</b> manually operated</p>  <p>black 890-101 100 (2x50) white 890-121 100 (2x50)</p>	<p><b>Locking lever, for "flying leads",</b> tool operated</p>  <p>black 890-111 100 (2x50) white 890-131 100 (2x50)</p>
<p><b>Mounting carrier, for 2- to 5-pole</b> "flying leads"</p>  <p>black 890-310 100 white 890-311 100</p>	

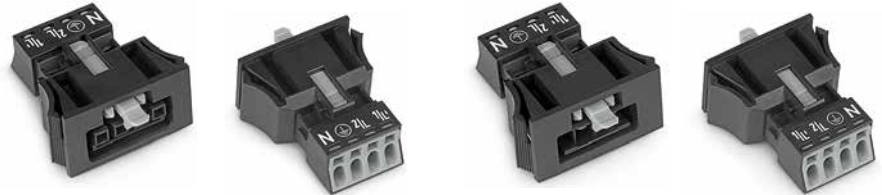
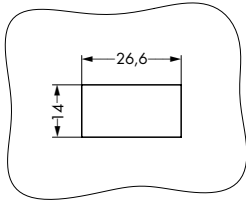
**Dimensions**







# WINSTA® MINI Snap-In Sockets and Plugs, 4-Pole

PUSH-IN CAGE CLAMP®

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	

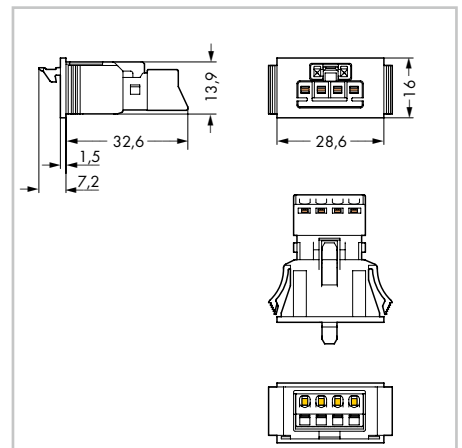
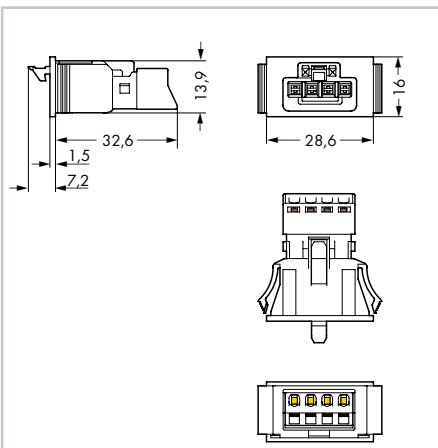


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 4-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● black	890-704	50	● black	890-714	50
	○ white	890-724	50	○ white	890-734	50
<b>Item-Specific Accessories</b>						
	Operating tool, partially insulated 4-way 			Operating tool, partially insulated 4-way 		
		890-384	1		890-384	1
<b>Accessories, 890 Series</b>						
	Lockout cap, for cutout, 4-pole 			Lockout cap, for cutout, 4-pole 		
	● black	890-644	100	● black	890-644	100
	○ white	890-694	100	○ white	890-694	100
<b>Info</b>	<b>Dimensions</b>					

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

- black Coding A (N ⊕ 2|L 1|L)
- white Coding A (N ⊕ 2|L 1|L)

For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MINI



## Distribution Connectors, 4-Pole

400 V/6 kV/3 I <sub>N</sub> 16 A  ② Approvals	400 V/6 kV/3 I <sub>N</sub> 16 A  ② Approvals	400 V/6 kV/3 I <sub>N</sub> 16 A  ② Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Intermediate coupler, 1 x plug/1 x socket</b>			<b>h-distribution connector, unidirectional, plug/socket – socket</b>			<b>T-distribution connector, 1 x plug/2 x socket</b>		
black	890-604	50	● black	890-944	50	● black	890-626	50
white	890-654	50	○ white	890-994	50	○ white	890-676	50
At least one snap-in connector <b>WITHOUT</b> locking lever is required on one side when connecting two lights directly via intermediate coupler.			for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
			● black	890-945	50	● black	890-627	50
			○ white	890-995	50	○ white	890-677	50

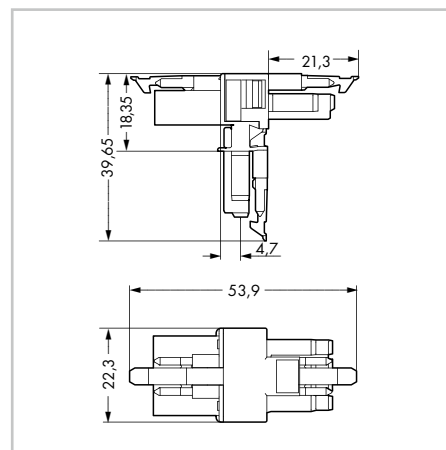
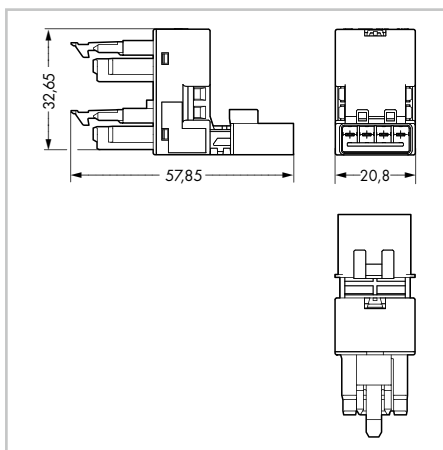
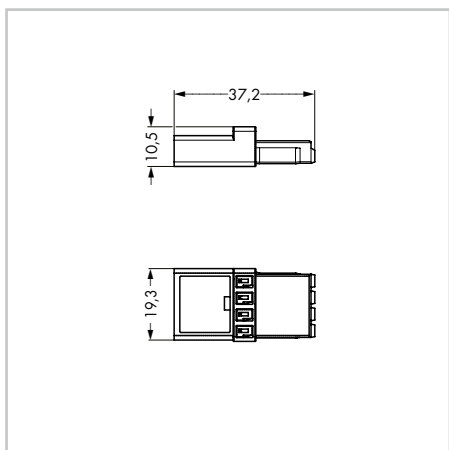
### Item-Specific Accessories

	<b>Mounting plate, for distribution connectors</b>	
	black	890-624 50
	white	890-674 50
	<b>Fixing pin, for mounting plates</b>	
	③ black	890-601 250

### Accessories, 890 Series

	<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>		
	black	890-101 100 (2x50)		black	890-111 100 (2x50)
	white	890-121 100 (2x50)		white	890-131 100 (2x50)

### Dimensions



	250 V/4 kV/3 $I_N$ 16 A  ① Approvals	250 V/4 kV/3 $I_N$ 16 A  ① Approvals
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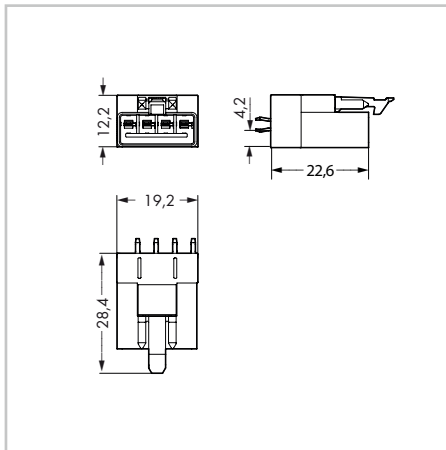
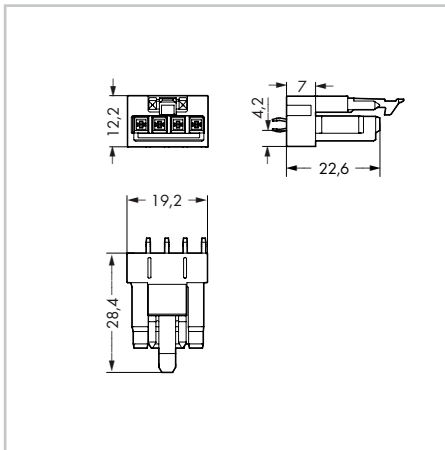


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	890-804	100	● black	890-814	100
	○ white	890-824	100	○ white	890-834	100
Info	Dimensions					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

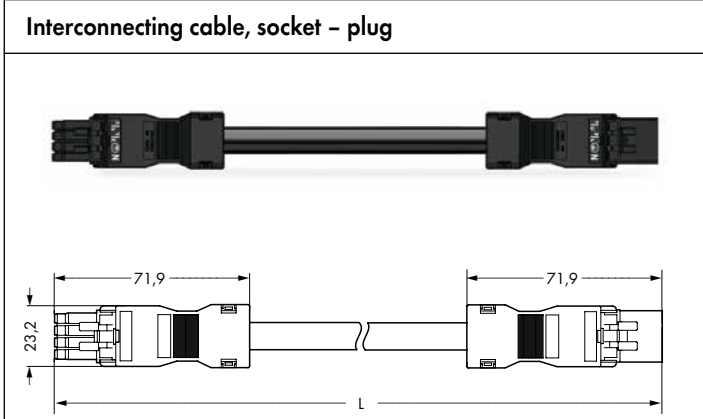
- black      Coding A      (N ⊕ 2L 1L)
- white      Coding A      (N ⊕ 2L 1L)

For coding information, see page 250.  
Fire load data available upon request.

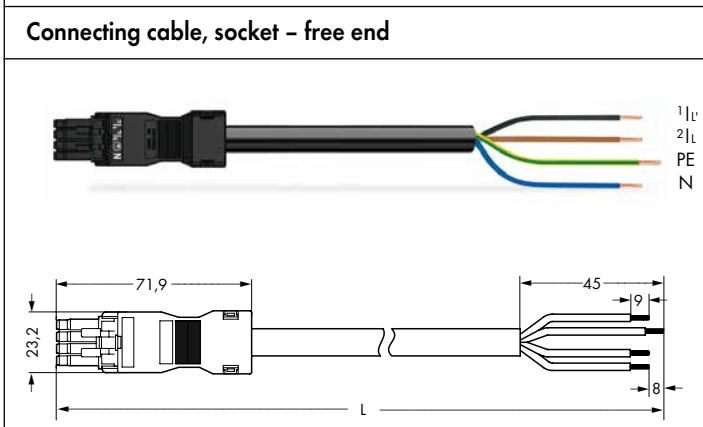




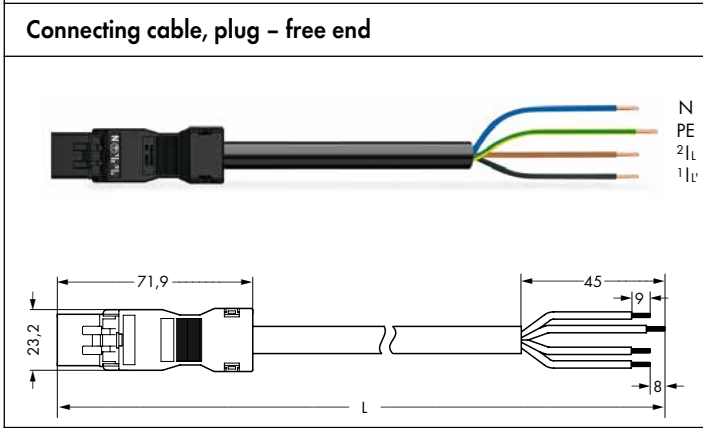
	PVC	H05VV-F 4G1.5
	halogen-free	H05Z1Z1-F 4G1.5
	400 V/6 kV/3	I <sub>N</sub> 16 A
	Conductor ends, bonded: 9 mm	
	① Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A			
	PVC		halogen-free	
1 m	891-8994/006-101	891-8994/006-102	891-8994/016-101	891-8994/016-102
2 m	891-8994/006-201	891-8994/006-202	891-8994/016-201	891-8994/016-202
3 m	891-8994/006-301	891-8994/006-302	891-8994/016-301	891-8994/016-302
4 m	891-8994/006-401	891-8994/006-402	891-8994/016-401	891-8994/016-402
5 m	891-8994/006-501	891-8994/006-502	891-8994/016-501	891-8994/016-502
6 m	891-8994/006-601	891-8994/006-602	891-8994/016-601	891-8994/016-602
7 m	891-8994/006-701	891-8994/006-702	891-8994/016-701	891-8994/016-702
8 m	891-8994/006-801	891-8994/006-802	891-8994/016-801	891-8994/016-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A			
	PVC		halogen-free	
1 m	891-8994/106-101	891-8994/106-102	891-8994/116-101	891-8994/116-102
2 m	891-8994/106-201	891-8994/106-202	891-8994/116-201	891-8994/116-202
3 m	891-8994/106-301	891-8994/106-302	891-8994/116-301	891-8994/116-302
4 m	891-8994/106-401	891-8994/106-402	891-8994/116-401	891-8994/116-402
5 m	891-8994/106-501	891-8994/106-502	891-8994/116-501	891-8994/116-502
6 m	891-8994/106-601	891-8994/106-602	891-8994/116-601	891-8994/116-602
7 m	891-8994/106-701	891-8994/106-702	891-8994/116-701	891-8994/116-702
8 m	891-8994/106-801	891-8994/106-802	891-8994/116-801	891-8994/116-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A			
	PVC		halogen-free	
1 m	891-8994/206-101	891-8994/206-102	891-8994/216-101	891-8994/216-102
2 m	891-8994/206-201	891-8994/206-202	891-8994/216-201	891-8994/216-202
3 m	891-8994/206-301	891-8994/206-302	891-8994/216-301	891-8994/216-302
4 m	891-8994/206-401	891-8994/206-402	891-8994/216-401	891-8994/216-402
5 m	891-8994/206-501	891-8994/206-502	891-8994/216-501	891-8994/216-502
6 m	891-8994/206-601	891-8994/206-602	891-8994/216-601	891-8994/216-602
7 m	891-8994/206-701	891-8994/206-702	891-8994/216-701	891-8994/216-702
8 m	891-8994/206-801	891-8994/206-802	891-8994/216-801	891-8994/216-802

**Info**

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

● black Coding A (N ⊕ 2|L 1|L)  
○ white Coding A (N ⊕ 2|L 1|L)

For coding information, see page 250.  
Fire load data available upon request.



**Accessories**

	manually operated		
	black	890-101	100 (2x50)
	white	890-121	100 (2x50)
	tool operated		
	black	890-111	100 (2x50)
	white	890-131	100 (2x50)
	Mounting carrier, for 2- to 5-pole "flying leads"		
	black	890-310	100
	white	890-311	100










# WINSTA® MINI Sockets and Plugs, 5-Pole

<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 13 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 13 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>22 ... 16 AWG</p>
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**Note:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

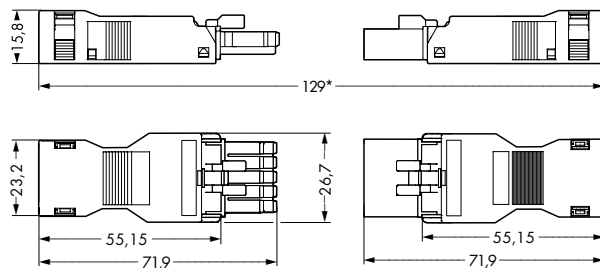


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 5-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm			Plug with strain relief housing, for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm		
	● black	890-105	50	● black	890-115	50
	○ white	890-125	50	○ white	890-135	50
<b>Item-Specific Accessories</b>						
	Operating tool, partially insulated 5-way 			Operating tool, partially insulated 5-way 		
		890-385	1		890-385	1
<b>Accessories, 890 Series</b>						
	Locking lever, for "flying leads", manually operated 			Locking lever, for "flying leads", tool operated 		
	black	890-101	100 (2x50)	black	890-111	100 (2x50)
	white	890-121	100 (2x50)	white	890-131	100 (2x50)
	Mounting carrier, for 2- to 5-pole "flying leads" 					
	black	890-310	100			
	white	890-311	100			
<b>Info</b>	<b>Dimensions</b>					

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ③ Blue plugs and sockets are suitable for 16 A DALI applications.

- black Coding A (N ⊕ 1 2 3)
- white Coding A (N ⊕ 1 2 3)
- blue Coding I (N ⊕ L - +)

For coding information, see page 250.  
Fire load data available upon request.





\* Overall length when mated

<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 13 A / 16 A ③</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 13 A / 16 A ③</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>Snap-on type strain relief housings for: - 5-pole sockets - 5-pole plugs</p>
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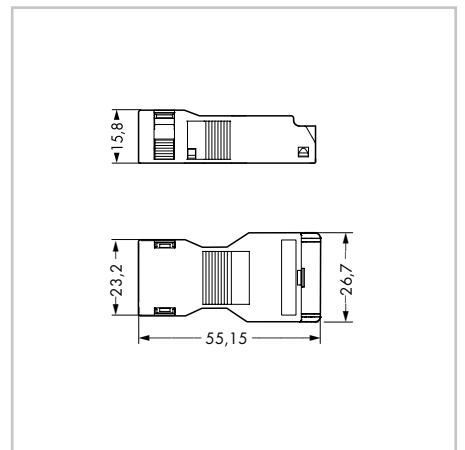
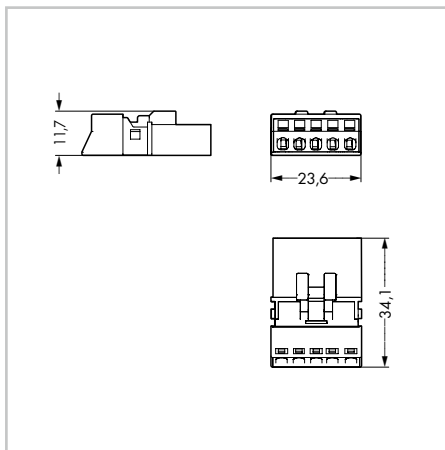
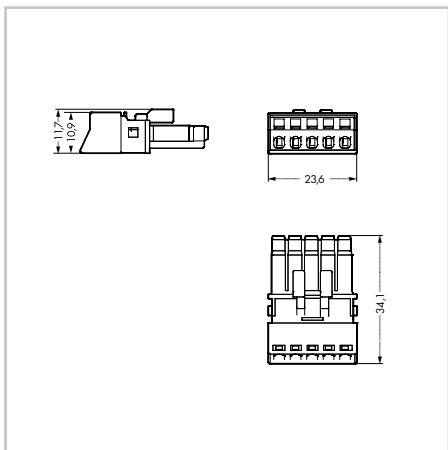


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>			<b>Strain relief housing,</b> for 6.5 ... 10.5 mm cable diameter, Strip length, outer insulation: 45 mm		
● black	890-205	50	● black	890-215	50	black	890-505	50
○ white	890-225	50	○ white	890-235	50	white	890-515	50
● blue	890-1105 ③	50	● blue	890-1115 ③	50			

Item-Specific Accessories		
<p><b>Operating tool, partially insulated</b> 5-way</p>  <p>890-385 1</p>	<p><b>Operating tool, partially insulated</b> 5-way</p>  <p>890-385 1</p>	

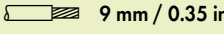
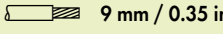
Accessories, 890 Series		
<p><b>Locking lever, for "flying leads",</b> manually operated</p> <p>black 890-101 100 (2x50) white 890-121 100 (2x50)</p>	<p><b>Locking lever, for "flying leads",</b> tool operated</p> <p>black 890-111 100 (2x50) white 890-131 100 (2x50)</p>	
<p><b>Mounting carrier, for 2- to 5-pole</b> "flying leads"</p> <p>black 890-310 100 white 890-311 100</p>		

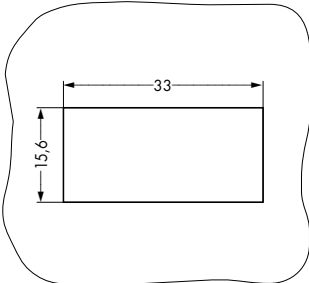
**Dimensions**





# WINSTA® MINI Snap-In Sockets and Plugs, 5-Pole



PUSH-IN CAGE CLAMP®

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 13 A / 16 A ③	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 13 A / 16 A ③	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	



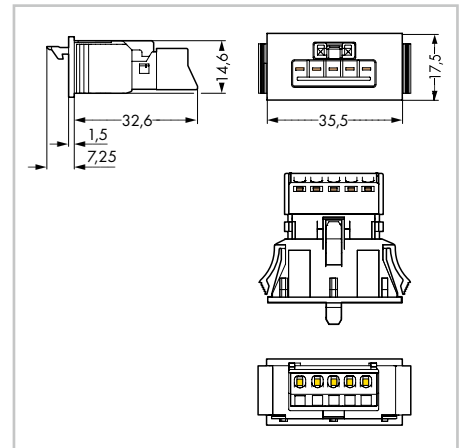
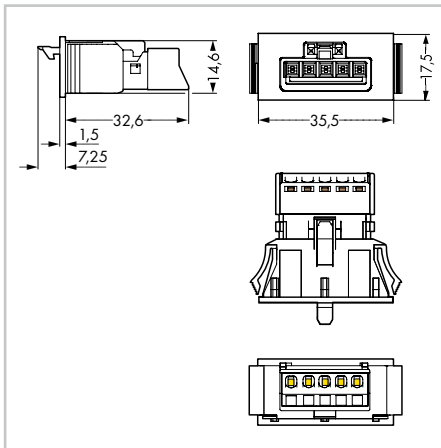
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 5-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● black	890-705	50	● black	890-715	50
	○ white	890-725	50	○ white	890-735	50
	● blue	890-2105 ③	50	● blue	890-2115 ③	50
	without locking lever, for lighting installation with intermediate coupler			without locking lever, for lighting installation with intermediate coupler		
	● black	890-705/006-000	50	● black	890-715/006-000	50
	○ white	890-725/006-000	50	○ white	890-735/006-000	50
	● blue	890-2105/006-000 ③	50	● blue	890-2115/006-000 ③	50

Item-Specific Accessories						
	Operating tool, partially insulated 5-way			Operating tool, partially insulated 5-way		
		890-385	1		890-385	1

Accessories, 890 Series						
	Lockout cap, for cutout, 5-pole			Lockout cap, for cutout, 5-pole		
		black 770-643	100		black 770-643	100
		white 770-693	100		white 770-693	100

Info	Dimensions
------	------------

- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ Blue plugs and sockets are suitable for 16 A DALI applications.
  - ④ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness  
For other cables, please contact factory.
- black Coding A (N ⊕ 1 2 3)  
○ white Coding A (N ⊕ 1 2 3)  
● blue Coding I (N ⊕ L - +)
- For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MINI



## Intermediate Couplers and T-Distribution Connectors, 5-Pole

400 V/6 kV/3 $I_N$ 13 A/16 A Ⓢ  ② Approvals	400 V/6 kV/3 $I_N$ 13 A/16 A Ⓢ  ② Approvals	400 V/6 kV/3 $I_N$ 13 A/16 A Ⓢ  ② Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Intermediate coupler , 1 x plug/1 x socket</b>			<b>h-distribution connector, plug/socket – socket</b>			<b>T-distribution connector, 1 x plug/2 x socket</b>		
● black	890-605	50	● black	890-929	50	● black	890-621	50
○ white	890-655	50	○ white	890-979	50	○ white	890-671	50
● blue	890-619	50	● blue	890-982	50	● blue	890-617	50
At least one snap-in connector <b>WITHOUT</b> locking lever is required on one side when connecting two lights directly via intermediate coupler (see page 38).			for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
			● black	890-930	50	● black	890-622	50
			○ white	890-980	50	○ white	890-672	50
			● blue	890-983	50	● blue	890-620	50

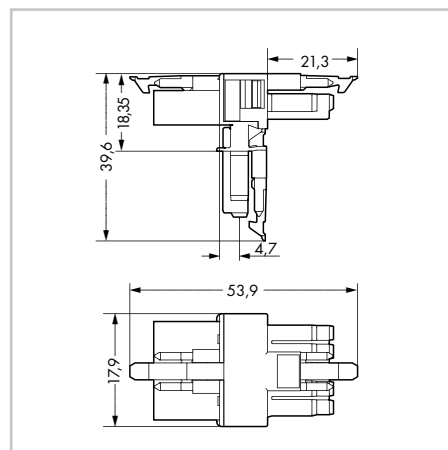
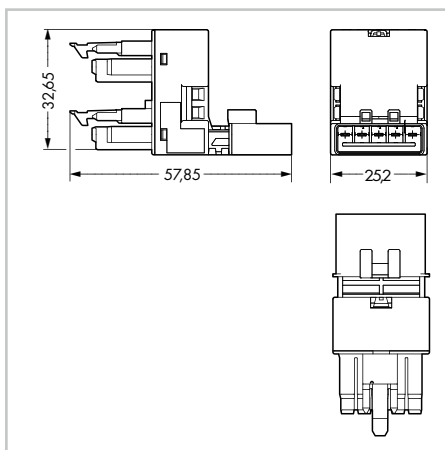
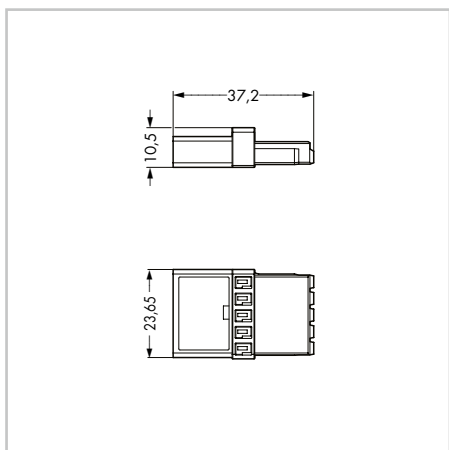
### Item-Specific Accessories

	<b>Mounting plate</b> , for distribution connectors  black 890-625 50 white 890-675 50	
	<b>Fixing pin</b> , for mounting plates  ④ black 890-601 250	

### Accessories, 890 Series

	<b>Locking lever</b> , for "flying leads", manually operated  black 890-101 100 (2x50) white 890-121 100 (2x50)	<b>Locking lever</b> , for "flying leads", tool operated  black 890-111 100 (2x50) white 890-131 100 (2x50)
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### Dimensions



	250 V/4 kV/3 $I_N$ 13 A/16 A ②  ① Approvals	250 V/4 kV/3 $I_N$ 13 A/16 A ②  ① Approvals
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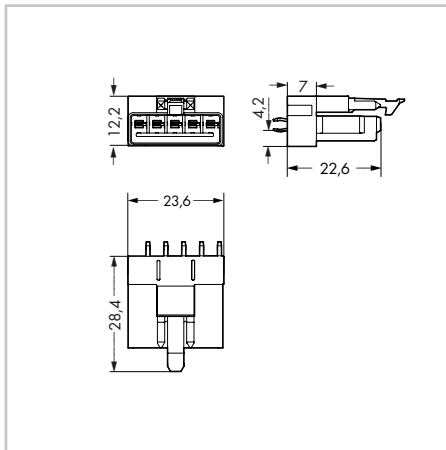
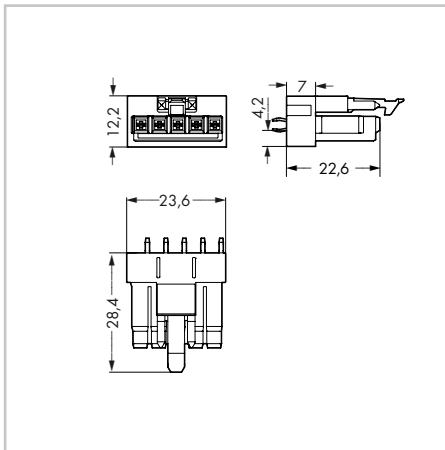


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	890-805	100	● black	890-815	100
	○ white	890-825	100	○ white	890-835	100
	● blue	890-3105	100	● blue	890-3115	100
Info	Dimensions					

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② Blue plugs and sockets are suitable for 16 A DALI applications.

- black Coding A (N ⊕ 1 2 3)
- white Coding A (N ⊕ 1 2 3)
- blue Coding I (N ⊕ L - +)

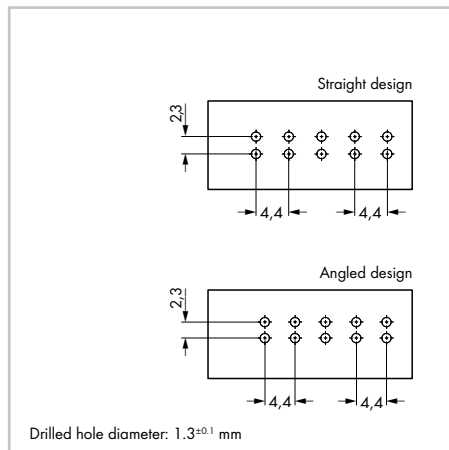
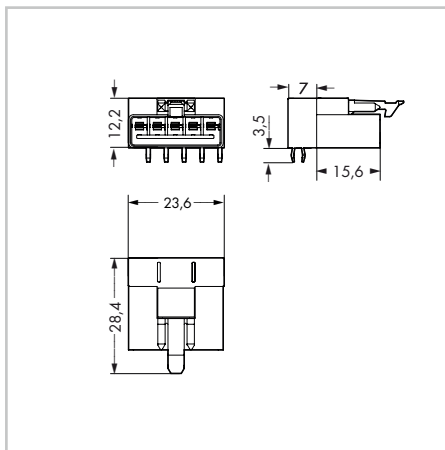
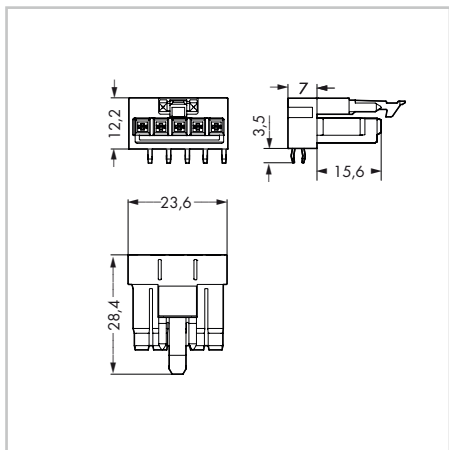
For coding information, see page 250.  
Fire load data available upon request.



250 V/4 kV/3 $I_N$ 13 A/16 A ②  ① Approvals	250 V/4 kV/3 $I_N$ 13 A/16 A ②  ① Approvals
--	--



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
● black	890-805/011-000	100	● black	890-815/011-000	100
○ white	890-825/011-000	100	○ white	890-835/011-000	100
● blue	890-3105/011-000	100	● blue	890-3115/011-000	100
<b>Dimensions</b>			<b>Hole patterns</b>		

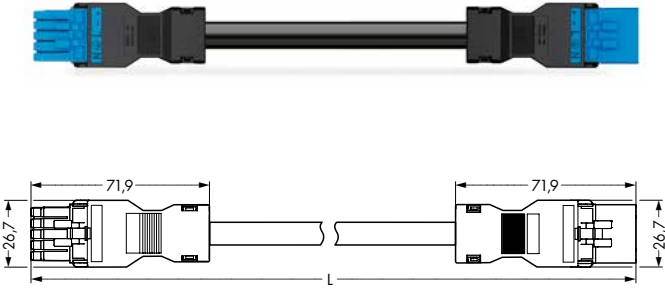
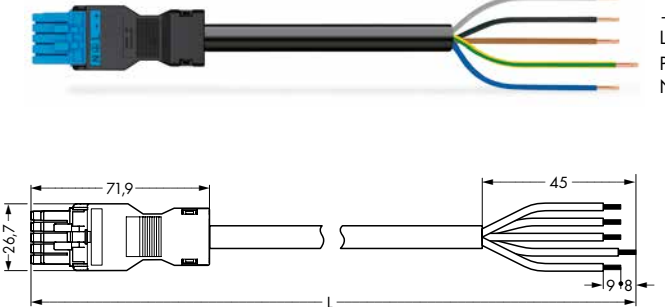
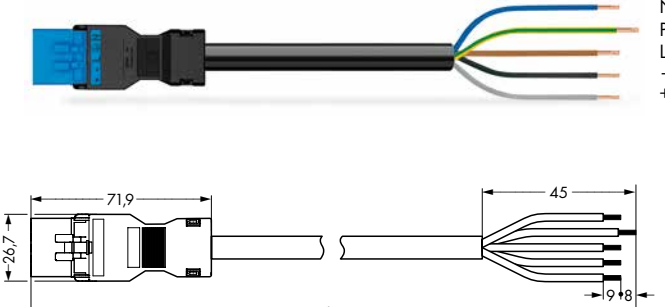


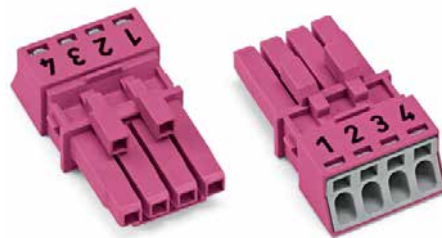
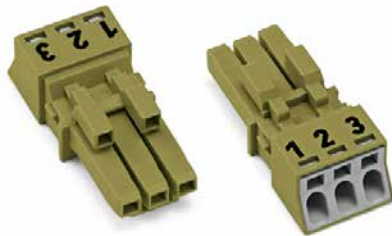
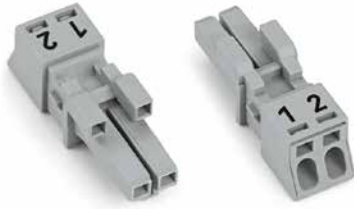
# WINSTA® MINI

## Cable Assemblies 5 x 1.5 mm<sup>2</sup>

		<p>PVC H05VV-F 5G1.5 halogen-free H05Z1Z1-F 5G1.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 13 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																																							
<b>Interconnecting cable, socket – plug</b>		<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● ○ Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr> <td>1 m</td> <td>891-8995/006-101</td> <td>891-8995/006-102</td> <td>891-8995/016-101</td> <td>891-8995/016-102</td> </tr> <tr> <td>2 m</td> <td>891-8995/006-201</td> <td>891-8995/006-202</td> <td>891-8995/016-201</td> <td>891-8995/016-202</td> </tr> <tr> <td>3 m</td> <td>891-8995/006-301</td> <td>891-8995/006-302</td> <td>891-8995/016-301</td> <td>891-8995/016-302</td> </tr> <tr> <td>4 m</td> <td>891-8995/006-401</td> <td>891-8995/006-402</td> <td>891-8995/016-401</td> <td>891-8995/016-402</td> </tr> <tr> <td>5 m</td> <td>891-8995/006-501</td> <td>891-8995/006-502</td> <td>891-8995/016-501</td> <td>891-8995/016-502</td> </tr> <tr> <td>6 m</td> <td>891-8995/006-601</td> <td>891-8995/006-602</td> <td>891-8995/016-601</td> <td>891-8995/016-602</td> </tr> <tr> <td>7 m</td> <td>891-8995/006-701</td> <td>891-8995/006-702</td> <td>891-8995/016-701</td> <td>891-8995/016-702</td> </tr> <tr> <td>8 m</td> <td>891-8995/006-801</td> <td>891-8995/006-802</td> <td>891-8995/016-801</td> <td>891-8995/016-802</td> </tr> </tbody> </table>	Length	Item No. black	Item No. white	Item No. black	Item No. white	● ○ Coding A					PVC		halogen-free			1 m	891-8995/006-101	891-8995/006-102	891-8995/016-101	891-8995/016-102	2 m	891-8995/006-201	891-8995/006-202	891-8995/016-201	891-8995/016-202	3 m	891-8995/006-301	891-8995/006-302	891-8995/016-301	891-8995/016-302	4 m	891-8995/006-401	891-8995/006-402	891-8995/016-401	891-8995/016-402	5 m	891-8995/006-501	891-8995/006-502	891-8995/016-501	891-8995/016-502	6 m	891-8995/006-601	891-8995/006-602	891-8995/016-601	891-8995/016-602	7 m	891-8995/006-701	891-8995/006-702	891-8995/016-701	891-8995/016-702	8 m	891-8995/006-801	891-8995/006-802	891-8995/016-801	891-8995/016-802
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● ○ Coding A																																																									
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<p>① For "International Certification Organizations" and "Approvals – User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② Blue plugs and sockets are suitable for 16 A DALI applications. For other cables, please contact factory.</p> <p>● black Coding A (N ⊕ 1 2 3) ○ white Coding A (N ⊕ 1 2 3) ● blue Coding I (N ⊕ L - +)</p> <p>For coding information, see page 250. Fire load data available upon request.</p>		<p><b>Locking lever, for "flying leads",</b> manually operated</p> <table border="1"> <tr> <td>black</td> <td>890-101</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-121</td> <td>100 (2x50)</td> </tr> </table> <p><b>Locking lever, for "flying leads",</b> tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p><b>Mounting carrier, for 2- to 5-pole</b> "flying leads"</p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>	black	890-101	100 (2x50)	white	890-121	100 (2x50)	black	890-111	100 (2x50)	white	890-131	100 (2x50)	black	890-310	100	white	890-311	100																																					
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**Important note:**

B-Coded components of the *WINSTA*<sup>®</sup> MINI special series are designed for specialty applications (e.g., measurement, control and regulation technology) and certified per DIN EN 61984. In addition to the gray models for 110–400 V voltages, there is now also a variant in light green for low voltages up to 48 V, as well as a pink one for bus applications. Each of the three versions is available in 2-, 3-, 4- or 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-coded products are protected against mismatching with all other coding types found in the *WINSTA*<sup>®</sup> system. Within B coding, all special variants can mate with each other. Special variants can be clearly differentiated according to color and pole marking.

- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.

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	<p><b>890 Series</b></p> <p><b>Connectors, 2-Pole</b> 99</p> <p><b>Connectors, 3-Pole</b> 106</p> <p><b>Connectors, 4-Pole</b> 114</p> <p><b>Connectors, 5-Pole</b> 122</p>
	<p><b>890 Series</b></p> <p><b>Snap-In Device Connectors, 2-Pole</b> 100</p> <p><b>Snap-In Device Connectors, 3-Pole</b> 107</p> <p><b>Snap-In Device Connectors, 4-Pole</b> 115</p> <p><b>Snap-In Device Connectors, 5-Pole</b> 123</p>
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	<p><b>891 Series</b></p> <p><b>Cable Assemblies, 2-Pole</b> 104</p> <p><b>Cable Assemblies, 3-Pole</b> 112</p> <p><b>Cable Assemblies, 4-Pole</b> 120</p> <p><b>Cable Assemblies, 5-Pole</b> 126</p>

# WINSTA® MINI special, 890 Series Handling:

## Pole marking



Gray, B-coded connector with "2 1" marking; e.g., control signal (A circuit)

## Circuit identification



Easy circuit identification via different marking and colors.

## Protection against mismatching



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

## Pole marking

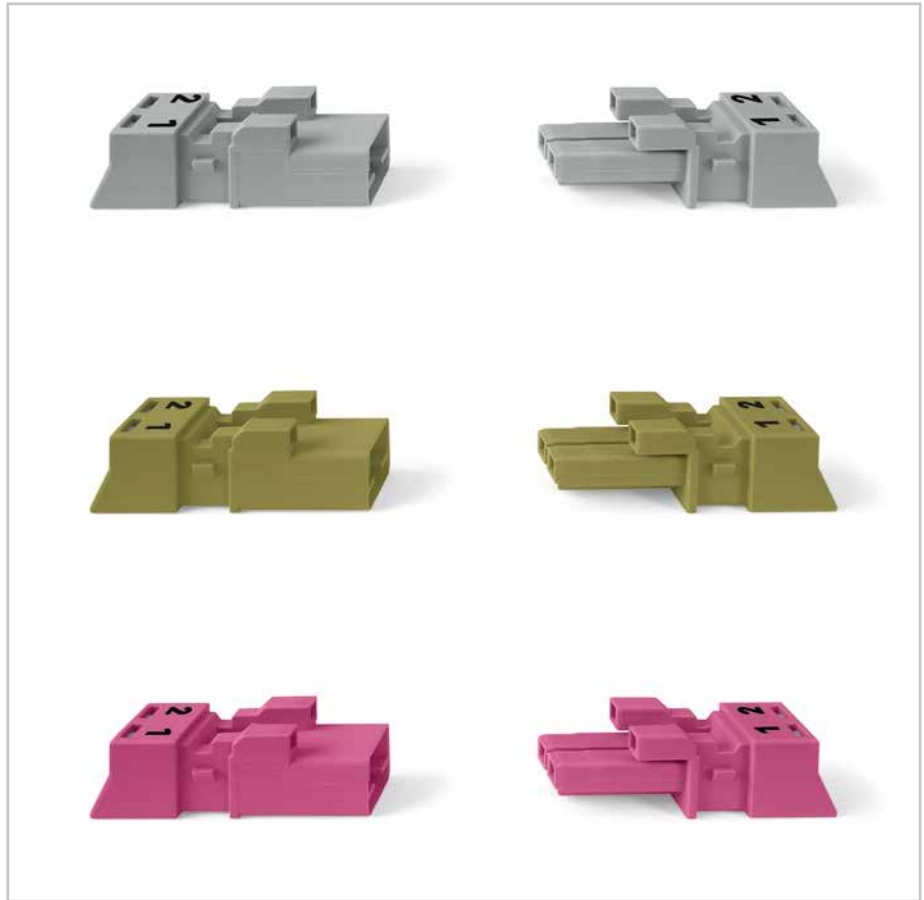


Light green, B-coded connector with "- +" marking; e.g., DC power supply (24 V circuit)

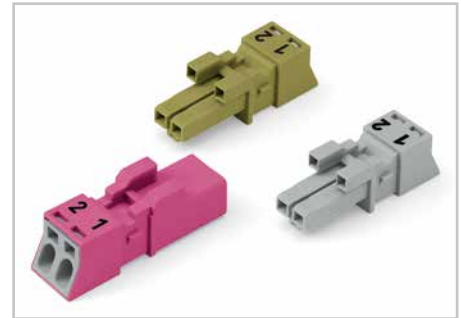
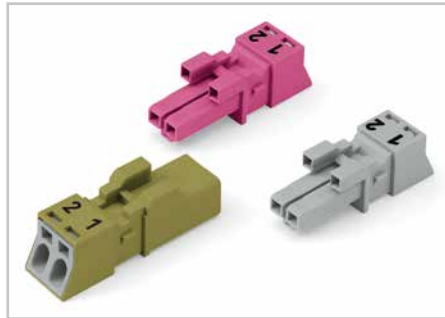
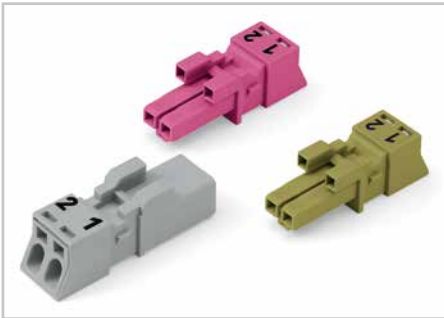
## Pole marking



Pink, B-coded connector with "2 1" marking; e.g., control signal (B circuit)



## Plug compatibility



B-coded connectors with different colors can be plugged together.

### Important note:

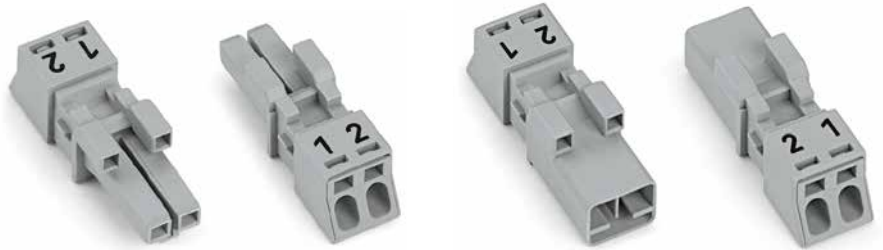
Different colors and/or pole marking are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.

<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>
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**Notice:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 2-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	890-242	50	gray	890-252	50
	gray	890-242/060-000*	50	gray	890-252/060-000*	50
	light green	890-262	50	light green	890-272	50
	pink	890-282	50	pink	890-292	50
	pink	890-282/080-000*	50	pink	890-292/080-000*	50
	pink	890-282/082-000*	50	pink	890-292/082-000*	50
	*For pole marking, see page 253.			*For pole marking, see page 253.		

**Item-Specific Accessories**

	<p><b>Strain relief housing,</b></p> <p>for 3.8 ... 8.2 mm cable diameter</p> <p>black 890-502 50</p> <p>white 890-512 50</p>	<p><b>Strain relief housing,</b></p> <p>for 3.8 ... 8.2 mm cable diameter</p> <p>black 890-502 50</p> <p>white 890-512 50</p>
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**Accessories, 890 Series**

	<p><b>Locking lever, for "flying leads",</b></p> <p>manually operated</p> <p>black 890-101 100 (2x50)</p> <p>white 890-121 100 (2x50)</p>	<p><b>Locking lever, for "flying leads",</b></p> <p>tool operated</p> <p>black 890-111 100 (2x50)</p> <p>white 890-131 100 (2x50)</p>
	<p><b>Mounting carrier, for 2- to 5-pole</b></p> <p>"flying leads"</p> <p>black 890-310 100</p> <p>white 890-311 100</p>	

**Dimensions**

① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"

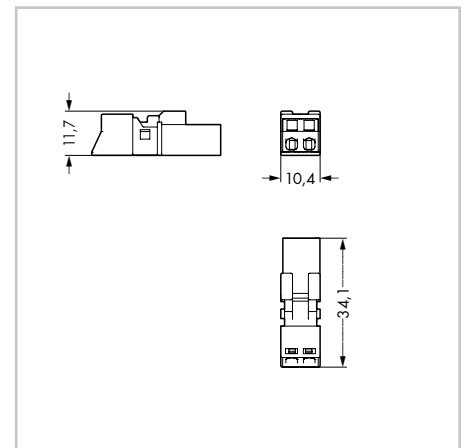
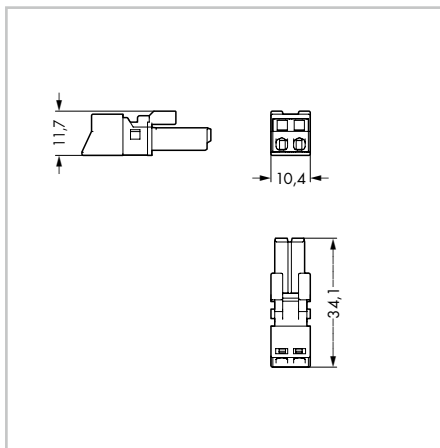
② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

Standard printing (without suffix number)

- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)



For additional pole marking, see page 253.

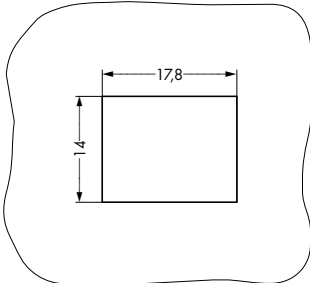
For coding information, see page 250.  
Fire load data available upon request.





# WINSTA® MINI special Snap-In Sockets and Plugs, 2-Pole



PUSH-IN CAGE CLAMP®

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals			 9 mm / 0.35 in. ② Approvals



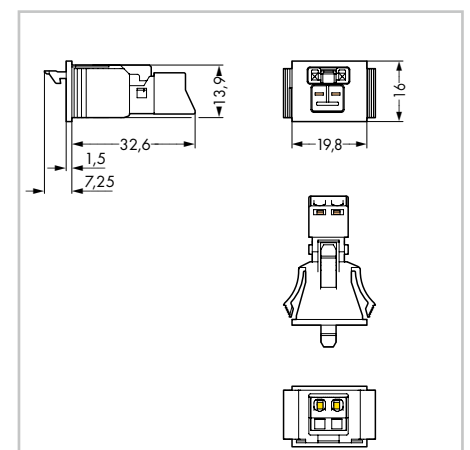
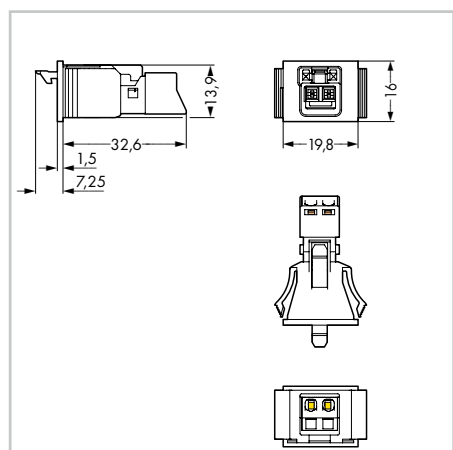
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 2-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● gray	890-742	50	● gray	890-752	50
	● gray	890-742/060-000*	50	● gray	890-752/060-000*	50
	● light green	890-762	50	● light green	890-772	50
	● pink	890-782	50	● pink	890-792	50
	● pink	890-782/080-000*	50	● pink	890-792/080-000*	50
	● pink	890-782/082-000*	50	● pink	890-792/082-000*	50
	* For pole marking, see page 253.			* For pole marking, see page 253.		

Item-Specific Accessories	
 Operating tool, partially insulated 2-way 890-382 1	 Operating tool, partially insulated 2-way 890-382 1

Accessories, 890 Series	
 Lockout cap, for cutout, 2-pole black 890-642 100 white 890-692 100	 Lockout cap, for cutout, 2-pole black 890-642 100 white 890-692 100

Info	Dimensions
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- ① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
- Standard printing (without suffix number)
- gray Coding B (1 2)
  - light green Coding B (1 2)
  - pink Coding B (1 2)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.

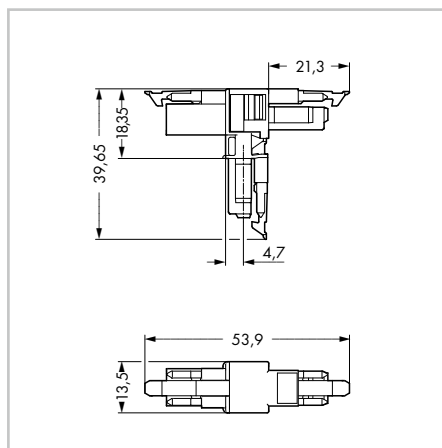


# WINSTA® MINI special T-Distribution Connectors, 2-Pole

	250 V/4 kV/3 $I_N$ 16 A  ② Approvals	
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Description	Color	Item No.	Pack. Unit
T-distribution connector, 2-pole, pluggable	T-distribution connector, 1 x plug/2 x socket		
	● gray	890-1601	25
	● light green	890-1602	25
	● pink	890-1603	25
	for "flying leads", with 3rd locking lever		
	● gray	890-1701	25
	● light green	890-1702	25
	● pink	890-1703	25
<b>Accessories, 890 Series</b>			
	<b>Locking lever, for "flying leads",</b> manually operated black <b>890-101</b> 100 (2x50) white <b>890-121</b> 100 (2x50)		
			
	<b>Locking lever, for "flying leads",</b> tool operated black <b>890-111</b> 100 (2x50) white <b>890-131</b> 100 (2x50)		
			
<b>Dimensions</b>			



# WINSTA® MINI special PCB Connectors, 2-Pole

	250 V/4 kV/3 $I_N$ 16 A  ① Approvals	250 V/4 kV/3 $I_N$ 16 A  ① Approvals
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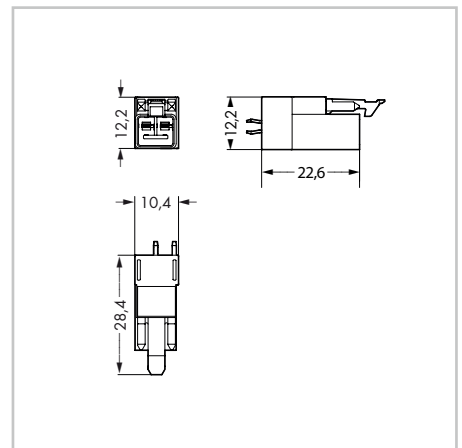
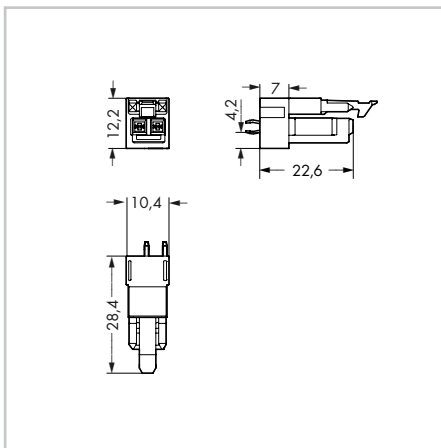
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	890-842	100	gray	890-852	100
	light green	890-862	100	light green	890-872	100
	pink	890-882	100	pink	890-892	100
Info	Dimensions					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)

For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.







# WINSTA® MINI special Cable Assemblies, 2 x 1 mm<sup>2</sup>

		<b>PVC</b> <b>Control line: 2 x 1, gray</b>  <b>250 V/4 kV/3 I<sub>N</sub> 10 A</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>																					
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																		
		<b>Coding B</b> <b>PVC</b>																					
		1 m	891-8992/005-103	891-8992/005-105	891-8992/005-107																		
		2 m	891-8992/005-203	891-8992/005-205	891-8992/005-207																		
		3 m	891-8992/005-303	891-8992/005-305	891-8992/005-307																		
		4 m	891-8992/005-403	891-8992/005-405	891-8992/005-407																		
		5 m	891-8992/005-503	891-8992/005-505	891-8992/005-507																		
		6 m	891-8992/005-603	891-8992/005-605	891-8992/005-607																		
		7 m	891-8992/005-703	891-8992/005-705	891-8992/005-707																		
		8 m	891-8992/005-803	891-8992/005-805	891-8992/005-807																		
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																		
		<b>Coding B</b> <b>PVC</b>																					
		1 m	891-8992/105-103	891-8992/105-105	891-8992/105-107																		
		2 m	891-8992/105-203	891-8992/105-205	891-8992/105-207																		
		3 m	891-8992/105-303	891-8992/105-305	891-8992/105-307																		
		4 m	891-8992/105-403	891-8992/105-405	891-8992/105-407																		
		5 m	891-8992/105-503	891-8992/105-505	891-8992/105-507																		
		6 m	891-8992/105-603	891-8992/105-605	891-8992/105-607																		
		7 m	891-8992/105-703	891-8992/105-705	891-8992/105-707																		
		8 m	891-8992/105-803	891-8992/105-805	891-8992/105-807																		
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																		
		<b>Coding B</b> <b>PVC</b>																					
		1 m	891-8992/205-103	891-8992/205-105	891-8992/205-107																		
		2 m	891-8992/205-203	891-8992/205-205	891-8992/205-207																		
		3 m	891-8992/205-303	891-8992/205-305	891-8992/205-307																		
		4 m	891-8992/205-403	891-8992/205-405	891-8992/205-407																		
		5 m	891-8992/205-503	891-8992/205-505	891-8992/205-507																		
		6 m	891-8992/205-603	891-8992/205-605	891-8992/205-607																		
		7 m	891-8992/205-703	891-8992/205-705	891-8992/205-707																		
		8 m	891-8992/205-803	891-8992/205-805	891-8992/205-807																		
<b>Info</b>		<b>Accessories</b>																					
<p>① For "International Certification Organizations" and "Approvals – User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.</p> <p>● gray      Coding B      (1 2)          ● light green      Coding B      (1 2)          ● pink      Coding B      (1 2)</p> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250.          Fire load data available upon request.</p>		<p><b>Locking lever, for "flying leads",</b>          manually operated</p> <table border="1"> <tr> <td>black</td> <td>890-101</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-121</td> <td>100 (2x50)</td> </tr> </table> <p><b>Locking lever, for "flying leads",</b>          tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p><b>Mounting carrier, for 2- to 5-pole</b>          "flying leads"</p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>				black	890-101	100 (2x50)	white	890-121	100 (2x50)	black	890-111	100 (2x50)	white	890-131	100 (2x50)	black	890-310	100	white	890-311	100
black	890-101	100 (2x50)																					
white	890-121	100 (2x50)																					
black	890-111	100 (2x50)																					
white	890-131	100 (2x50)																					
black	890-310	100																					
white	890-311	100																					

		PVC Control line: 2 x 1.5, gray			
		250 V/4 kV/3 I <sub>N</sub> 16 A			
		Conductor ends, bonded: 9 mm			
		① Approvals			
Interconnecting cable, socket – plug		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8992/006-103	891-8992/006-105	891-8992/006-107
		2 m	891-8992/006-203	891-8992/006-205	891-8992/006-207
		3 m	891-8992/006-303	891-8992/006-305	891-8992/006-307
		4 m	891-8992/006-403	891-8992/006-405	891-8992/006-407
		5 m	891-8992/006-503	891-8992/006-505	891-8992/006-507
		6 m	891-8992/006-603	891-8992/006-605	891-8992/006-607
		7 m	891-8992/006-703	891-8992/006-705	891-8992/006-707
		8 m	891-8992/006-803	891-8992/006-805	891-8992/006-807
Connecting cable, socket – free end		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8992/106-103	891-8992/106-105	891-8992/106-107
		2 m	891-8992/106-203	891-8992/106-205	891-8992/106-207
		3 m	891-8992/106-303	891-8992/106-305	891-8992/106-307
		4 m	891-8992/106-403	891-8992/106-405	891-8992/106-407
		5 m	891-8992/106-503	891-8992/106-505	891-8992/106-507
		6 m	891-8992/106-603	891-8992/106-605	891-8992/106-607
		7 m	891-8992/106-703	891-8992/106-705	891-8992/106-707
		8 m	891-8992/106-803	891-8992/106-805	891-8992/106-807
Connecting cable, plug – free end		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8992/206-103	891-8992/206-105	891-8992/206-107
		2 m	891-8992/206-203	891-8992/206-205	891-8992/206-207
		3 m	891-8992/206-303	891-8992/206-305	891-8992/206-307
		4 m	891-8992/206-403	891-8992/206-405	891-8992/206-407
		5 m	891-8992/206-503	891-8992/206-505	891-8992/206-507
		6 m	891-8992/206-603	891-8992/206-605	891-8992/206-607
		7 m	891-8992/206-703	891-8992/206-705	891-8992/206-707
		8 m	891-8992/206-803	891-8992/206-805	891-8992/206-807

**Item numbers overview for other cable lengths**

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	891	-	8	9	9	2	/	0	0	6	-	1	0	3
light green	891	-	8	9	9	2	/	0	0	6	-	1	0	5
pink	891	-	8	9	9	2	/	0	0	6	-	1	0	7



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 2-pole, socket – plug, PVC control line, 2 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8992/016-107.

The 10th position defines the cable cross-section. For example, a 2 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8992/005-105

The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 891-8992/006-503.

## WINSTA® MINI special Sockets and Plugs, 3-Pole


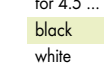

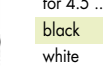
<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A ③</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>	<p>0.25 ... 1.5 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 16 A ③</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>22 ... 16 AWG</p>
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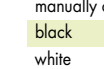

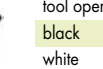

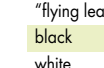
**Notice:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 3-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	890-243	50	gray	890-253	50
	gray	890-243/060-000*	50	gray	890-253/060-000*	50
	gray	890-243/062-000*	50	gray	890-253/062-000*	50
	light green	890-263	50	light green	890-273	50
	light green	890-263/071-000*	50	light green	890-273/071-000*	50
	light green	890-263/073-000*	50	light green	890-273/073 000*	50
	pink	890-283	50	pink	890-293	50
	pink	890-283/081-000*	50	pink	890-293/081-000*	50
	pink	890-283/082-000*	50	pink	890-293/082-000*	50
	* For pole marking, see page 253.			* For pole marking, see page 253.		

Item-Specific Accessories							
			<p>Strain relief housing, for 4.5 ... 10 mm cable diameter</p> <p> black <b>890-503</b> 50</p> <p> white <b>890-513</b> 50</p>				<p>Strain relief housing, for 4.5 ... 10 mm cable diameter</p> <p> black <b>890-503</b> 50</p> <p> white <b>890-513</b> 50</p>

Accessories, 890 Series							
			<p>Locking lever, for "flying leads", manually operated</p> <p> black <b>890-101</b> 100 (2x50)</p> <p> white <b>890-121</b> 100 (2x50)</p>				<p>Locking lever, for "flying leads", tool operated</p> <p> black <b>890-111</b> 100 (2x50)</p> <p> white <b>890-131</b> 100 (2x50)</p>
			<p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <p> black <b>890-310</b> 100</p> <p> white <b>890-311</b> 100</p>				

Info	Dimensions
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① Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

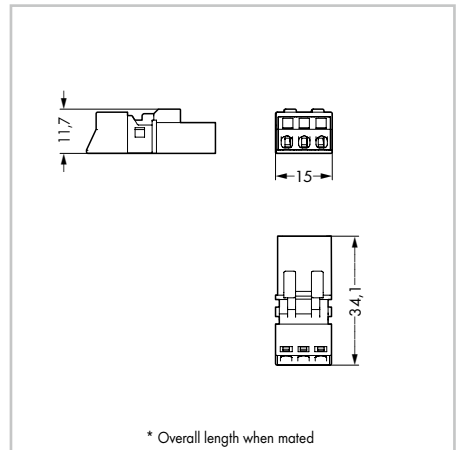
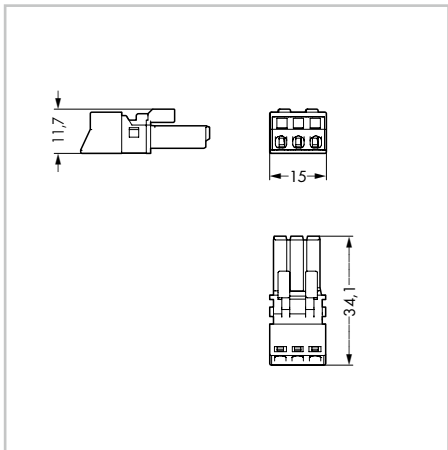
③ For 3-pole load I<sub>N</sub> = 13 A!

Standard printing (without suffix number)

- gray Coding B (1 2 3)
- light green Coding B (1 2 3)
- pink Coding B (1 2 3)

For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.





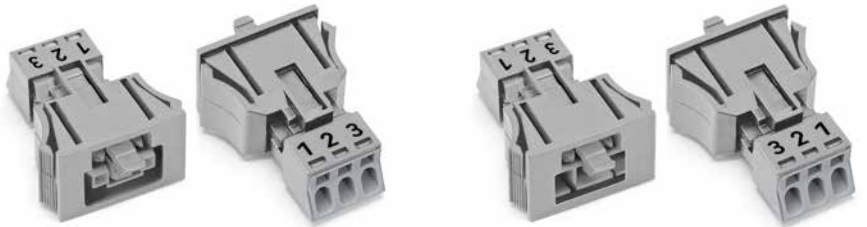
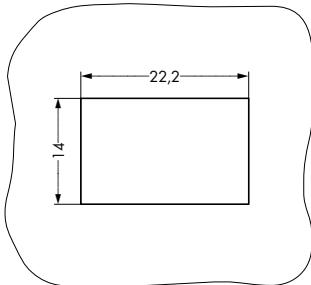
# WINSTA® MINI special Snap-In Sockets and Plugs, 3-Pole

PUSH-IN CAGE CLAMP®



3



107

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	

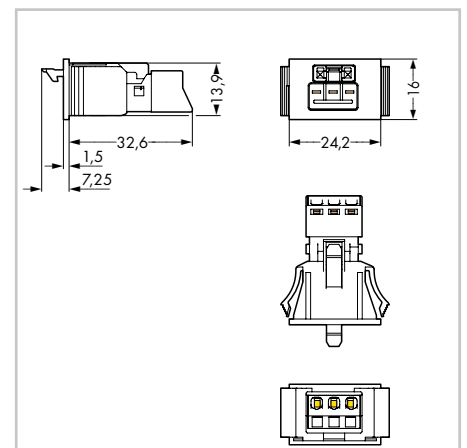
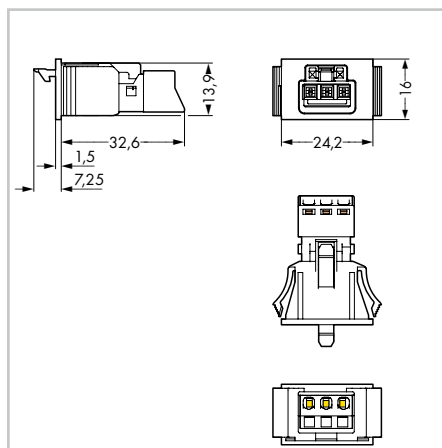


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 3-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	gray	890-743	50	gray	890-753	50
	gray	890-743/060-000*	50	gray	890-753/060-000*	50
	gray	890-743/062-000*	50	gray	890-753/062-000*	50
	light green	890-763	50	light green	890-773	50
	light green	890-763/071-000*	50	light green	890-773/071-000*	50
	light green	890-763/073-000*	50	light green	890-773/073-000*	50
	pink	890-783	50	pink	890-793	50
	pink	890-783/081-000*	50	pink	890-793/081-000*	50
	pink	890-783/082-000*	50	pink	890-793/082-000*	50
	*For pole marking, see page 253.			*For pole marking, see page 253.		

Item-Specific Accessories						
	Operating tool, partially insulated 3-way 			Operating tool, partially insulated 3-way 		
		890-383	1		890-383	1

Accessories, 890 Series						
	Lockout cap, for cutout, 3-pole 			Lockout cap, for cutout, 3-pole 		
	black	890-643	100	black	890-643	100
	white	890-693	100	white	890-693	100

Dimensions						
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# WINSTA® MINI special PCB Connectors, 3-Pole

	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals
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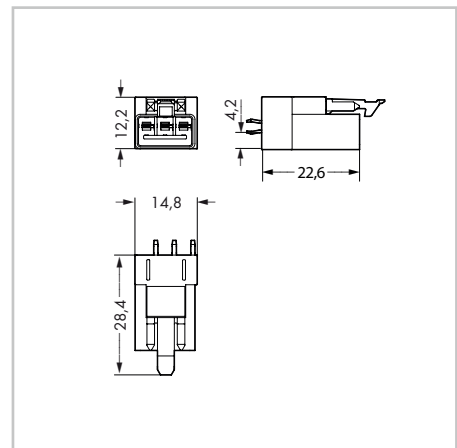
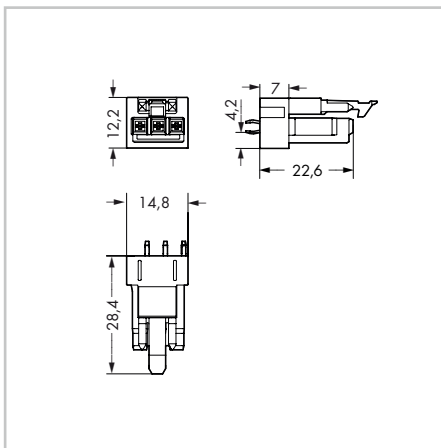


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	890-843	100	gray	890-853	100
	light green	890-863	100	light green	890-873	100
	pink	890-883	100	pink	890-893	100
Info	Dimensions					

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For 3-pole load  $I_N = 13 A!$

- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.









# WINSTA® MINI special Distribution Connectors, 3-Pole

	<p>250 V/4 kV/3 I<sub>N</sub> 16 A ②</p> <p>① Approvals</p>	
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Description	Color	Item No.	Pack. Unit
h-distribution connectors, 3-pole	h-distribution connector, unidirectional, plug/socket – socket		
	● gray	890-1661	50
	● light green	890-1662	50
	● pink	890-1663	50
	for "flying leads", with 3rd locking lever		
	● gray	890-1761	50
	● light green	890-1762	50
	● pink	890-1763	50

Item-Specific Accessories			
	<b>Mounting plate</b> , for distribution connectors 		
		black	890-623 100
		white	890-673 100
	<b>Fixing pin</b> , for mounting plates 		
		③ black	890-601 250

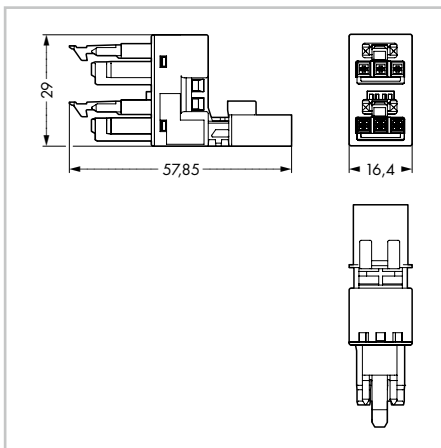
Accessories, 890 Series			
	<b>Locking lever</b> , for "flying leads", manually operated 		
		black	890-101 100 (2x50)
		white	890-121 100 (2x50)
	<b>Locking lever</b> , for "flying leads", tool operated 		
		black	890-111 100 (2x50)
		white	890-131 100 (2x50)

Info	Dimensions
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- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For 3-pole load I<sub>N</sub> = 13 A!
- ③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 253.

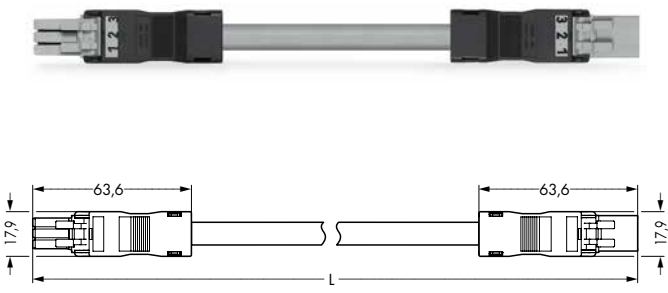
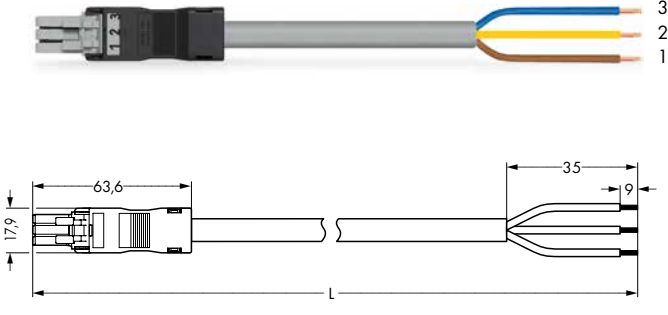
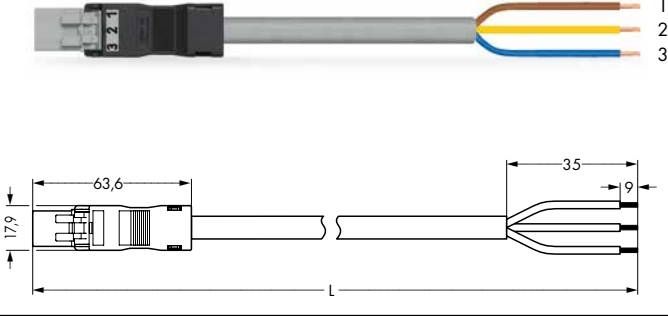
For coding information, see page 250.  
Fire load data available upon request.







# WINSTA® MINI special Cable Assemblies, 3 x 1 mm<sup>2</sup>

	<p>PVC Control line: 3 x 1, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																
<p>Interconnecting cable, socket – plug</p>	<p>Length Item No. Item No. Item No.</p>																																
	<p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>1 m</td><td>● 891-8993/005-103</td><td>● 891-8993/005-105</td><td>● 891-8993/005-107</td></tr> <tr><td>2 m</td><td>● 891-8993/005-203</td><td>● 891-8993/005-205</td><td>● 891-8993/005-207</td></tr> <tr><td>3 m</td><td>● 891-8993/005-303</td><td>● 891-8993/005-305</td><td>● 891-8993/005-307</td></tr> <tr><td>4 m</td><td>● 891-8993/005-403</td><td>● 891-8993/005-405</td><td>● 891-8993/005-407</td></tr> <tr><td>5 m</td><td>● 891-8993/005-503</td><td>● 891-8993/005-505</td><td>● 891-8993/005-507</td></tr> <tr><td>6 m</td><td>● 891-8993/005-603</td><td>● 891-8993/005-605</td><td>● 891-8993/005-607</td></tr> <tr><td>7 m</td><td>● 891-8993/005-703</td><td>● 891-8993/005-705</td><td>● 891-8993/005-707</td></tr> <tr><td>8 m</td><td>● 891-8993/005-803</td><td>● 891-8993/005-805</td><td>● 891-8993/005-807</td></tr> </table>	1 m	● 891-8993/005-103	● 891-8993/005-105	● 891-8993/005-107	2 m	● 891-8993/005-203	● 891-8993/005-205	● 891-8993/005-207	3 m	● 891-8993/005-303	● 891-8993/005-305	● 891-8993/005-307	4 m	● 891-8993/005-403	● 891-8993/005-405	● 891-8993/005-407	5 m	● 891-8993/005-503	● 891-8993/005-505	● 891-8993/005-507	6 m	● 891-8993/005-603	● 891-8993/005-605	● 891-8993/005-607	7 m	● 891-8993/005-703	● 891-8993/005-705	● 891-8993/005-707	8 m	● 891-8993/005-803	● 891-8993/005-805	● 891-8993/005-807
1 m	● 891-8993/005-103	● 891-8993/005-105	● 891-8993/005-107																														
2 m	● 891-8993/005-203	● 891-8993/005-205	● 891-8993/005-207																														
3 m	● 891-8993/005-303	● 891-8993/005-305	● 891-8993/005-307																														
4 m	● 891-8993/005-403	● 891-8993/005-405	● 891-8993/005-407																														
5 m	● 891-8993/005-503	● 891-8993/005-505	● 891-8993/005-507																														
6 m	● 891-8993/005-603	● 891-8993/005-605	● 891-8993/005-607																														
7 m	● 891-8993/005-703	● 891-8993/005-705	● 891-8993/005-707																														
8 m	● 891-8993/005-803	● 891-8993/005-805	● 891-8993/005-807																														
<p>Connecting cable, socket – free end</p>	<p>Length Item No. Item No. Item No.</p>																																
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<p>① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② For 3-pole load I<sub>N</sub> = 13 A! For other cables, please contact factory.</p> <p>● gray Coding B (1 2 3) ● light green Coding B (1 2 3) ● pink Coding B (1 2 3)</p> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250. Fire load data available upon request.</p>	<p>Locking lever, for "flying leads", manually operated</p> <table border="1"> <tr><td>black</td><td>890-101</td><td>100 (2x50)</td></tr> <tr><td>white</td><td>890-121</td><td>100 (2x50)</td></tr> </table> <p>Locking lever, for "flying leads", tool operated</p> <table border="1"> <tr><td>black</td><td>890-111</td><td>100 (2x50)</td></tr> <tr><td>white</td><td>890-131</td><td>100 (2x50)</td></tr> </table> <p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <table border="1"> <tr><td>black</td><td>890-310</td><td>100</td></tr> <tr><td>white</td><td>890-311</td><td>100</td></tr> </table>	black	890-101	100 (2x50)	white	890-121	100 (2x50)	black	890-111	100 (2x50)	white	890-131	100 (2x50)	black	890-310	100	white	890-311	100														
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		<p>PVC Control line: 3 x 1.5, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																			
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Item numbers overview for other cable lengths

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	891	-	8	9	9	3	/	0	0	6	-	1	0	3
light green	891	-	8	9	9	3	/	0	0	6	-	1	0	5
pink	891	-	8	9	9	3	/	0	0	6	-	1	0	7



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 3-pole, socket – plug, PVC control line, 3 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8993/016-107.

The 10th position defines the cable cross-section. For example, a 3 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8993/005-105.

The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 891-8993/006-503.

# WINSTA® MINI special Sockets and Plugs, 4-Pole



<p>0.25 ... 1.5 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 16 A ❸</p> <p> 9 mm / 0.35 in.</p> <p>❷ Approvals</p>	<p>22 ... 16 AWG</p> <p>0.25 ... 1.5 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 16 A ❸</p> <p> 9 mm / 0.35 in.</p> <p>❷ Approvals</p>
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**Notice:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).



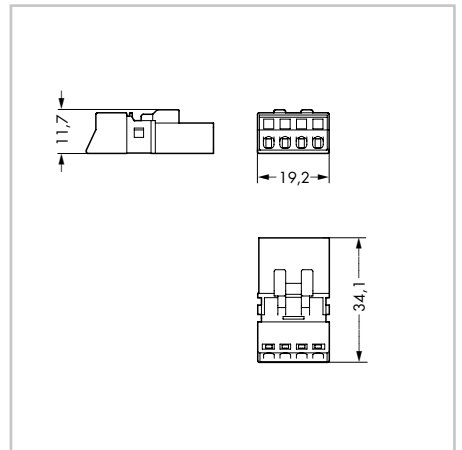
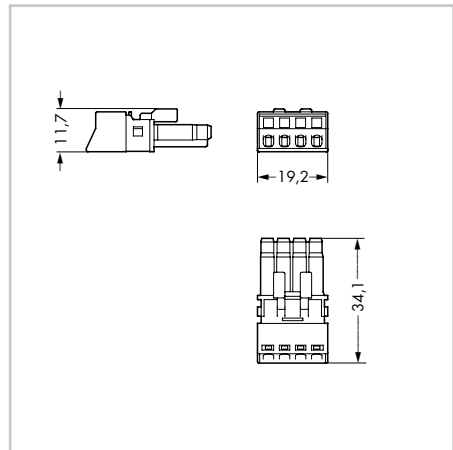
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 4-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	890-244	50	gray	890-254	50
	gray	890-244/060-000*	50	gray	890-254/060-000*	50
	gray	890-244/062-000*	50	gray	890-254/062-000*	50
	gray	890-244/064-000*	50	gray	890-254/064-000*	50
	light green	890-264	50	light green	890-274	50
	light green	890-264/071-000*	50	light green	890-274/071-000*	50
	light green	890-264/072-000*	50	light green	890-274/072-000*	50
	light green	890-264/073-000*	50	light green	890-274/073-000*	50
	pink	890-284	50	pink	890-294	50
	pink	890-284/081-000*	50	pink	890-294/081-000*	50
	* For pole marking, see page 253.			* For pole marking, see page 253.		

Item-Specific Accessories							
			<b>Strain relief housing,</b>  for 6.5 ... 10.5 mm cable diameter black <b>890-504</b> 50 white <b>890-514</b> 50				<b>Strain relief housing,</b>  for 6.5 ... 10.5 mm cable diameter black <b>890-504</b> 50 white <b>890-514</b> 50

Accessories, 890 Series							
			<b>Locking lever, for "flying leads",</b>  manually operated black <b>890-101</b> 100 (2x50) white <b>890-121</b> 100 (2x50)				<b>Locking lever, for "flying leads",</b>  tool operated black <b>890-111</b> 100 (2x50) white <b>890-131</b> 100 (2x50)
			<b>Mounting carrier, for 2- to 5-pole</b>  "flying leads" black <b>890-310</b> 100 white <b>890-311</b> 100				

Info	Dimensions
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- ❶ Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ For 3-pole load I<sub>N</sub> = 13 A!  
For 4-pole load I<sub>N</sub> = 10 A!
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.





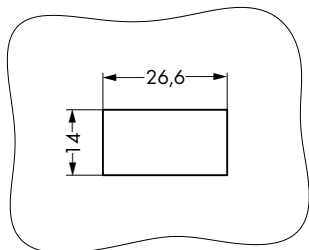
# WINSTA® MINI special Snap-In Sockets and Plugs, 4-Pole

PUSH-IN CAGE CLAMP®





3

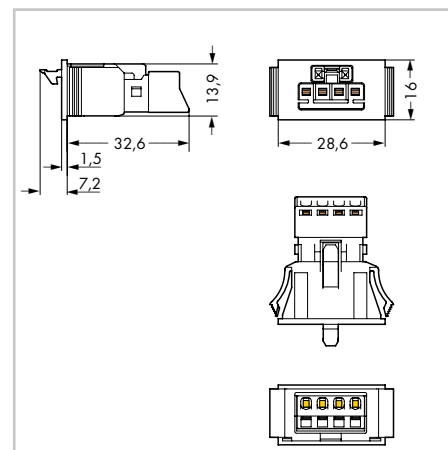
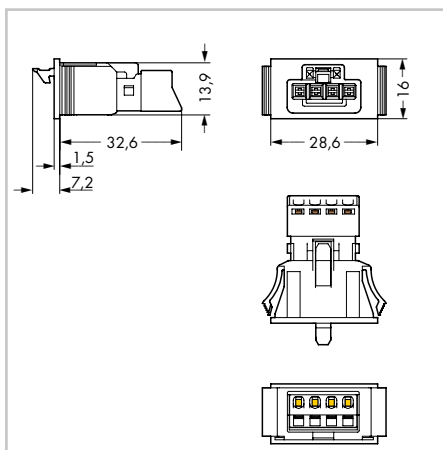
115

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	



3

Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
Connectors, snap-in device connection, 4-pole, with Push-in CAGE CLAMP® connection	Socket			Plug			
	● gray	890-744	50	● gray	890-754	50	
	● gray	890-744/060-000*	50	● gray	890-754/060-000*	50	
	● gray	890-744/062-000*	50	● gray	890-754/062-000*	50	
	● gray	890-744/064-000*	50	● gray	890-754/064-000*	50	
	● light green	890-764	50	● light green	890-774	50	
	● light green	890-764/071-000*	50	● light green	890-774/071-000*	50	
	● light green	890-764/072-000*	50	● light green	890-774/072-000*	50	
	● light green	890-764/073-000*	50	● light green	890-774/073-000*	50	
	● pink	890-784	50	● pink	890-794	50	
	● pink	890-784/081-000*	50	● pink	890-794/081-000*	50	
		*For pole marking, see page 253.			*For pole marking, see page 253.		
	<b>Item-Specific Accessories</b>						
	<b>Operating tool, partially insulated</b> 4-way  890-384 1			<b>Operating tool, partially insulated</b> 4-way  890-384 1			
<b>Accessories, 890 Series</b>							
	<b>Lockout cap, for cutout, 4-pole</b>  black 890-644 100 white 890-694 100			<b>Lockout cap, for cutout, 4-pole</b>  black 890-644 100 white 890-694 100			
<b>Dimensions</b>							



# WINSTA® MINI special PCB Connectors, 4-Pole

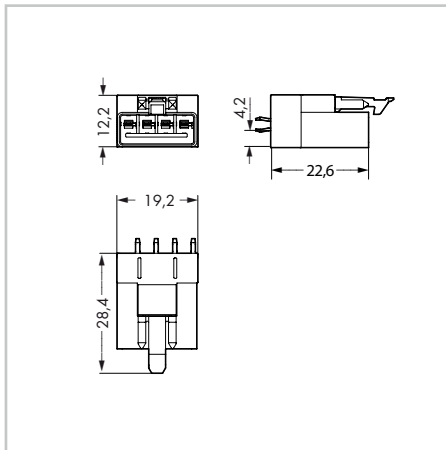
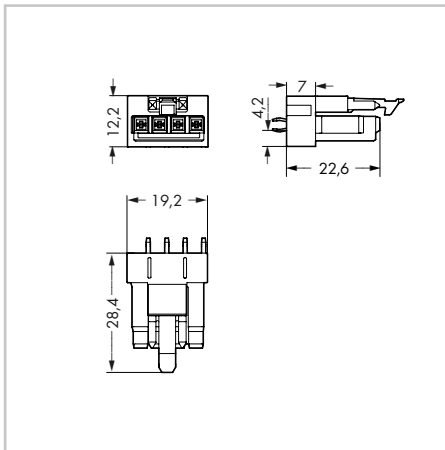
	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	890-844	100	gray	890-854	100
	light green	890-864	100	light green	890-874	100
	pink	890-884	100	pink	890-894	100
Info	Dimensions					

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② For 3-pole load  $I_N = 13$  A!  
For 4-pole load  $I_N = 10$  A!
- gray Coding B (1 2 3 4)  
● light green Coding B (1 2 3 4)  
● pink Coding B (1 2 3 4)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.

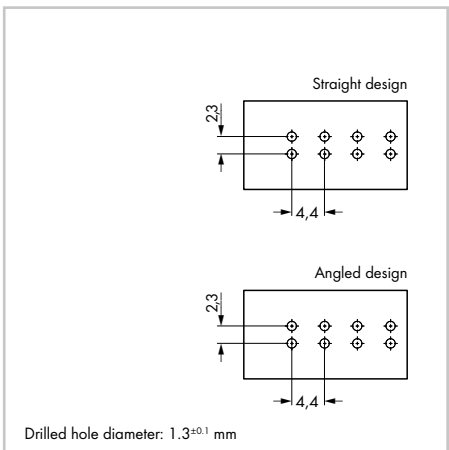
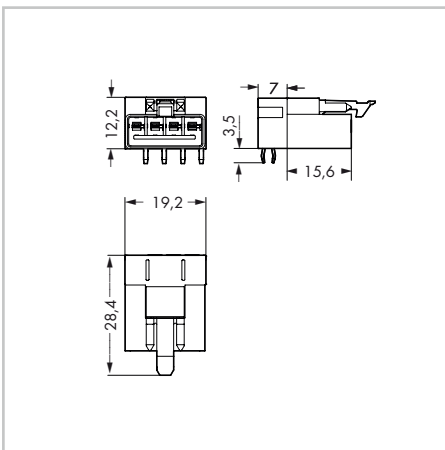
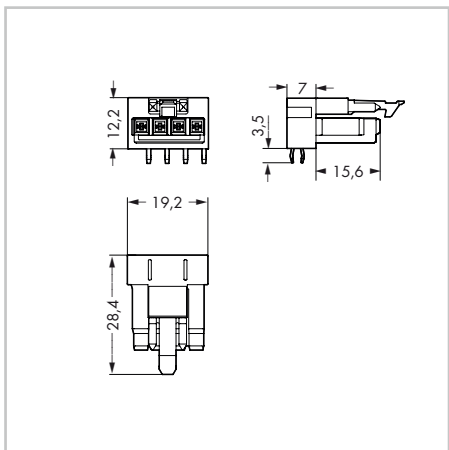


<p>250 V/4 kV/3 <math>I_N</math> 16 A ②</p> <p>① Approvals</p>	<p>250 V/4 kV/3 <math>I_N</math> 16 A ②</p> <p>① Approvals</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
gray	890-844/011-000	100	gray	890-854/011-000	100
light green	890-864/011-000	100	light green	890-874/011-000	100
pink	890-884/011-000	100	pink	890-894/011-000	100

<b>Dimensions</b>	<b>Hole patterns</b>
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# WINSTA® MINI special T- and h-Distribution Connectors, 4-Pole

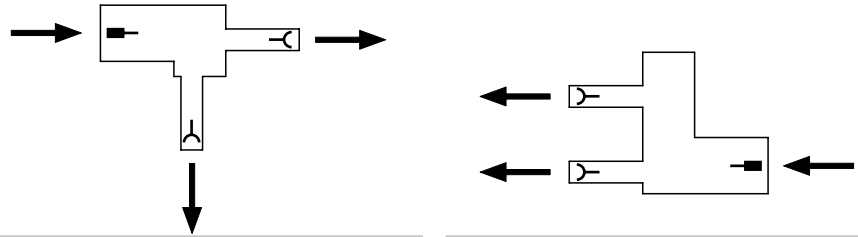
	<p>400 V/6 kV/3 I<sub>N</sub> 16 A ③</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 16 A ③</p> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector, h-distribution connector, 4-pole	T-distribution connector, 1 x plug/2 x socket			h-distribution connector, unidirectional, plug/socket – socket		
	gray	890-1631	50	gray	890-1681	50
	light green	890-1632	50	light green	890-1682	50
	pink	890-1633	50	pink	890-1683	50
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	gray	890-1731	50	gray	890-1781	50
	light green	890-1732	50	light green	890-1782	50
	pink	890-1733	50	pink	890-1783	50

Item-Specific Accessories							
	<p><b>Mounting plate</b>, for distribution connectors</p>  <table border="1"> <tr> <td>black</td> <td>890-624</td> <td>50</td> </tr> <tr> <td>white</td> <td>890-674</td> <td>50</td> </tr> </table>	black	890-624	50	white	890-674	50
black	890-624	50					
white	890-674	50					
	<p><b>Fixing pin</b>, for mounting plates</p>  <table border="1"> <tr> <td>② black</td> <td>890-601</td> <td>250</td> </tr> </table>	② black	890-601	250			
② black	890-601	250					

Info	Dimensions
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① For "International Certification Organizations" and "Approvals – User Guide," see page 534.

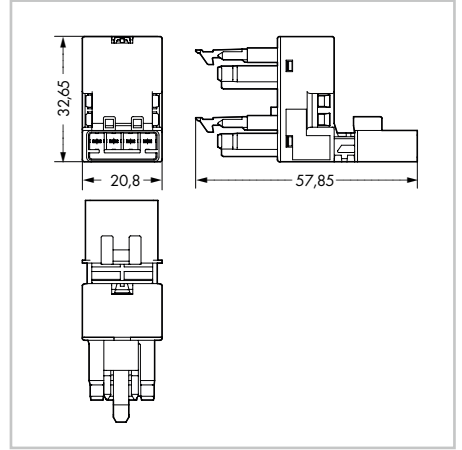
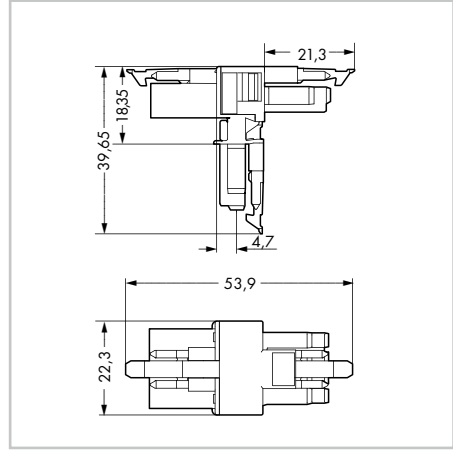
② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

③ For 3-pole load I<sub>N</sub> = 13 A!  
For 4-pole load I<sub>N</sub> = 10 A!

● gray Coding B (1 2 3 4)  
● light green Coding B (1 2 3 4)  
● pink Coding B (1 2 3 4)

For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.





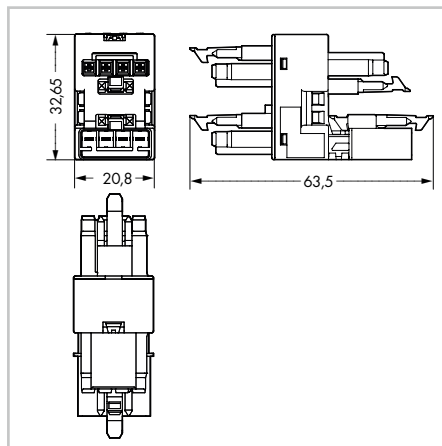
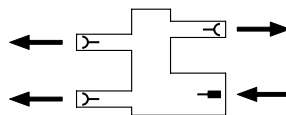


# WINSTA® MINI special Distribution Connectors, 4-Pole

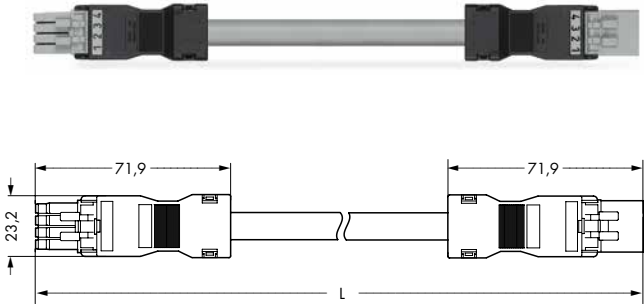
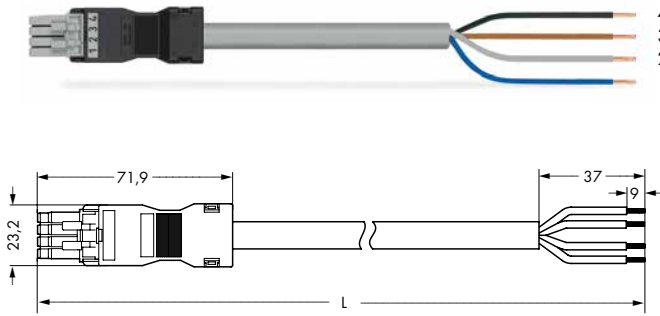
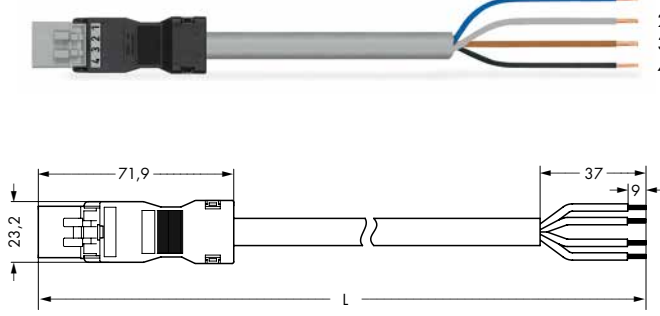
	<p>400 V/6 kV/3 I<sub>N</sub> 16 A ③</p> <p>① Approvals</p>	
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Description	Color	Item No.	Pack. Unit
Distribution connector, 4-pole	Distribution connector, 3-way, 1 x plug/3 x socket		
	● gray	890-1734	50
	● light green	890-1735	50
	● pink	890-1736	50
<b>Item-Specific Accessories</b>			
	Mounting plate, for distribution connectors		
		black 890-624	50
		white 890-674	50
	Fixing pin, for mounting plates		
		② black 890-601	250
<b>Dimensions</b>			



# WINSTA® MINI special Cable Assemblies, 4 x 1 mm<sup>2</sup>

	<p>PVC Control line: 4 x 1, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																												
<p>Interconnecting cable, socket – plug</p>	<table border="1"> <thead> <tr> <th>Length</th> <th>Item No.</th> <th>Item No.</th> <th>Item No.</th> </tr> </thead> <tbody> <tr> <td colspan="4">Coding B</td> </tr> <tr> <td colspan="4">PVC</td> </tr> <tr> <td>1 m</td> <td>891-8994/005-103</td> <td>891-8994/005-105</td> <td>891-8994/005-107</td> </tr> <tr> <td>2 m</td> <td>891-8994/005-203</td> <td>891-8994/005-205</td> <td>891-8994/005-207</td> </tr> <tr> <td>3 m</td> <td>891-8994/005-303</td> <td>891-8994/005-305</td> <td>891-8994/005-307</td> </tr> <tr> <td>4 m</td> <td>891-8994/005-403</td> <td>891-8994/005-405</td> <td>891-8994/005-407</td> </tr> <tr> <td>5 m</td> <td>891-8994/005-503</td> <td>891-8994/005-505</td> <td>891-8994/005-507</td> </tr> <tr> <td>6 m</td> <td>891-8994/005-603</td> <td>891-8994/005-605</td> <td>891-8994/005-607</td> </tr> <tr> <td>7 m</td> <td>891-8994/005-703</td> <td>891-8994/005-705</td> <td>891-8994/005-707</td> </tr> <tr> <td>8 m</td> <td>891-8994/005-803</td> <td>891-8994/005-805</td> <td>891-8994/005-807</td> </tr> </tbody> </table>	Length	Item No.	Item No.	Item No.	Coding B				PVC				1 m	891-8994/005-103	891-8994/005-105	891-8994/005-107	2 m	891-8994/005-203	891-8994/005-205	891-8994/005-207	3 m	891-8994/005-303	891-8994/005-305	891-8994/005-307	4 m	891-8994/005-403	891-8994/005-405	891-8994/005-407	5 m	891-8994/005-503	891-8994/005-505	891-8994/005-507	6 m	891-8994/005-603	891-8994/005-605	891-8994/005-607	7 m	891-8994/005-703	891-8994/005-705	891-8994/005-707	8 m	891-8994/005-803	891-8994/005-805	891-8994/005-807
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<p>Info</p>	<p>Accessories</p>																																												
<p>① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② For 3-pole load I<sub>N</sub> = 13 A! For 4-pole load I<sub>N</sub> = 10 A! For other cables, please contact factory.</p> <table border="0"> <tr> <td>● gray</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> <tr> <td>● light green</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> <tr> <td>● pink</td> <td>Coding B</td> <td>(1 2 3 4)</td> </tr> </table> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250. Fire load data available upon request.</p>	● gray	Coding B	(1 2 3 4)	● light green	Coding B	(1 2 3 4)	● pink	Coding B	(1 2 3 4)	<p>Locking lever, for "flying leads", manually operated</p> <table border="1"> <tr> <td>black</td> <td>890-101</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-121</td> <td>100 (2x50)</td> </tr> </table> <p>Locking lever, for "flying leads", tool operated</p> <table border="1"> <tr> <td>black</td> <td>890-111</td> <td>100 (2x50)</td> </tr> <tr> <td>white</td> <td>890-131</td> <td>100 (2x50)</td> </tr> </table> <p>Mounting carrier, for 2- to 5-pole "flying leads"</p> <table border="1"> <tr> <td>black</td> <td>890-310</td> <td>100</td> </tr> <tr> <td>white</td> <td>890-311</td> <td>100</td> </tr> </table>	black	890-101	100 (2x50)	white	890-121	100 (2x50)	black	890-111	100 (2x50)	white	890-131	100 (2x50)	black	890-310	100	white	890-311	100																	
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white	890-131	100 (2x50)																																											
black	890-310	100																																											
white	890-311	100																																											

		PVC Control line: 4 x 1.5, gray			
		400 V/6 kV/3 I <sub>N</sub> 16 A ②			
		Conductor ends, bonded: 9 mm			
		① Approvals			
Interconnecting cable, socket – plug		Length	Item No.	Item No.	Item No.
		Coding B			
		PVC			
		1 m	891-8994/006-103	891-8994/006-105	891-8994/006-107
		2 m	891-8994/006-203	891-8994/006-205	891-8994/006-207
		3 m	891-8994/006-303	891-8994/006-305	891-8994/006-307
		4 m	891-8994/006-403	891-8994/006-405	891-8994/006-407
		5 m	891-8994/006-503	891-8994/006-505	891-8994/006-507
		6 m	891-8994/006-603	891-8994/006-605	891-8994/006-607
		7 m	891-8994/006-703	891-8994/006-705	891-8994/006-707
		8 m	891-8994/006-803	891-8994/006-805	891-8994/006-807
Connecting cable, socket – free end		Length	Item No.	Item No.	Item No.
		Coding B			
		PVC			
		1 m	891-8994/106-103	891-8994/106-105	891-8994/106-107
		2 m	891-8994/106-203	891-8994/106-205	891-8994/106-207
		3 m	891-8994/106-303	891-8994/106-305	891-8994/106-307
		4 m	891-8994/106-403	891-8994/106-405	891-8994/106-407
		5 m	891-8994/106-503	891-8994/106-505	891-8994/106-507
		6 m	891-8994/106-603	891-8994/106-605	891-8994/106-607
		7 m	891-8994/106-703	891-8994/106-705	891-8994/106-707
		8 m	891-8994/106-803	891-8994/106-805	891-8994/106-807
Connecting cable, plug – free end		Length	Item No.	Item No.	Item No.
		Coding B			
		PVC			
		1 m	891-8994/206-103	891-8994/206-105	891-8994/206-107
		2 m	891-8994/206-203	891-8994/206-205	891-8994/206-207
		3 m	891-8994/206-303	891-8994/206-305	891-8994/206-307
		4 m	891-8994/206-403	891-8994/206-405	891-8994/206-407
		5 m	891-8994/206-503	891-8994/206-505	891-8994/206-507
		6 m	891-8994/206-603	891-8994/206-605	891-8994/206-607
		7 m	891-8994/206-703	891-8994/206-705	891-8994/206-707
		8 m	891-8994/206-803	891-8994/206-805	891-8994/206-807

Item numbers overview for other cable lengths

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	891	-	8	9	9	4	/	0	0	6	-	1	0	3
light green	891	-	8	9	9	4	/	0	0	6	-	1	0	5
pink	891	-	8	9	9	4	/	0	0	6	-	1	0	7



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 4-pole, socket – plug, PVC control line, 4 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8994/016-107.

The 10th position defines the cable cross-section. For example, a 4 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8994/005-105.

The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 891-8994/006-503.






















# WINSTA® MINI special Sockets and Plugs, 5-Pole




<p>0.25 ... 1.5 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 16 A ❸</p> <p> 9 mm / 0.35 in.</p> <p>❷ Approvals</p>	<p>22 ... 16 AWG</p> <p>0.25 ... 1.5 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 16 A ❸</p> <p> 9 mm / 0.35 in.</p> <p>❷ Approvals</p>
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**Note:**

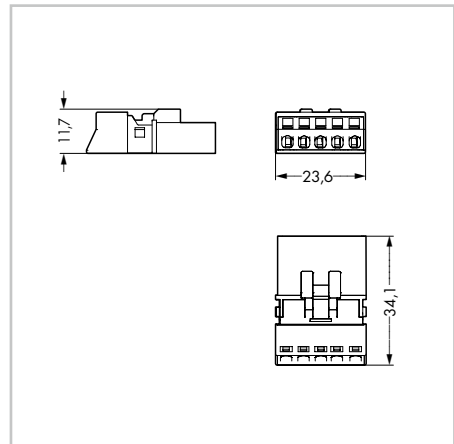
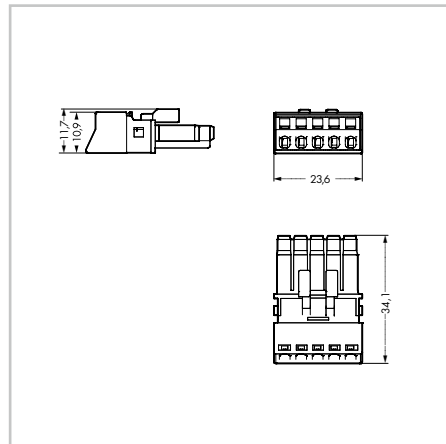
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
<b>Connectors, 5-pole, with Push-in CAGE CLAMP® connection</b>	<b>Socket</b>			<b>Plug</b>			
		gray	890-245	50		890-255	50
		gray	890-245/060-000*	50		890-255/060-000*	50
		gray	890-245/062-000*	50		890-255/062-000*	50
		light green	890-265	50		890-275	50
		light green	890-265/073-000*	50		890-275/073-000*	50
		pink	890-285	50		890-295	50
		pink	890-285/080-000*	50		890-295/080-000*	50
		pink	890-285/082-000*	50		890-295/082-000*	50
			* For pole marking, see page 253.				* For pole marking, see page 253.
<b>Item-Specific Accessories</b>							
	<b>Strain relief housing,</b>  for 6.5 ... 10.5 mm cable diameter			<b>Strain relief housing,</b>  for 6.5 ... 10.5 mm cable diameter			
		black	890-505	50	black	890-505	50
		white	890-515	50	white	890-515	50
<b>Accessories, 890 Series</b>							
	<b>Locking lever, for "flying leads",</b>  manually operated			<b>Locking lever, for "flying leads",</b>  tool operated			
		black	890-101	100 (2 x 50)	black	890-111	100 (2 x 50)
		white	890-121	100 (2 x 50)	white	890-131	100 (2 x 50)
	<b>Mounting carrier, for 2- to 5-pole</b>  "flying leads"						
		black	890-310	100			
		white	890-311	100			
<b>Info</b>	<b>Dimensions</b>						

- ❶ Conductor sizes: 0.25 ... 1.5 mm<sup>2</sup> "s + f-st"  
0.25 ... 1 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ For 3-pole load I<sub>N</sub> = 13 A!  
For 4- and 5-pole load I<sub>N</sub> = 10 A!
- Standard printing (without suffix number)
-  gray Coding B (1 2 3 4 5)
  -  light green Coding B (1 2 3 4 5)
  -  pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.





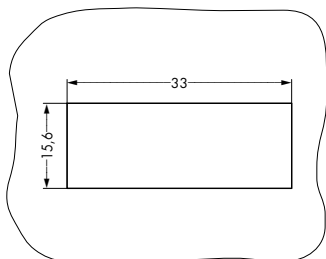
# WINSTA® MINI special Snap-In Sockets and Plugs, 5-Pole

PUSH-IN CAGE CLAMP®



3



123

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: +0.1 mm	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG	0.25 ... 1.5 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 16 A ③	22 ... 16 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	

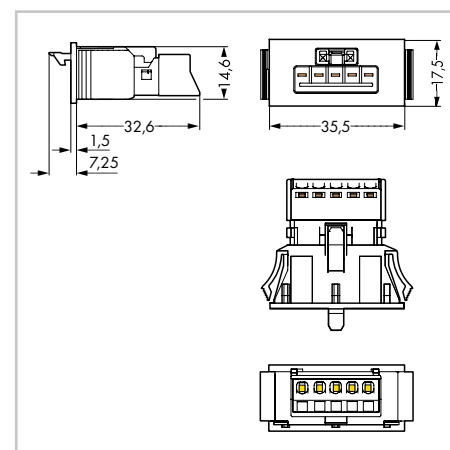
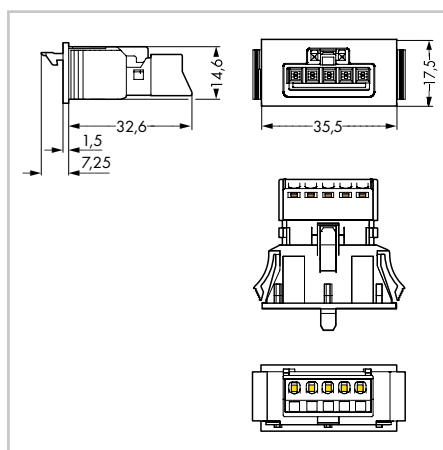


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Snap-in device connectors, 5-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	gray	890-745	50	gray	890-755	50
	gray	890-745/060-000*	50	gray	890-755/060-000*	50
	gray	890-745/062-000*	50	gray	890-755/062-000*	50
	light green	890-765	50	light green	890-775	50
	light green	890-765/073-000*	50	light green	890-775/073-000*	50
	pink	890-785	50	pink	890-795	50
	pink	890-785/080-000*	50	pink	890-795/080-000*	50
	pink	890-785/082-000*	50	pink	890-795/082-000*	50
		*For pole marking, see page 253.			*For pole marking, see page 253.	

Item-Specific Accessories	
Operating tool, partially insulated 5-way 	Operating tool, partially insulated 5-way 
890-385 1	890-385 1

Accessories, 890 Series	
Lockout cap, for cutout, 5-pole 	Lockout cap, for cutout, 5-pole 
black 770-643 100 white 770-693 100	black 770-643 100 white 770-693 100

## Dimensions



# WINSTA® MINI special PCB Connectors, 5-Pole

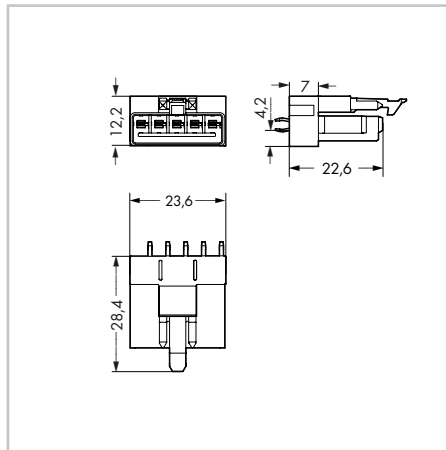
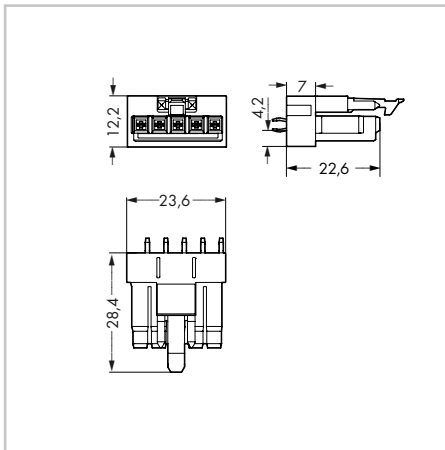
	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals	250 V/4 kV/3 $I_N$ 16 A ②  ① Approvals
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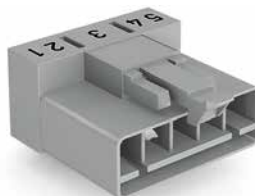
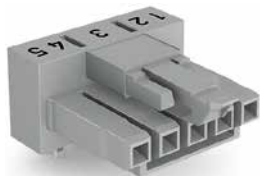
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	890-845	100	gray	890-855	100
	light green	890-865	100	light green	890-875	100
	pink	890-885	100	pink	890-895	100
Info	Dimensions					

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② For 3-pole load  $I_N = 13$  A!  
For 4- and 5-pole load  $I_N = 10$  A!
- gray    Coding B    (1 2 3 4 5)  
● light green    Coding B    (1 2 3 4 5)  
● pink    Coding B    (1 2 3 4 5)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.

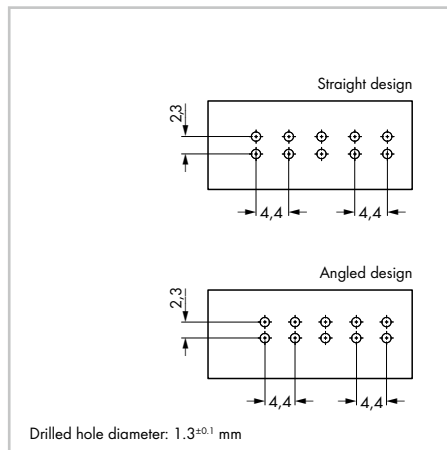
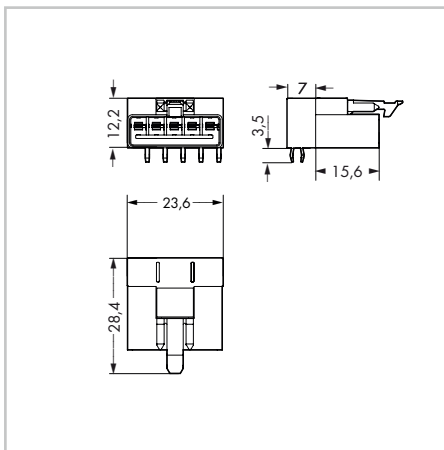
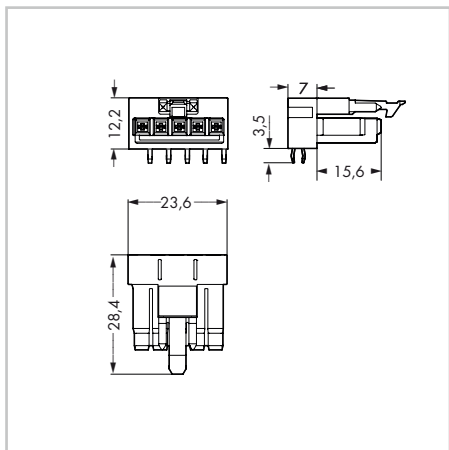


250 V/4 kV/3 $I_N$ 16 A Ⓢ  1 Approvals	250 V/4 kV/3 $I_N$ 16 A Ⓢ  1 Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Socket, angled			Plug, angled		
gray	890-845/011-000	100	gray	890-855/011-000	100
light green	890-865/011-000	100	light green	890-875/011-000	100
pink	890-885/011-000	100	pink	890-895/011-000	100

<b>Dimensions</b>	<b>Hole patterns</b>
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# WINSTA® MINI special Cable Assemblies, 5 x 1 mm<sup>2</sup>

		<b>PVC</b> Control line: 5 x 1, gray  <b>400 V/6 kV/3 I<sub>N</sub> 10 A</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>																																			
<b>Interconnecting cable, socket - plug</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																																
		<b>Coding B</b> <b>PVC</b> <table border="1"> <tr><td>1 m</td><td>● 891-8995/005-103</td><td>● 891-8995/005-105</td><td>● 891-8995/005-107</td></tr> <tr><td>2 m</td><td>● 891-8995/005-203</td><td>● 891-8995/005-205</td><td>● 891-8995/005-207</td></tr> <tr><td>3 m</td><td>● 891-8995/005-303</td><td>● 891-8995/005-305</td><td>● 891-8995/005-307</td></tr> <tr><td>4 m</td><td>● 891-8995/005-403</td><td>● 891-8995/005-405</td><td>● 891-8995/005-407</td></tr> <tr><td>5 m</td><td>● 891-8995/005-503</td><td>● 891-8995/005-505</td><td>● 891-8995/005-507</td></tr> <tr><td>6 m</td><td>● 891-8995/005-603</td><td>● 891-8995/005-605</td><td>● 891-8995/005-607</td></tr> <tr><td>7 m</td><td>● 891-8995/005-703</td><td>● 891-8995/005-705</td><td>● 891-8995/005-707</td></tr> <tr><td>8 m</td><td>● 891-8995/005-803</td><td>● 891-8995/005-805</td><td>● 891-8995/005-807</td></tr> </table>				1 m	● 891-8995/005-103	● 891-8995/005-105	● 891-8995/005-107	2 m	● 891-8995/005-203	● 891-8995/005-205	● 891-8995/005-207	3 m	● 891-8995/005-303	● 891-8995/005-305	● 891-8995/005-307	4 m	● 891-8995/005-403	● 891-8995/005-405	● 891-8995/005-407	5 m	● 891-8995/005-503	● 891-8995/005-505	● 891-8995/005-507	6 m	● 891-8995/005-603	● 891-8995/005-605	● 891-8995/005-607	7 m	● 891-8995/005-703	● 891-8995/005-705	● 891-8995/005-707	8 m	● 891-8995/005-803	● 891-8995/005-805	● 891-8995/005-807
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4 m	● 891-8995/005-403	● 891-8995/005-405	● 891-8995/005-407																																		
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8 m	● 891-8995/005-803	● 891-8995/005-805	● 891-8995/005-807																																		
<b>Connecting cable, socket - free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																																
		<b>Coding B</b> <b>PVC</b> <table border="1"> <tr><td>1 m</td><td>● 891-8995/105-103</td><td>● 891-8995/105-105</td><td>● 891-8995/105-107</td></tr> <tr><td>2 m</td><td>● 891-8995/105-203</td><td>● 891-8995/105-205</td><td>● 891-8995/105-207</td></tr> <tr><td>3 m</td><td>● 891-8995/105-303</td><td>● 891-8995/105-305</td><td>● 891-8995/105-307</td></tr> <tr><td>4 m</td><td>● 891-8995/105-403</td><td>● 891-8995/105-405</td><td>● 891-8995/105-407</td></tr> <tr><td>5 m</td><td>● 891-8995/105-503</td><td>● 891-8995/105-505</td><td>● 891-8995/105-507</td></tr> <tr><td>6 m</td><td>● 891-8995/105-603</td><td>● 891-8995/105-605</td><td>● 891-8995/105-607</td></tr> <tr><td>7 m</td><td>● 891-8995/105-703</td><td>● 891-8995/105-705</td><td>● 891-8995/105-707</td></tr> <tr><td>8 m</td><td>● 891-8995/105-803</td><td>● 891-8995/105-805</td><td>● 891-8995/105-807</td></tr> </table>				1 m	● 891-8995/105-103	● 891-8995/105-105	● 891-8995/105-107	2 m	● 891-8995/105-203	● 891-8995/105-205	● 891-8995/105-207	3 m	● 891-8995/105-303	● 891-8995/105-305	● 891-8995/105-307	4 m	● 891-8995/105-403	● 891-8995/105-405	● 891-8995/105-407	5 m	● 891-8995/105-503	● 891-8995/105-505	● 891-8995/105-507	6 m	● 891-8995/105-603	● 891-8995/105-605	● 891-8995/105-607	7 m	● 891-8995/105-703	● 891-8995/105-705	● 891-8995/105-707	8 m	● 891-8995/105-803	● 891-8995/105-805	● 891-8995/105-807
1 m	● 891-8995/105-103	● 891-8995/105-105	● 891-8995/105-107																																		
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6 m	● 891-8995/105-603	● 891-8995/105-605	● 891-8995/105-607																																		
7 m	● 891-8995/105-703	● 891-8995/105-705	● 891-8995/105-707																																		
8 m	● 891-8995/105-803	● 891-8995/105-805	● 891-8995/105-807																																		
<b>Connecting cable, plug - free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																																
		<b>Coding B</b> <b>PVC</b> <table border="1"> <tr><td>1 m</td><td>● 891-8995/205-103</td><td>● 891-8995/205-105</td><td>● 891-8995/205-107</td></tr> <tr><td>2 m</td><td>● 891-8995/205-203</td><td>● 891-8995/205-205</td><td>● 891-8995/205-207</td></tr> <tr><td>3 m</td><td>● 891-8995/205-303</td><td>● 891-8995/205-305</td><td>● 891-8995/205-307</td></tr> <tr><td>4 m</td><td>● 891-8995/205-403</td><td>● 891-8995/205-405</td><td>● 891-8995/205-407</td></tr> <tr><td>5 m</td><td>● 891-8995/205-503</td><td>● 891-8995/205-505</td><td>● 891-8995/205-507</td></tr> <tr><td>6 m</td><td>● 891-8995/205-603</td><td>● 891-8995/205-605</td><td>● 891-8995/205-607</td></tr> <tr><td>7 m</td><td>● 891-8995/205-703</td><td>● 891-8995/205-705</td><td>● 891-8995/205-707</td></tr> <tr><td>8 m</td><td>● 891-8995/205-803</td><td>● 891-8995/205-805</td><td>● 891-8995/205-807</td></tr> </table>				1 m	● 891-8995/205-103	● 891-8995/205-105	● 891-8995/205-107	2 m	● 891-8995/205-203	● 891-8995/205-205	● 891-8995/205-207	3 m	● 891-8995/205-303	● 891-8995/205-305	● 891-8995/205-307	4 m	● 891-8995/205-403	● 891-8995/205-405	● 891-8995/205-407	5 m	● 891-8995/205-503	● 891-8995/205-505	● 891-8995/205-507	6 m	● 891-8995/205-603	● 891-8995/205-605	● 891-8995/205-607	7 m	● 891-8995/205-703	● 891-8995/205-705	● 891-8995/205-707	8 m	● 891-8995/205-803	● 891-8995/205-805	● 891-8995/205-807
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8 m	● 891-8995/205-803	● 891-8995/205-805	● 891-8995/205-807																																		
<b>Info</b>		<b>Accessories</b>																																			
<p>① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② For 3-pole load I<sub>N</sub> = 13 A! For 4- and 5-pole load I<sub>N</sub> = 10 A! For other cables, please contact factory.</p> <p>● gray      Coding B      (1 2 3 4 5) ● light green      Coding B      (1 2 3 4 5) ● pink      Coding B      (1 2 3 4 5)</p> <p>For additional pole marking, see page 253.</p>		<p><b>Locking lever, for "flying leads",</b> manually operated</p> <table border="1"> <tr><td>black</td><td><b>890-101</b></td><td>100 (2x50)</td></tr> <tr><td>white</td><td><b>890-121</b></td><td>100 (2x50)</td></tr> </table> <p><b>Locking lever, for "flying leads",</b> tool operated</p> <table border="1"> <tr><td>black</td><td><b>890-111</b></td><td>100 (2x50)</td></tr> <tr><td>white</td><td><b>890-131</b></td><td>100 (2x50)</td></tr> </table> <p><b>Mounting carrier, for 2- to 5-pole</b> "flying leads"</p> <table border="1"> <tr><td>black</td><td><b>890-310</b></td><td>100</td></tr> <tr><td>white</td><td><b>890-311</b></td><td>100</td></tr> </table>				black	<b>890-101</b>	100 (2x50)	white	<b>890-121</b>	100 (2x50)	black	<b>890-111</b>	100 (2x50)	white	<b>890-131</b>	100 (2x50)	black	<b>890-310</b>	100	white	<b>890-311</b>	100														
black	<b>890-101</b>	100 (2x50)																																			
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black	<b>890-310</b>	100																																			
white	<b>890-311</b>	100																																			
<p>For coding information, see page 250. Fire load data available upon request.</p>																																					



		PVC Control line: 5 x 1.5, gray			
		400 V/6 kV/3 I <sub>N</sub> 16 A ②			
		Conductor ends, bonded: 9 mm			
		① Approvals			
<b>Interconnecting cable, socket – plug</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8995/006-103	891-8995/006-105	891-8995/006-107
		2 m	891-8995/006-203	891-8995/006-205	891-8995/006-207
		3 m	891-8995/006-303	891-8995/006-305	891-8995/006-307
		4 m	891-8995/006-403	891-8995/006-405	891-8995/006-407
		5 m	891-8995/006-503	891-8995/006-505	891-8995/006-507
		6 m	891-8995/006-603	891-8995/006-605	891-8995/006-607
		7 m	891-8995/006-703	891-8995/006-705	891-8995/006-707
		8 m	891-8995/006-803	891-8995/006-805	891-8995/006-807
<b>Connecting cable, socket – free end</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8995/106-103	891-8995/106-105	891-8995/106-107
		2 m	891-8995/106-203	891-8995/106-205	891-8995/106-207
		3 m	891-8995/106-303	891-8995/106-305	891-8995/106-307
		4 m	891-8995/106-403	891-8995/106-405	891-8995/106-407
		5 m	891-8995/106-503	891-8995/106-505	891-8995/106-507
		6 m	891-8995/106-603	891-8995/106-605	891-8995/106-607
		7 m	891-8995/106-703	891-8995/106-705	891-8995/106-707
		8 m	891-8995/106-803	891-8995/106-805	891-8995/106-807
<b>Connecting cable, plug – free end</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	891-8995/206-103	891-8995/206-105	891-8995/206-107
		2 m	891-8995/206-203	891-8995/206-205	891-8995/206-207
		3 m	891-8995/206-303	891-8995/206-305	891-8995/206-307
		4 m	891-8995/206-403	891-8995/206-405	891-8995/206-407
		5 m	891-8995/206-503	891-8995/206-505	891-8995/206-507
		6 m	891-8995/206-603	891-8995/206-605	891-8995/206-607
		7 m	891-8995/206-703	891-8995/206-705	891-8995/206-707
		8 m	891-8995/206-803	891-8995/206-805	891-8995/206-807

Item numbers overview for other cable lengths

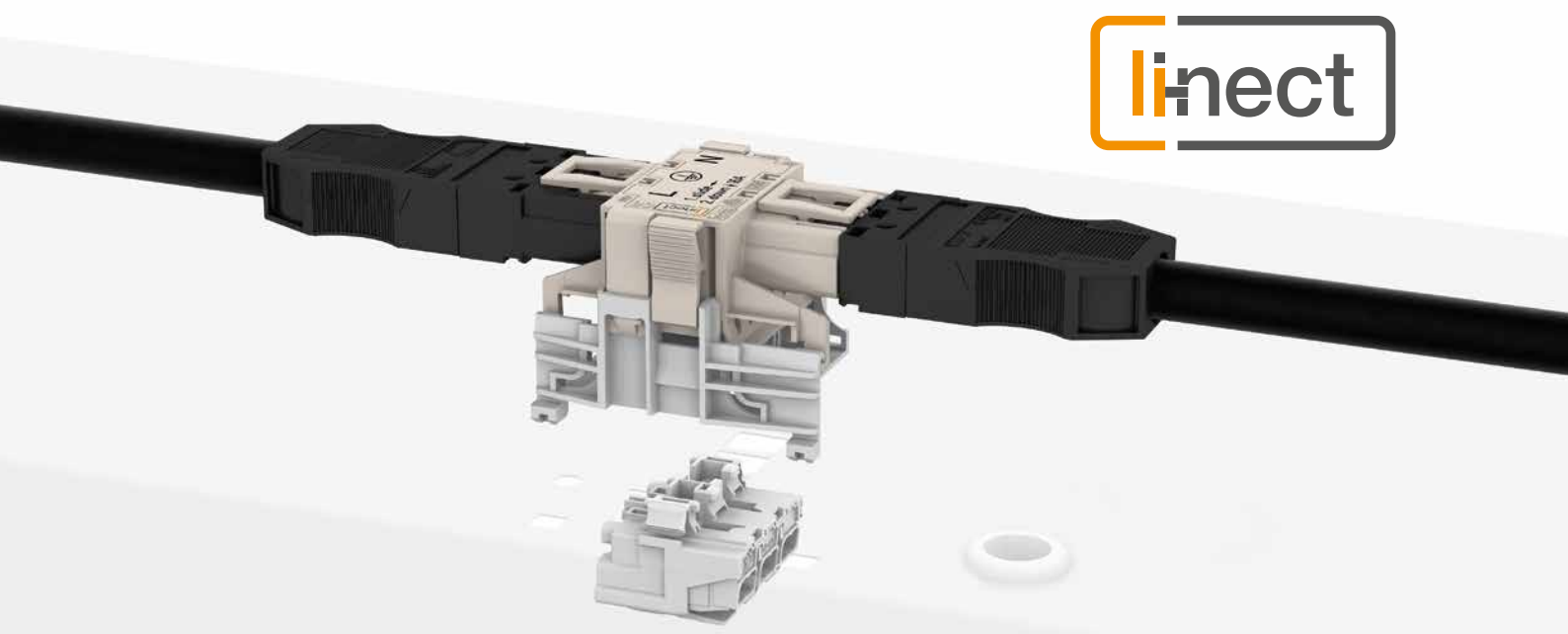
Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	891	-	8	9	9	5	/	0	0	6	-	1	0	3
light green	891	-	8	9	9	5	/	0	0	6	-	1	0	5
pink	891	-	8	9	9	5	/	0	0	6	-	1	0	7

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 5-pole, socket – plug, PVC control line, 5 x 1.5 mm<sup>2</sup>, 1 m long







The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 891-8995/016-107.

The 10th position defines the cable cross-section. For example, a 5 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 891-8995/005-105.

The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 891-8995/006-503.

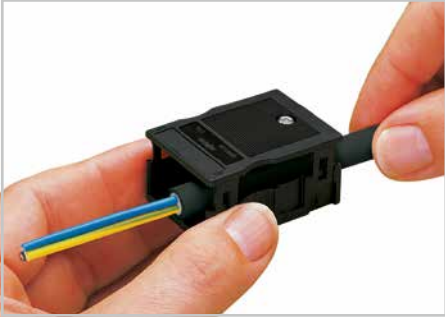


- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.

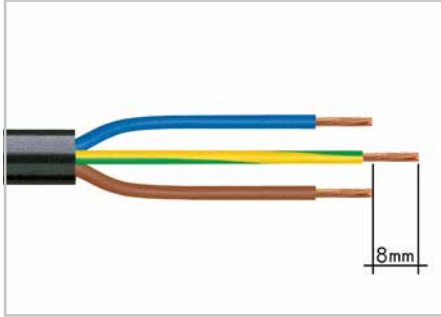
	Page	
	<b>770 Series</b>	
	<b>Linect® T-Connectors, 2-Pole</b>	136
	<b>Linect® T-Connectors, 3-Pole</b>	154
	<b>Linect® T-Connectors, 4-Pole</b>	178
	<b>Linect® T-Connectors, 5-Pole</b>	192
	<b>770 Series</b>	
	<b>Connectors, 2-Pole</b>	132
	<b>Connectors, 3-Pole</b>	144, 150
	<b>Connectors, 4-Pole</b>	170
	<b>770 Series</b>	
	<b>Strain Relief Housings, 2-Pole</b>	134
	<b>Strain Relief Housings, 3-Pole</b>	146
	<b>Strain Relief Housings, 4-Pole</b>	172
	<b>Strain Relief Housings, 5-Pole</b>	186
	<b>770 Series</b>	
	<b>Snap-In Device Connectors, 2-Pole</b>	135
	<b>Snap-In Device Connectors, 3-Pole</b>	148
	<b>Snap-In Device Connectors, 4-Pole</b>	174
	<b>Snap-In Device Connectors, 5-Pole</b>	188
	<b>770 Series</b>	
	<b>PCB Connectors, 3-Pole</b>	152
	<b>PCB Connectors, 4-Pole</b>	176
	<b>770 Series</b>	
	<b>Distribution Connectors, 2-Pole</b>	137
	<b>Intermediate Couplers and T-Distribution Connectors, 3-Pole</b>	154
	<b>Distribution Connectors, 4-Pole</b>	178
	<b>771 Series</b>	
	<b>Cable Assemblies, 2-Pole</b>	138
	<b>Cable Assemblies, 3-Pole</b>	160
	<b>Cable Assemblies, 4-Pole</b>	180
	<b>770/771 Series</b>	
	<b>Strain Relief Housings, IP 2XD, 3-Pole</b>	167
	<b>Cable Assemblies, IP 2XD, 3-Pole</b>	168

# WINSTA® MIDI, 770 Series Handling:

## Preparation

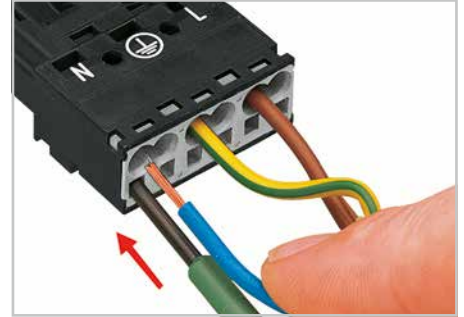


We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



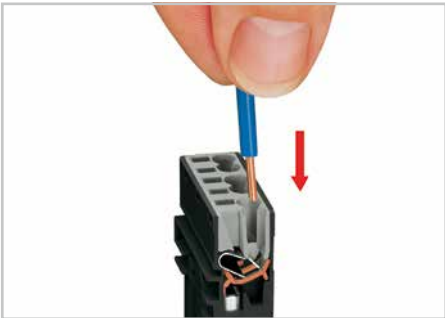
1. Strip length, outer insulation = x mm <sup>1</sup>
2. Strip length: = 9 mm
3. Extended ground conductor = 8 mm

## Termination via Push-in CAGE CLAMP®

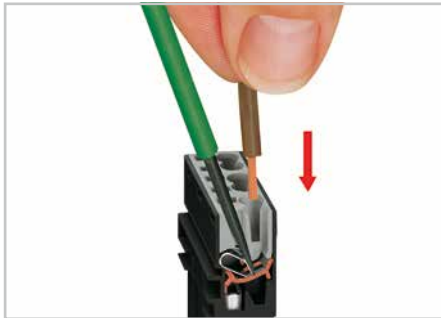


To terminate fine-stranded conductors, open clamping unit via 2.5 mm screwdriver and insert stripped conductor until it hits backstop.

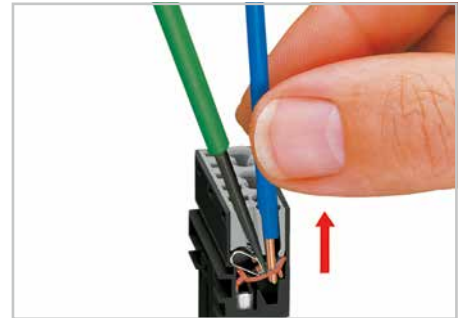
## Termination via Push-in CAGE CLAMP®



Insert stripped solid conductor until it hits backstop.



To terminate fine-stranded conductors, open clamping unit via 2.5 mm screwdriver and insert stripped conductor until it hits backstop.



To remove the conductor, actuate the clamp via 2.5 mm screwdriver and pull out the conductor.

## Strain relief installation



Latch the strain relief housing on the plug/socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw using a 2.5 mm screwdriver.

## Variable coding



Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

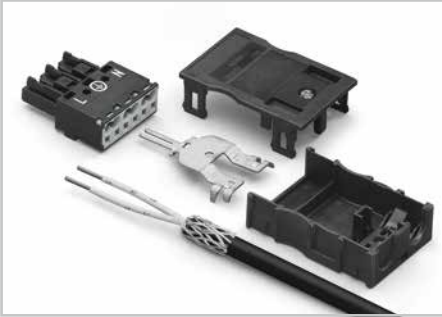
## Marking



Marking strain relief housing via WSB quick marking system.

<sup>1</sup> Strip length, outer insulation: 2-pole = 35 mm, 3- to 5-pole = 55 mm

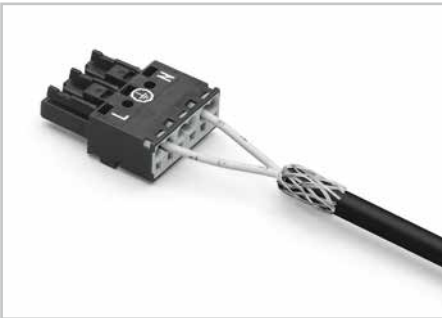
Shield termination



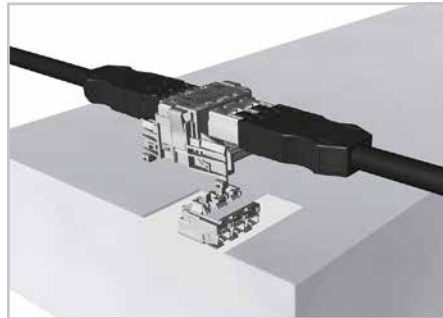
Connector with shield termination



the light connection system

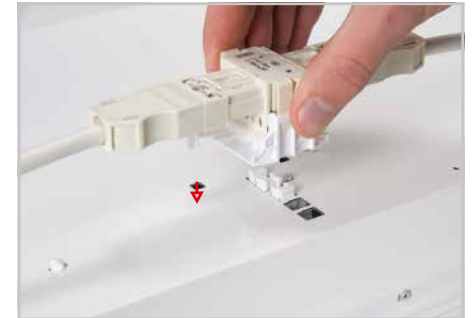


Apply the shield to the rubber cable.  
Strip length, outer insulation = 55 mm  
Shield length = 10 mm



Connecting a T-connector to a 294 Series lighting connector.

Three easy steps to error-free connections:

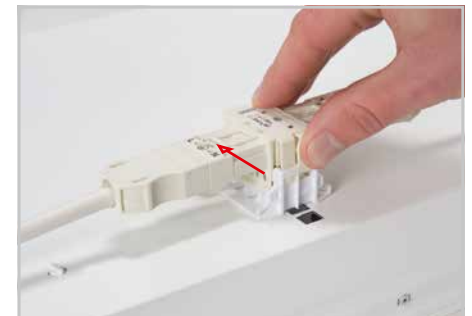
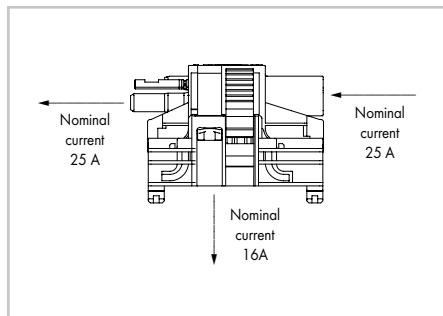


Align the T-connector with the square cutouts.



Push the shield connecting plate into the connector until fully inserted.

Nominal current



Move the T-connector toward the square cutouts until it is locked in position.





First insert the wired connector into the strain relief housing, then snap the cover and tighten the screw.







Push down until fully engaged – done!



# WINSTA® MIDI Sockets and Plugs, 2-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>2 x 20 ... 12 AWG</p>
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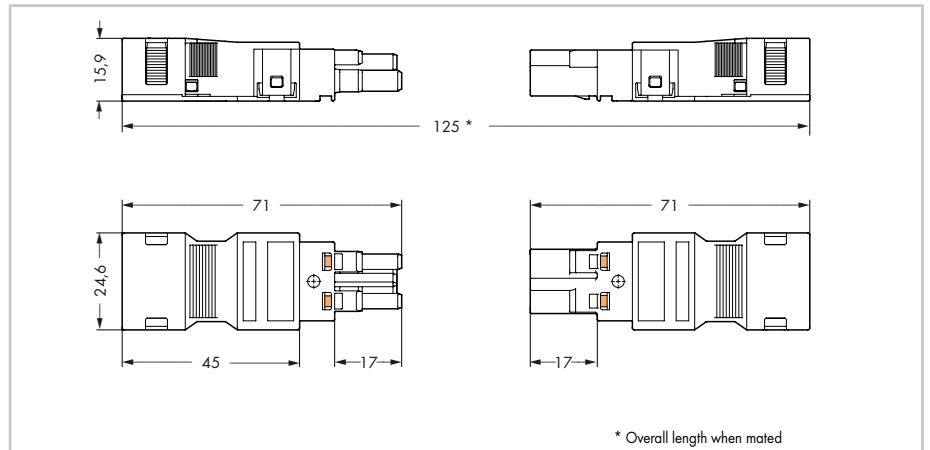
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 2-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 1 cable, 7 ... 10.5 mm diameter ③, Strip length, outer insulation: 35 mm			Plug with strain relief housing, for 1 cable, 7 ... 10.5 mm diameter ③, Strip length, outer insulation: 35 mm		
	● black	770-102/041-000	25	● black	770-112/041-000	25
	○ white	770-122/041-000	25	○ white	770-132/041-000	25

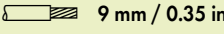
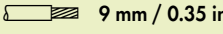
Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
	Operating tool, partially insulated 2-way			Operating tool, partially insulated 2-way		
		770-382 1			770-382 1	

Accessories, 770 Series						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	

Info	Dimensions
------	------------

- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ For more strain relief housings, see page 134.
- |             |          |           |
|-------------|----------|-----------|
| ● black     | Coding A | (L N)     |
| ○ white     | Coding A | (L N)     |
| ● blue      | Coding I | (DA+ DA-) |
| ● dark gray | Coding L | (L' N')   |
- For coding information, see page 250.  
Fire load data available upon request.







2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals
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**Notice:**

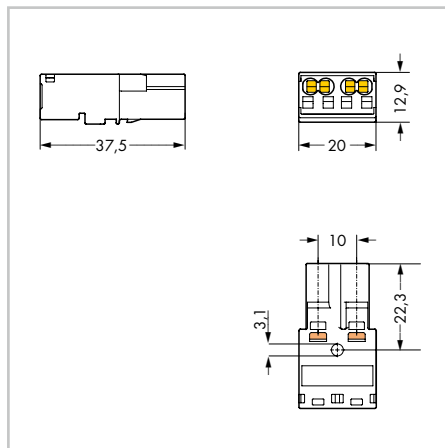
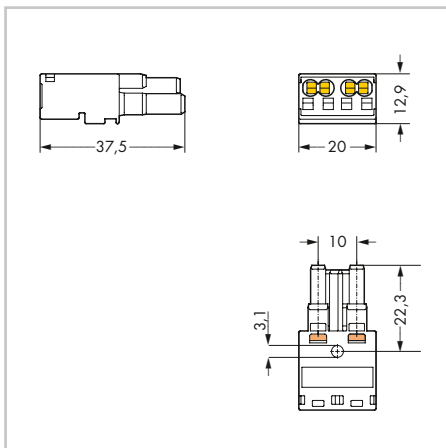
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>		
● black	770-202	100	● black	770-212	100
○ white	770-222	100	○ white	770-232	100
● blue	770-1102	100	● blue	770-1112	100
● dark gray	770-1162	100	● dark gray	770-1172	100

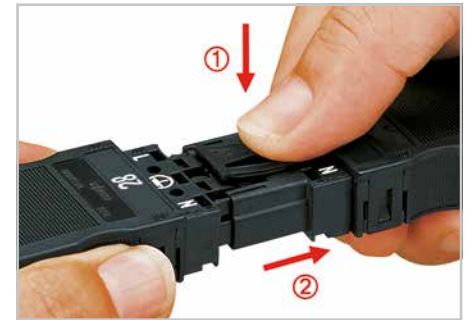
Item-Specific Accessories			
<b>Lockout cap, for socket, separable, 12-pole</b>		<b>Lockout cap, for plug, separable, 5-pole</b>	
	black 770-201 100 white 770-221 100		yellow 770-360 100
<b>Operating tool, partially insulated</b>		<b>Operating tool, partially insulated</b>	
	2-way 770-382 1		2-way 770-382 1

Accessories, 770 Series			
<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>	
	black 770-101 100 (4x25) white 770-121 100 (4x25)		black 770-111 100 (4x25) white 770-131 100 (4x25)

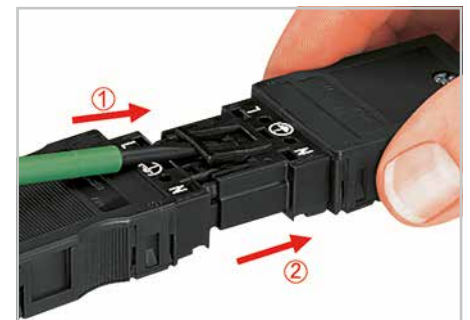
**Dimensions**



Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)





Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

# WINSTA® MIDI Strain Relief Housings, 2-Pole, for Different Cable Diameters

	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul> <p>① Approvals</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 2-pole sockets</li> <li>- 2-pole plugs</li> </ul> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Strain relief housing	Strain relief housing, for 1 cable, 5 ... 9 mm diameter ②, Strip length, outer insulation: 35 mm			Strain relief housing, for 1 cable, 7 ... 10.5 mm diameter ②, Strip length, outer insulation: 35 mm		
	black	770-502/042-000	50	black	770-502/041-000	50
	white	770-512/042-000	50	white	770-512/041-000	50

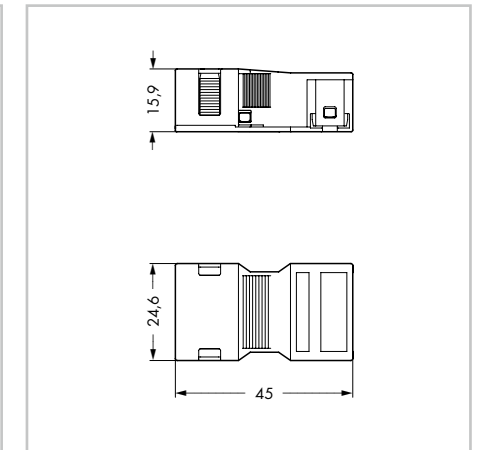
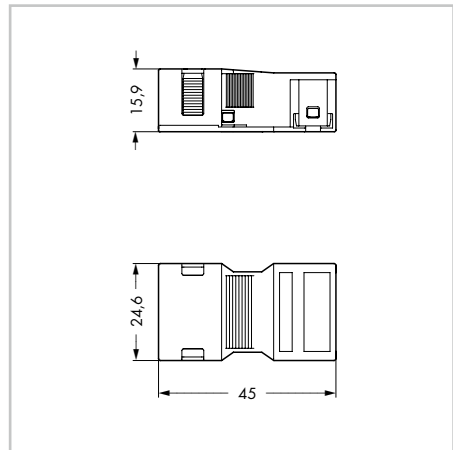
Item-Specific Accessories						
	<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333    100</p> <p>Marking area: 20 x 6.5 mm</p>			<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333    100</p> <p>Marking area: 20 x 6.5 mm</p>		

Info	Dimensions
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① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

② For H05VV and NYM cables  
For other cables, please contact factory.

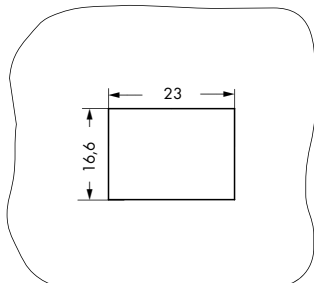
For coding information, see page 250.  
Fire load data available upon request.




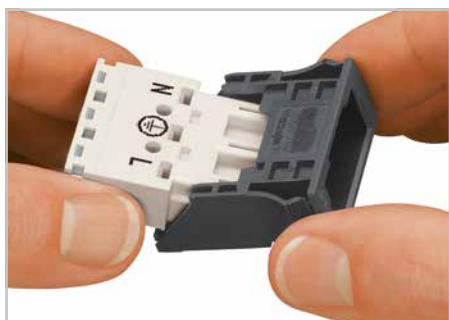


# WINSTA® MIDI Snap-In Frames, 2-Pole

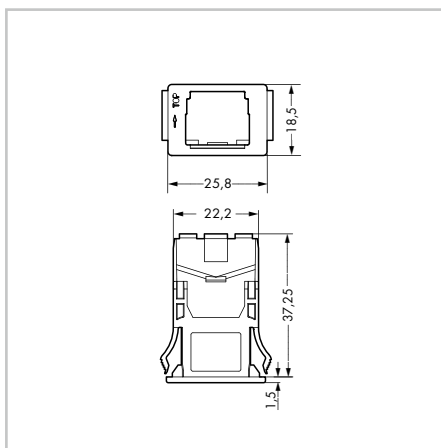
<p><b>Cutout dimensions</b></p> <p>Plate thickness: 1 ... 3 mm Cutout tolerance: + 0.1 mm</p>	<p><b>Snap-in frame</b> - for 2-pole sockets and plugs (see page 83) Plate thickness: 1 ... 3 mm</p> <p><b>1 Approvals</b></p>	
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Description	Color	Item No.	Pack. Unit
<b>Snap-in frame</b>	<b>Snap-In Frames, 2-Poles</b>		
	black	770-317	100
	white	770-337	100
<b>Item-Specific Accessories</b>			
	<b>Locking lever, oversized,</b>		
		tool operated gray	<b>770-140</b> 100 (4x25)
<b>Dimensions</b>			





Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout (example shows a 3-pole connector).

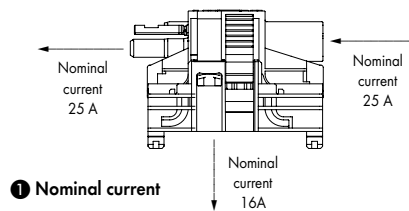


	<p>250 V/4 kV/3 I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p>	
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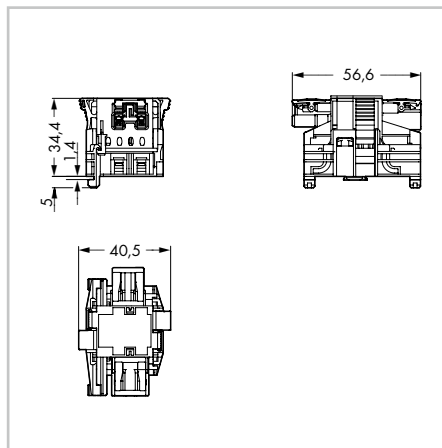


Description	Color	Item No.	Pack. Unit
Linect® T-connector, 2-pole	Linect® T-connector, 2-pole, socket - plug, white housing		
	for DALL applications, blue cover		
	● blue	<b>770-7102</b>	20
Suitable for 294-8032 Lighting Connector			
for emergency power, dark gray cover			
	● dark gray	<b>770-7502</b>	20
Suitable for 294-8022 Lighting Connector			

Item-Specific Accessories			
Lockout cap, for socket, separable, 12-pole			
			
	black	<b>770-201</b>	100
	white	<b>770-221</b>	100
Lockout cap, for plug, separable, 5-pole			
			
	yellow	<b>770-360</b>	100
Info			
Dimensions			



- ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ❹ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- |             |          |           |
|-------------|----------|-----------|
| ● black     | Coding A | (L N)     |
| ○ white     | Coding A | (L N)     |
| ● blue      | Coding I | (DA- DA+) |
| ● dark gray | Coding L | (L' N')   |
- For coding information, see page 250.  
Fire load data available upon request.








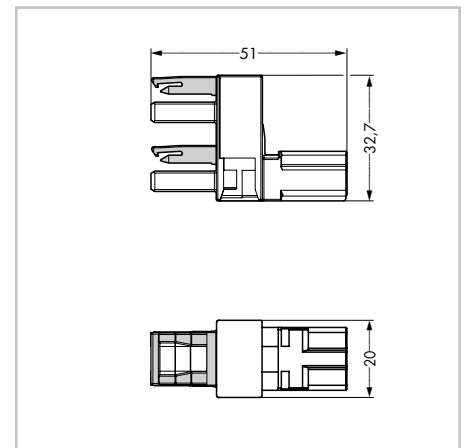
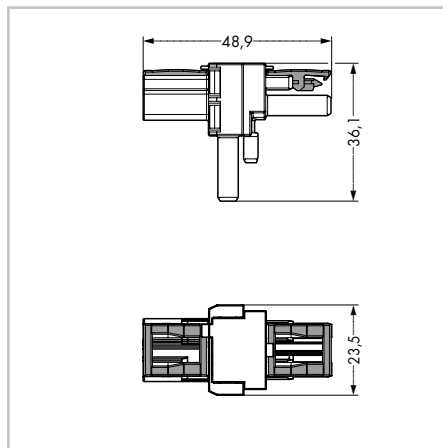
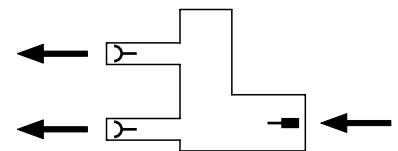
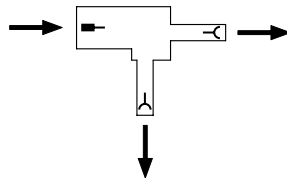
# WINSTA® MIDI T- and h-Distribution Connectors, 2-Pole

	250 V/4 kV/3 $I_N$ 25 A  ② Approvals	250 V/4 kV/3 $I_N$ 25 A  ② Approvals
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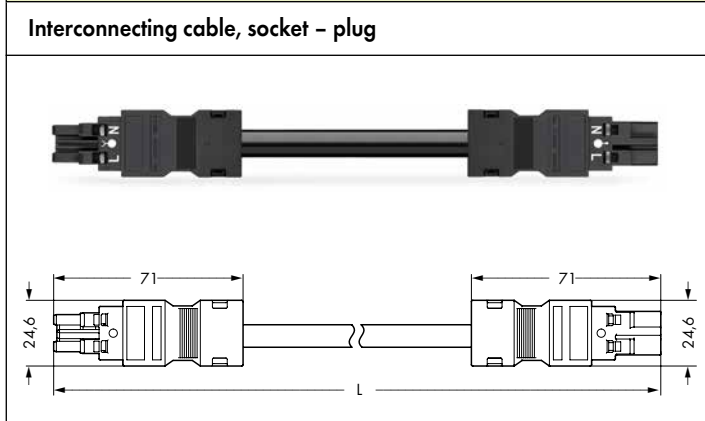
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector, 2-pole	T-distribution connector, 1 x plug/2 x socket			h-distribution connector, unidirectional, plug/socket - socket		
	● black	770-1606	50	● black	770-1634	50
	○ white	770-1656	50	○ white	770-1684	50
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	● black	770-1615	50	● black	770-1636	50
	○ white	770-1665	50	○ white	770-1686	50

Item-Specific Accessories						
	<b>Lockout cap</b> , for socket, separable, 12-pole  black 770-201 100 white 770-221 100			<b>Mounting plate</b> , for distribution connectors  black 770-1626 25 white 770-1627 25		
	<b>Lockout cap</b> , for plug, separable, 5-pole  yellow 770-360 100			<b>Fixing pin</b> , for mounting plates  ③ black 890-601 250 ④ black 770-601 250		
				<b>Lockout cap</b> , for socket, separable, 12-pole  black 770-201 100 white 770-221 100		
<b>Dimensions</b>						

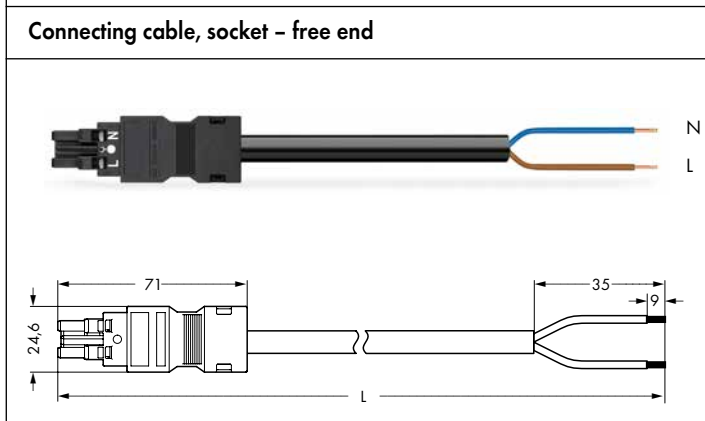


# WINSTA® MIDI Cable Assemblies 2 x 1.5 mm<sup>2</sup>

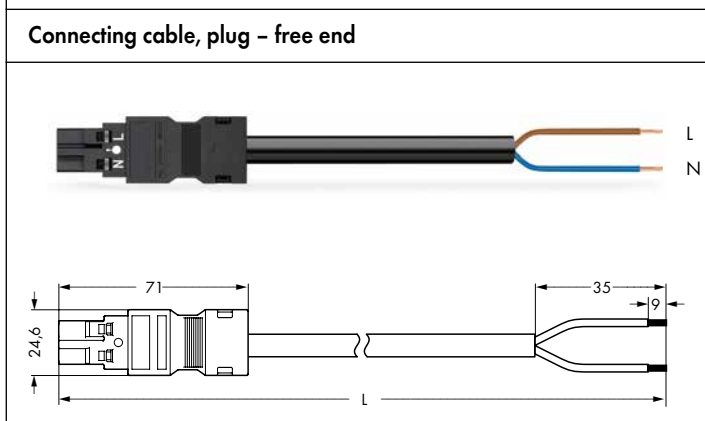
PVC	H05VV-F 2x1.5
halogen-free	H05Z1Z1-F 2x1.5
250 V/4 kV/3	I <sub>N</sub> 16 A
Conductor ends, bonded: 9 mm	
① Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-8992/006-101	771-8992/006-102	771-8992/016-101	771-8992/016-102
2 m	771-8992/006-201	771-8992/006-202	771-8992/016-201	771-8992/016-202
3 m	771-8992/006-301	771-8992/006-302	771-8992/016-301	771-8992/016-302
4 m	771-8992/006-401	771-8992/006-402	771-8992/016-401	771-8992/016-402
5 m	771-8992/006-501	771-8992/006-502	771-8992/016-501	771-8992/016-502
6 m	771-8992/006-601	771-8992/006-602	771-8992/016-601	771-8992/016-602
7 m	771-8992/006-701	771-8992/006-702	771-8992/016-701	771-8992/016-702
8 m	771-8992/006-801	771-8992/006-802	771-8992/016-801	771-8992/016-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-8992/106-101	771-8992/106-102	771-8992/116-101	771-8992/116-102
2 m	771-8992/106-201	771-8992/106-202	771-8992/116-201	771-8992/116-202
3 m	771-8992/106-301	771-8992/106-302	771-8992/116-301	771-8992/116-302
4 m	771-8992/106-401	771-8992/106-402	771-8992/116-401	771-8992/116-402
5 m	771-8992/106-501	771-8992/106-502	771-8992/116-501	771-8992/116-502
6 m	771-8992/106-601	771-8992/106-602	771-8992/116-601	771-8992/116-602
7 m	771-8992/106-701	771-8992/106-702	771-8992/116-701	771-8992/116-702
8 m	771-8992/106-801	771-8992/106-802	771-8992/116-801	771-8992/116-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-8992/206-101	771-8992/206-102	771-8992/216-101	771-8992/216-102
2 m	771-8992/206-201	771-8992/206-202	771-8992/216-201	771-8992/216-202
3 m	771-8992/206-301	771-8992/206-302	771-8992/216-301	771-8992/216-302
4 m	771-8992/206-401	771-8992/206-402	771-8992/216-401	771-8992/216-402
5 m	771-8992/206-501	771-8992/206-502	771-8992/216-501	771-8992/216-502
6 m	771-8992/206-601	771-8992/206-602	771-8992/216-601	771-8992/216-602
7 m	771-8992/206-701	771-8992/206-702	771-8992/216-701	771-8992/216-702
8 m	771-8992/206-801	771-8992/206-802	771-8992/216-801	771-8992/216-802

**Info**

① For “International Certification Organizations” and “Approvals – User Guide,” see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

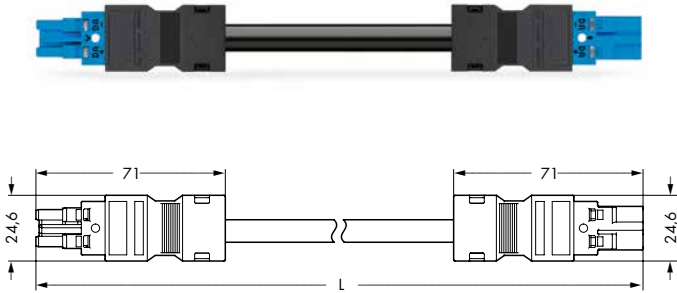
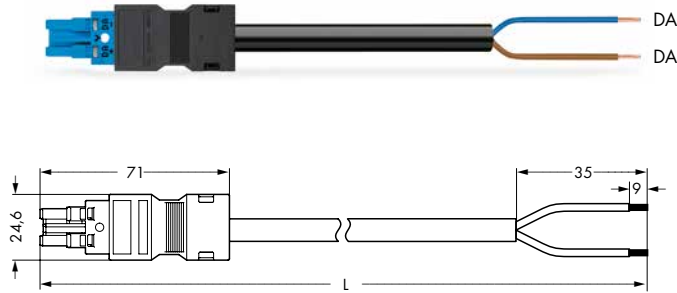
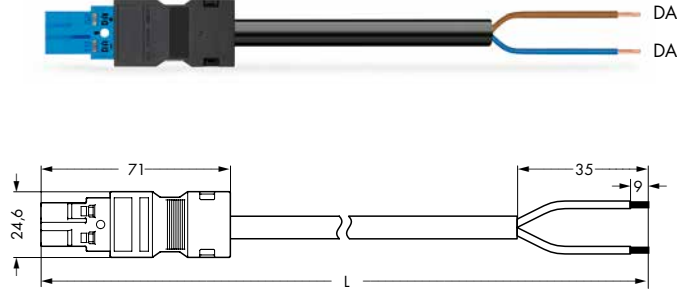
For other cables, please contact factory.

● black	Coding A	(L N)
○ white	Coding A	(L N)
● blue	Coding I	(DA+ DA-)

For coding information, see page 250.  
Fire load data available upon request.

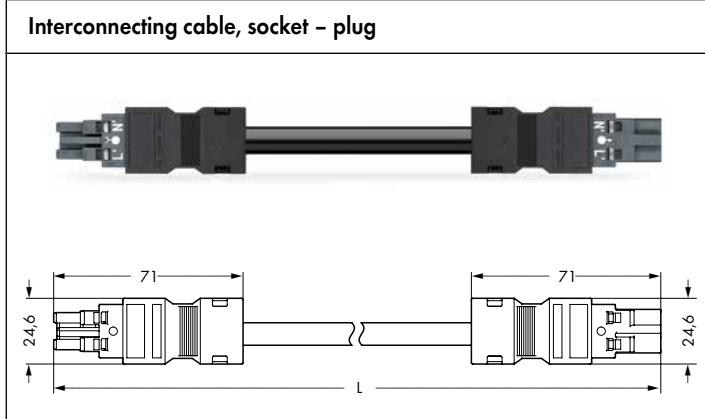
**Accessories**

<b>Locking lever, for “flying leads”,</b>			
	manually operated		
	black	770-101	100 (4x25)
	white	770-121	100 (4x25)
<b>Locking lever, for “flying leads”,</b>			
	tool operated		
	black	770-111	100 (4x25)
	white	770-131	100 (4x25)
<b>Lockout cap, for socket, separable, 12-pole</b>			
	black	770-201	100
	white	770-221	100
<b>Lockout cap, for plug, separable, 5-pole</b>			
	yellow	770-360	100

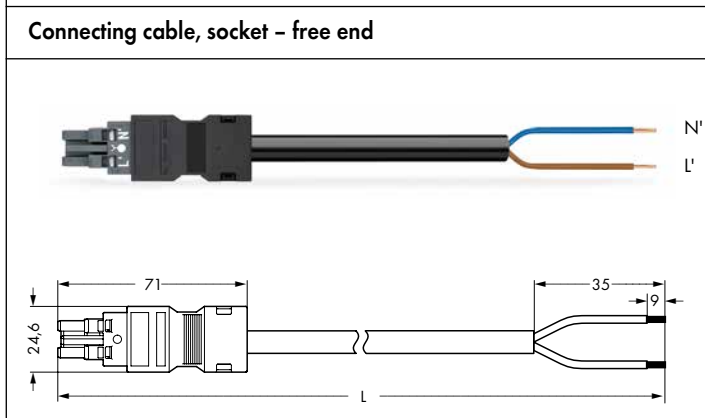
	<p>PVC H05VV-F 2x1.5 halogen-free H05Z1Z1-F 2x1.5</p> <p>250 V/4 kV/3 I<sub>N</sub> 16 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																																							
<b>Interconnecting cable, socket – plug</b>	<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I, e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr><td>1 m</td><td>771-8982/006-101</td><td>771-8982/006-102</td><td>771-8982/016-101</td><td>771-8982/016-102</td></tr> <tr><td>2 m</td><td>771-8982/006-201</td><td>771-8982/006-202</td><td>771-8982/016-201</td><td>771-8982/016-202</td></tr> <tr><td>3 m</td><td>771-8982/006-301</td><td>771-8982/006-302</td><td>771-8982/016-301</td><td>771-8982/016-302</td></tr> <tr><td>4 m</td><td>771-8982/006-401</td><td>771-8982/006-402</td><td>771-8982/016-401</td><td>771-8982/016-402</td></tr> <tr><td>5 m</td><td>771-8982/006-501</td><td>771-8982/006-502</td><td>771-8982/016-501</td><td>771-8982/016-502</td></tr> <tr><td>6 m</td><td>771-8982/006-601</td><td>771-8982/006-602</td><td>771-8982/016-601</td><td>771-8982/016-602</td></tr> <tr><td>7 m</td><td>771-8982/006-701</td><td>771-8982/006-702</td><td>771-8982/016-701</td><td>771-8982/016-702</td></tr> <tr><td>8 m</td><td>771-8982/006-801</td><td>771-8982/006-802</td><td>771-8982/016-801</td><td>771-8982/016-802</td></tr> </tbody> </table>	Length	Item No. black	Item No. white	Item No. black	Item No. white	● Coding I, e.g., for dimming function (DALI)					PVC		halogen-free			1 m	771-8982/006-101	771-8982/006-102	771-8982/016-101	771-8982/016-102	2 m	771-8982/006-201	771-8982/006-202	771-8982/016-201	771-8982/016-202	3 m	771-8982/006-301	771-8982/006-302	771-8982/016-301	771-8982/016-302	4 m	771-8982/006-401	771-8982/006-402	771-8982/016-401	771-8982/016-402	5 m	771-8982/006-501	771-8982/006-502	771-8982/016-501	771-8982/016-502	6 m	771-8982/006-601	771-8982/006-602	771-8982/016-601	771-8982/016-602	7 m	771-8982/006-701	771-8982/006-702	771-8982/016-701	771-8982/016-702	8 m	771-8982/006-801	771-8982/006-802	771-8982/016-801	771-8982/016-802
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<b>Connecting cable, socket – free end</b>	<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. white</th> <th>Item No. black</th> <th>Item No. white</th> </tr> </thead> <tbody> <tr> <td colspan="5">● Coding I, e.g., for dimming function (DALI)</td> </tr> <tr> <td colspan="2">PVC</td> <td colspan="3">halogen-free</td> </tr> <tr><td>1 m</td><td>771-8982/106-101</td><td>771-8982/106-102</td><td>771-8982/116-101</td><td>771-8982/116-102</td></tr> <tr><td>2 m</td><td>771-8982/106-201</td><td>771-8982/106-202</td><td>771-8982/116-201</td><td>771-8982/116-202</td></tr> <tr><td>3 m</td><td>771-8982/106-301</td><td>771-8982/106-302</td><td>771-8982/116-301</td><td>771-8982/116-302</td></tr> <tr><td>4 m</td><td>771-8982/106-401</td><td>771-8982/106-402</td><td>771-8982/116-401</td><td>771-8982/116-402</td></tr> <tr><td>5 m</td><td>771-8982/106-501</td><td>771-8982/106-502</td><td>771-8982/116-501</td><td>771-8982/116-502</td></tr> <tr><td>6 m</td><td>771-8982/106-601</td><td>771-8982/106-602</td><td>771-8982/116-601</td><td>771-8982/116-602</td></tr> <tr><td>7 m</td><td>771-8982/106-701</td><td>771-8982/106-702</td><td>771-8982/116-701</td><td>771-8982/116-702</td></tr> <tr><td>8 m</td><td>771-8982/106-801</td><td>771-8982/106-802</td><td>771-8982/116-801</td><td>771-8982/116-802</td></tr> </tbody> </table>	Length	Item No. black	Item No. white	Item No. black	Item No. white	● Coding I, e.g., for dimming function (DALI)					PVC		halogen-free			1 m	771-8982/106-101	771-8982/106-102	771-8982/116-101	771-8982/116-102	2 m	771-8982/106-201	771-8982/106-202	771-8982/116-201	771-8982/116-202	3 m	771-8982/106-301	771-8982/106-302	771-8982/116-301	771-8982/116-302	4 m	771-8982/106-401	771-8982/106-402	771-8982/116-401	771-8982/116-402	5 m	771-8982/106-501	771-8982/106-502	771-8982/116-501	771-8982/116-502	6 m	771-8982/106-601	771-8982/106-602	771-8982/116-601	771-8982/116-602	7 m	771-8982/106-701	771-8982/106-702	771-8982/116-701	771-8982/116-702	8 m	771-8982/106-801	771-8982/106-802	771-8982/116-801	771-8982/116-802
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6 m	771-8982/106-601	771-8982/106-602	771-8982/116-601	771-8982/116-602																																																				
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1 m	771-8982/206-101	771-8982/206-102	771-8982/216-101	771-8982/216-102																																																				
2 m	771-8982/206-201	771-8982/206-202	771-8982/216-201	771-8982/216-202																																																				
3 m	771-8982/206-301	771-8982/206-302	771-8982/216-301	771-8982/216-302																																																				
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	<p><b>Lockout cap</b>, for plug, separable, 5-pole</p> <table border="1"> <tr><td>yellow</td><td>770-360</td><td>100</td></tr> </table>	yellow	770-360	100																																																				
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# WINSTA® MIDI Cable Assemblies 2 x 1.5 mm<sup>2</sup>

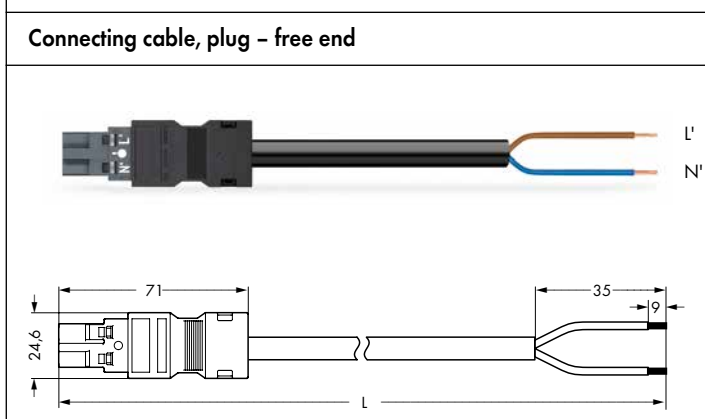
	PVC	H05VV-F 2x1.5
	halogen-free	H05Z1Z1-F 2x1.5
	250 V/4 kV/3	I <sub>N</sub> 16 A
	Conductor ends, bonded: 9 mm	
	● Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8982/006-103	771-8982/006-104	771-8982/016-103	771-8982/016-104
2 m	771-8982/006-203	771-8982/006-204	771-8982/016-203	771-8982/016-204
3 m	771-8982/006-303	771-8982/006-304	771-8982/016-303	771-8982/016-304
4 m	771-8982/006-403	771-8982/006-404	771-8982/016-403	771-8982/016-404
5 m	771-8982/006-503	771-8982/006-504	771-8982/016-503	771-8982/016-504
6 m	771-8982/006-603	771-8982/006-604	771-8982/016-603	771-8982/016-604
7 m	771-8982/006-703	771-8982/006-704	771-8982/016-703	771-8982/016-704
8 m	771-8982/006-803	771-8982/006-804	771-8982/016-803	771-8982/016-804



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8982/106-103	771-8982/106-104	771-8982/116-103	771-8982/116-104
2 m	771-8982/106-203	771-8982/106-204	771-8982/116-203	771-8982/116-204
3 m	771-8982/106-303	771-8982/106-304	771-8982/116-303	771-8982/116-304
4 m	771-8982/106-403	771-8982/106-404	771-8982/116-403	771-8982/116-404
5 m	771-8982/106-503	771-8982/106-504	771-8982/116-503	771-8982/116-504
6 m	771-8982/106-603	771-8982/106-604	771-8982/116-603	771-8982/116-604
7 m	771-8982/106-703	771-8982/106-704	771-8982/116-703	771-8982/116-704
8 m	771-8982/106-803	771-8982/106-804	771-8982/116-803	771-8982/116-804



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8982/206-103	771-8982/206-104	771-8982/216-103	771-8982/216-104
2 m	771-8982/206-203	771-8982/206-204	771-8982/216-203	771-8982/216-204
3 m	771-8982/206-303	771-8982/206-304	771-8982/216-303	771-8982/216-304
4 m	771-8982/206-403	771-8982/206-404	771-8982/216-403	771-8982/216-404
5 m	771-8982/206-503	771-8982/206-504	771-8982/216-503	771-8982/216-504
6 m	771-8982/206-603	771-8982/206-604	771-8982/216-603	771-8982/216-604
7 m	771-8982/206-703	771-8982/206-704	771-8982/216-703	771-8982/216-704
8 m	771-8982/206-803	771-8982/206-804	771-8982/216-803	771-8982/216-804

**Info**

**Accessories**

● For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

- black Coding A (L N)
- white Coding A (L N)
- dark gray Coding L (L' N')

For coding information, see page 250. Fire load data available upon request.

**Locking lever, for "flying leads",**



manually operated		
black	770-101	100 (4x25)
white	770-121	100 (4x25)

**Locking lever, for "flying leads",**



tool operated		
black	770-111	100 (4x25)
white	770-131	100 (4x25)

**Lockout cap, for socket, separable, 12-pole**


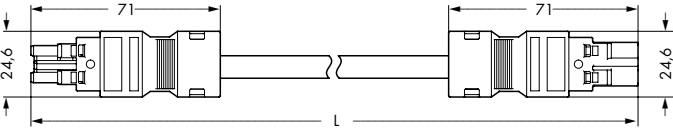

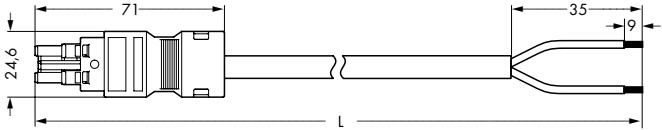

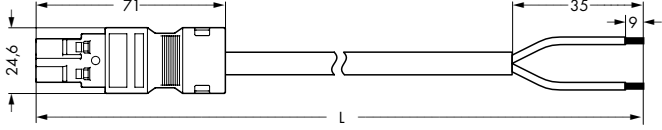







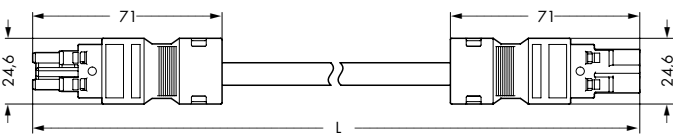

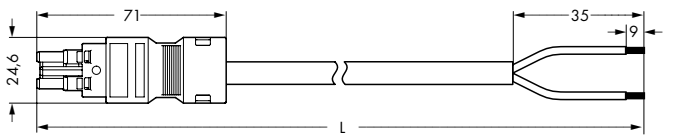

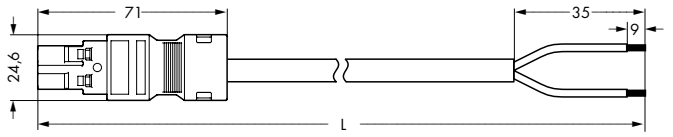





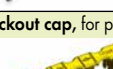

black	770-201	100
white	770-221	100

**Lockout cap, for plug, separable, 5-pole**



yellow	770-360	100
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

		PVC	H05VV-F 2x2.5			
		halogen-free	H05Z1Z1-F 2x2.5			
		250 V/4 kV/3 I <sub>N</sub> 20 A				
		Conductor ends, bonded: 9 mm				
		① Approvals				
<b>Interconnecting cable, socket – plug</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A				
		PVC		halogen-free		
		1 m	771-8992/007-101	771-8992/007-102	771-8992/017-101	771-8992/017-102
		2 m	771-8992/007-201	771-8992/007-202	771-8992/017-201	771-8992/017-202
		3 m	771-8992/007-301	771-8992/007-302	771-8992/017-301	771-8992/017-302
		4 m	771-8992/007-401	771-8992/007-402	771-8992/017-401	771-8992/017-402
		5 m	771-8992/007-501	771-8992/007-502	771-8992/017-501	771-8992/017-502
		6 m	771-8992/007-601	771-8992/007-602	771-8992/017-601	771-8992/017-602
		7 m	771-8992/007-701	771-8992/007-702	771-8992/017-701	771-8992/017-702
		8 m	771-8992/007-801	771-8992/007-802	771-8992/017-801	771-8992/017-802
<b>Connecting cable, socket – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A				
		PVC		halogen-free		
		1 m	771-8992/107-101	771-8992/107-102	771-8992/117-101	771-8992/117-102
		2 m	771-8992/107-201	771-8992/107-202	771-8992/117-201	771-8992/117-202
		3 m	771-8992/107-301	771-8992/107-302	771-8992/117-301	771-8992/117-302
		4 m	771-8992/107-401	771-8992/107-402	771-8992/117-401	771-8992/117-402
		5 m	771-8992/107-501	771-8992/107-502	771-8992/117-501	771-8992/117-502
		6 m	771-8992/107-601	771-8992/107-602	771-8992/117-601	771-8992/117-602
		7 m	771-8992/107-701	771-8992/107-702	771-8992/117-701	771-8992/117-702
		8 m	771-8992/107-801	771-8992/107-802	771-8992/117-801	771-8992/117-802
<b>Connecting cable, plug – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A				
		PVC		halogen-free		
		1 m	771-8992/207-101	771-8992/207-102	771-8992/217-101	771-8992/217-102
		2 m	771-8992/207-201	771-8992/207-202	771-8992/217-201	771-8992/217-202
		3 m	771-8992/207-301	771-8992/207-302	771-8992/217-301	771-8992/217-302
		4 m	771-8992/207-401	771-8992/207-402	771-8992/217-401	771-8992/217-402
		5 m	771-8992/207-501	771-8992/207-502	771-8992/217-501	771-8992/217-502
		6 m	771-8992/207-601	771-8992/207-602	771-8992/217-601	771-8992/217-602
		7 m	771-8992/207-701	771-8992/207-702	771-8992/217-701	771-8992/217-702
		8 m	771-8992/207-801	771-8992/207-802	771-8992/217-801	771-8992/217-802
<b>Accessories</b>						
		<b>Locking lever, for "flying leads",</b>				
		manually operated				
		black	770-101	100	(4x25)	
		white	770-121	100	(4x25)	
		<b>Locking lever, for "flying leads",</b>				
		tool operated				
		black	770-111	100	(4x25)	
		white	770-131	100	(4x25)	
		<b>Lockout cap, for socket, separable, 12-pole</b>				
		black	770-201	100		
		white	770-221	100		
		<b>Lockout cap, for plug, separable, 5-pole</b>				
		yellow	770-360	100		

		PVC H05VV-F 2x2.5 halogen-free H05Z1Z1-F 2x2.5  250 V/4 kV/3 I <sub>N</sub> 20 A  Conductor ends, bonded: 9 mm ① Approvals																																																	
<b>Interconnecting cable, socket – plug</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white																																													
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PVC		halogen-free																																																	
1 m	771-8982/007-103	771-8982/007-104	771-8982/017-103	771-8982/017-104																																															
2 m	771-8982/007-203	771-8982/007-204	771-8982/017-203	771-8982/017-204																																															
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5 m	771-8982/007-503	771-8982/007-504	771-8982/017-503	771-8982/017-504																																															
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7 m	771-8982/007-703	771-8982/007-704	771-8982/017-703	771-8982/017-704																																															
8 m	771-8982/007-803	771-8982/007-804	771-8982/017-803	771-8982/017-804																																															
<b>Connecting cable, socket – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white																																													
 		● Coding L  <table border="1"> <thead> <tr> <th colspan="2">PVC</th> <th colspan="3">halogen-free</th> </tr> </thead> <tbody> <tr><td>1 m</td><td>771-8982/107-103</td><td>771-8982/107-104</td><td>771-8982/117-103</td><td>771-8982/117-104</td></tr> <tr><td>2 m</td><td>771-8982/107-203</td><td>771-8982/107-204</td><td>771-8982/117-203</td><td>771-8982/117-204</td></tr> <tr><td>3 m</td><td>771-8982/107-303</td><td>771-8982/107-304</td><td>771-8982/117-303</td><td>771-8982/117-304</td></tr> <tr><td>4 m</td><td>771-8982/107-403</td><td>771-8982/107-404</td><td>771-8982/117-403</td><td>771-8982/117-404</td></tr> <tr><td>5 m</td><td>771-8982/107-503</td><td>771-8982/107-504</td><td>771-8982/117-503</td><td>771-8982/117-504</td></tr> <tr><td>6 m</td><td>771-8982/107-603</td><td>771-8982/107-604</td><td>771-8982/117-603</td><td>771-8982/117-604</td></tr> <tr><td>7 m</td><td>771-8982/107-703</td><td>771-8982/107-704</td><td>771-8982/117-703</td><td>771-8982/117-704</td></tr> <tr><td>8 m</td><td>771-8982/107-803</td><td>771-8982/107-804</td><td>771-8982/117-803</td><td>771-8982/117-804</td></tr> </tbody> </table>					PVC		halogen-free			1 m	771-8982/107-103	771-8982/107-104	771-8982/117-103	771-8982/117-104	2 m	771-8982/107-203	771-8982/107-204	771-8982/117-203	771-8982/117-204	3 m	771-8982/107-303	771-8982/107-304	771-8982/117-303	771-8982/117-304	4 m	771-8982/107-403	771-8982/107-404	771-8982/117-403	771-8982/117-404	5 m	771-8982/107-503	771-8982/107-504	771-8982/117-503	771-8982/117-504	6 m	771-8982/107-603	771-8982/107-604	771-8982/117-603	771-8982/117-604	7 m	771-8982/107-703	771-8982/107-704	771-8982/117-703	771-8982/117-704	8 m	771-8982/107-803	771-8982/107-804	771-8982/117-803	771-8982/117-804
PVC		halogen-free																																																	
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2 m	771-8982/107-203	771-8982/107-204	771-8982/117-203	771-8982/117-204																																															
3 m	771-8982/107-303	771-8982/107-304	771-8982/117-303	771-8982/117-304																																															
4 m	771-8982/107-403	771-8982/107-404	771-8982/117-403	771-8982/117-404																																															
5 m	771-8982/107-503	771-8982/107-504	771-8982/117-503	771-8982/117-504																																															
6 m	771-8982/107-603	771-8982/107-604	771-8982/117-603	771-8982/117-604																																															
7 m	771-8982/107-703	771-8982/107-704	771-8982/117-703	771-8982/117-704																																															
8 m	771-8982/107-803	771-8982/107-804	771-8982/117-803	771-8982/117-804																																															
<b>Connecting cable, plug – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white																																													
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PVC		halogen-free																																																	
1 m	771-8982/207-103	771-8982/207-104	771-8982/217-103	771-8982/217-104																																															
2 m	771-8982/207-203	771-8982/207-204	771-8982/217-203	771-8982/217-204																																															
3 m	771-8982/207-303	771-8982/207-304	771-8982/217-303	771-8982/217-304																																															
4 m	771-8982/207-403	771-8982/207-404	771-8982/217-403	771-8982/217-404																																															
5 m	771-8982/207-503	771-8982/207-504	771-8982/217-503	771-8982/217-504																																															
6 m	771-8982/207-603	771-8982/207-604	771-8982/217-603	771-8982/217-604																																															
7 m	771-8982/207-703	771-8982/207-704	771-8982/217-703	771-8982/217-704																																															
8 m	771-8982/207-803	771-8982/207-804	771-8982/217-803	771-8982/217-804																																															
<b>Info</b>		<b>Accessories</b>																																																	
① For “International Certification Organizations” and “Approvals – User Guide,” see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.  For other cables, please contact factory.  ● dark gray Coding L (L' N')  For coding information, see page 250. Fire load data available upon request.		Locking lever, for “flying leads”, manually operated  black <b>770-101</b> 100 (4x25)  white <b>770-121</b> 100 (4x25) Locking lever, for “flying leads”, tool operated  black <b>770-111</b> 100 (4x25)  white <b>770-131</b> 100 (4x25) Lockout cap, for socket, separable, 12-pole  black <b>770-201</b> 100  white <b>770-221</b> 100 Lockout cap, for plug, separable, 5-pole  yellow <b>770-360</b> 100																																																	












# WINSTA® MIDI Sockets and Plugs, 3-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p> <p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>
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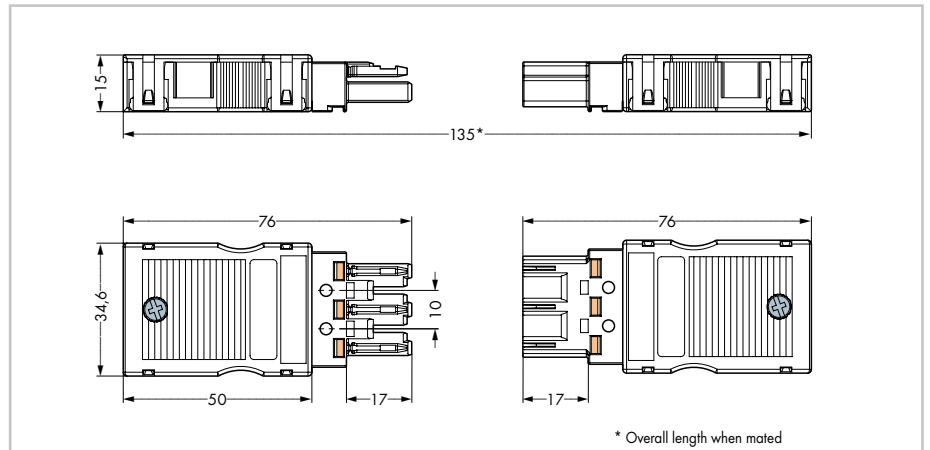
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 3-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 2 cables, 8 ... 11.5 mm diameter ③, Strip length, outer insulation: 55 mm			Plug with strain relief housing, for 2 cables, 8 ... 11.5 mm diameter ③, Strip length, outer insulation: 55 mm		
	● black	770-103	25	● black	770-113	25
	○ white	770-123	25	○ white	770-133	25
	for quick assembly ④ for 1 cable, 7 ... 10.5 mm diameter, Strip length, outer insulation: 48 mm			for quick assembly ④ for 1 cable, 7 ... 10.5 mm diameter, Strip length, outer insulation: 48 mm		
	● black	770-203/035-000	25	● black	770-213/035-000	25
	○ white	770-223/035-050	25	○ white	770-233/035-050	25



Item-Specific Accessories						
			Lockout cap, for socket, separable, 12-pole		Lockout cap, for plug, separable, 5-pole	
				black 770-201 100		yellow 770-360 100
			white 770-221 100			
			Operating tool, partially insulated 3-way		Coding pin, for plug (A and B coding)	
				770-383 1		gray 770-401 100

Accessories, 770 Series						
			Locking lever, for "flying leads", manually operated		Locking lever, for "flying leads", tool operated	
				black 770-101 100 (4x25)		black 770-111 100 (4x25)
			white 770-121 100 (4x25)	white 770-131 100 (4x25)		
			Marker, for manual marking			
				white 770-450 50		

Info	Dimensions
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- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ For more strain relief housings, see page 146.
  - ④ see page 147
- |          |          |             |
|----------|----------|-------------|
| ● black  | Coding A | (L ⊕ N)     |
| ○ white  | Coding A | (L ⊕ N)     |
| ● red    | Coding P | (L ⊕ N)     |
| ● orange | Coding R | (LON LON S) |
| ● brown  | Coding S | (1 2 L)     |
- For coding information, see page 250.  
Fire load data available upon request.



2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals
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**Notice:**

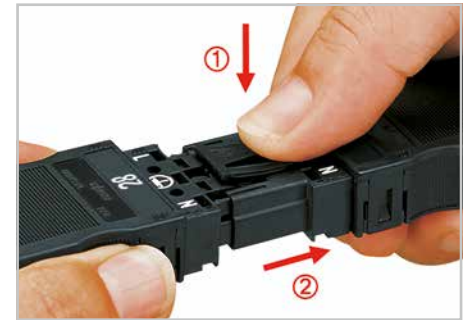
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>		
● black	770-203	100	● black	770-213	100
○ white	770-223	100	○ white	770-233	100
● red	770-1303	100	● red	770-1313	100
● orange	770-1343	100	● orange	770-1353	100
● brown	770-1363	100	● brown	770-1373	100






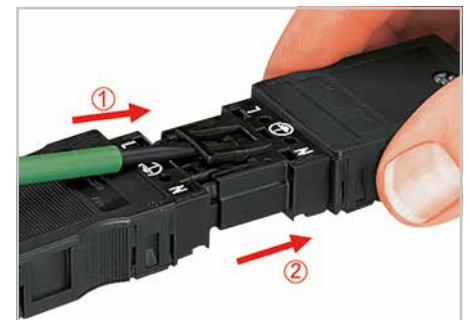
Snap on locking lever. Observe direction!

Item-Specific Accessories			
<b>Lockout cap, for socket, separable, 12-pole</b>		<b>Lockout cap, for plug, separable, 5-pole</b>	
	black 770-201 100		yellow 770-360 100
	white 770-221 100		
<b>Operating tool, partially insulated 3-way</b>		<b>Coding pin, for plug (A and B coding)</b>	
	770-383 1		gray 770-401 100



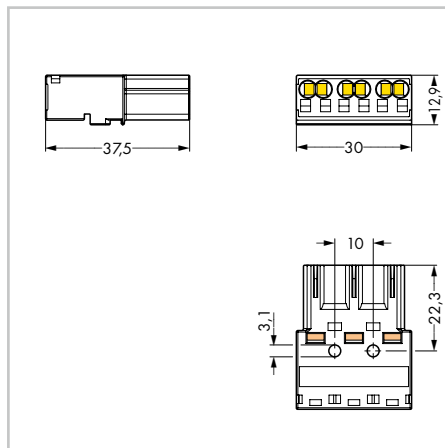
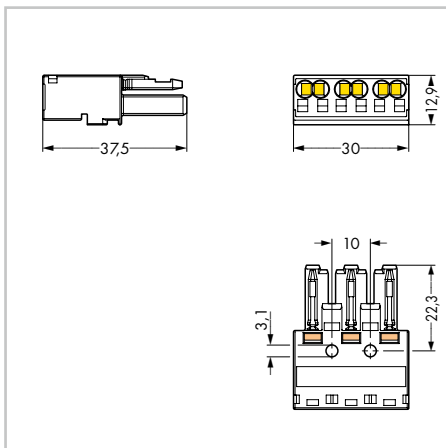
Locking lever, manually operated:  
 1.) Press on locking lever.  
 2.) Pull apart the connectors.

Accessories, 770 Series			
<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>	
	black 770-101 100 (4x25)		black 770-111 100 (4x25)
	white 770-121 100 (4x25)		white 770-131 100 (4x25)
<b>Marker, for manual marking</b>			
	white 770-450 50		



Locking lever, tool operated:  
 1.) Unlatch locking lever.  
 2.) Pull apart the connectors.

**Dimensions**






# WINSTA® MIDI Strain Relief Housings, 3-Pole, for Different Cable Diameters

	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p>① Approvals</p>
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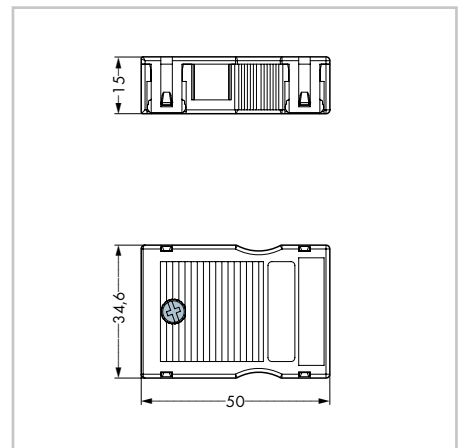
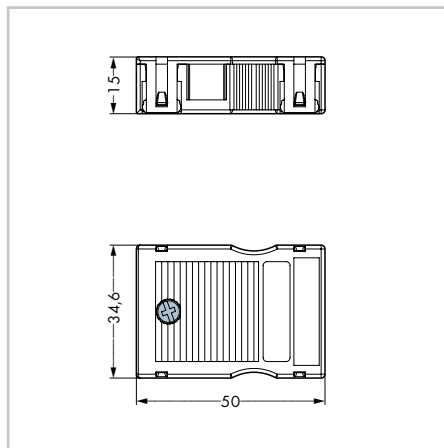
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Strain relief housing, 3-pole	Strain relief housing, for 2 cables, 4.5 ... 8 mm diameter ②, Strip length, outer insulation: 55 mm			Strain relief housing, for 2 cables, 8 ... 11.5 mm diameter ②, Strip length, outer insulation: 55 mm		
	black	770-503/023-000	50	black	770-503	50
	white	770-513/023-000	50	white	770-513	50

Item-Specific Accessories							
		<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333 100 Marking area: 48 x 6.5 mm</p>				<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333 100 Marking area: 48 x 6.5 mm</p>	
		<p>Shield connecting plate, for sockets and plugs, for 2 cables, 4 ... 7.5 mm diameter</p>  <p>770-523 25</p>					

Info	Dimensions
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- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For H05VV and NYM cables  
For other cables, please contact factory.

Fire load data available upon request.





<p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p>	<p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p>	<p><b>Snap-on type strain relief housings for:</b></p> <ul style="list-style-type: none"> <li>- 3-pole sockets</li> <li>- 3-pole plugs</li> </ul> <p><b>1 Approvals</b></p>
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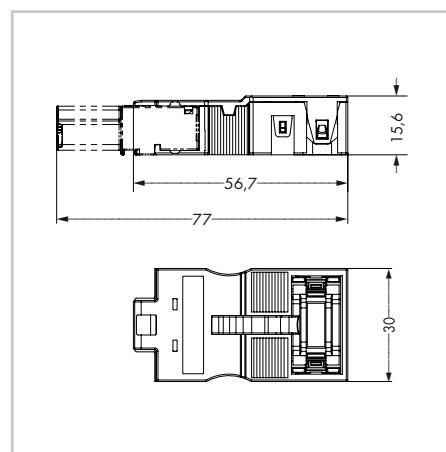
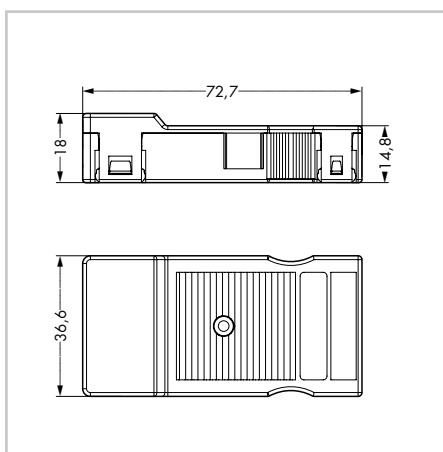
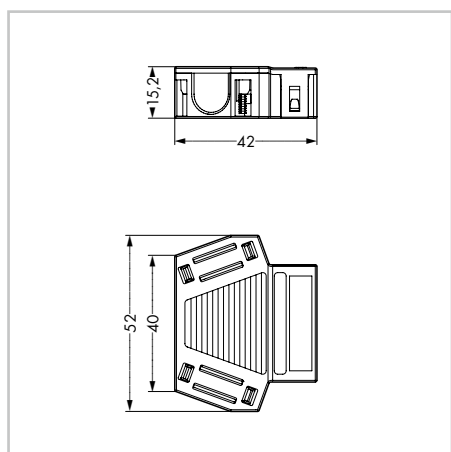


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<p><b>Strain relief housing, angled</b> for 2 cables, 8 ... 11.5 mm diameter <b>2</b>, Strip length, outer insulation: 55 mm</p>			<p><b>Strain relief housing for 4 mm<sup>2</sup> conductors,</b> for 1 cable, 9 ... 13 mm diameter <b>2</b>, Strip length, outer insulation: 71 mm</p>			<p><b>Strain relief housing, for quick assembly,</b> for 1 cable, 7 ... 11.5 mm diameter <b>2</b>, Strip length, outer insulation: 48 mm</p>		
black	770-503/032-000	25	black	770-503/021-000	50	black	770-503/035-000	50
white	770-513/032-000	25	white	770-513/021-000	50	white	770-513/035-000	50

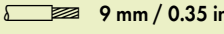
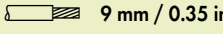
**Item-Specific Accessories**

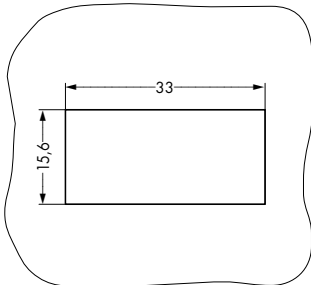
<p><b>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</b> Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm</p> 	<p><b>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</b> Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm</p> 

**Dimensions**









# WINSTA® MIDI Snap-In Sockets, 3-Pole

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals	 9 mm / 0.35 in. ② Approvals		



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 3-pole, with Push-in CAGE CLAMP® connection, snap-in frame, 3-pole	Socket			Socket with protruding interface		
	● black	770-703	100	● black	770-703/009-000	45
	○ white	770-723	100	○ white	770-723/009-000	45
	● red	770-2303	100			
	● orange	770-2343	100			
	● brown	770-2363	100			

Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for socket, separable, 12-pole		
		black 770-201 100			black 770-201 100	
		white 770-221 100			white 770-221 100	
	Operating tool, partially insulated			Operating tool, partially insulated		
		3-way	770-383 1		3-way	770-383 1

Accessories, 770 Series						
	Lockout cap, for cutout, 3-pole			Lockout cap, for cutout, 3-pole		
		black 770-643 100			black 770-643 100	
		white 770-693 100			white 770-693 100	

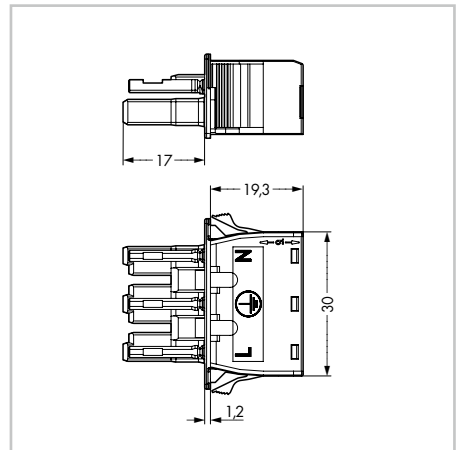
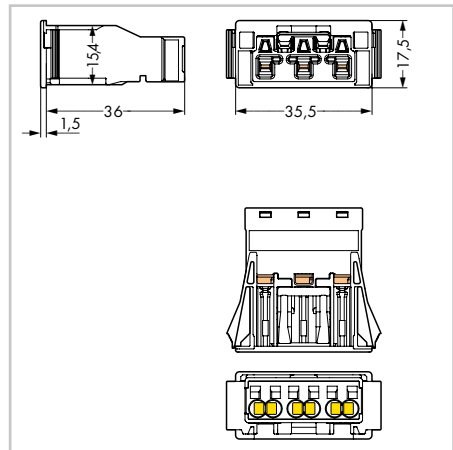
Info	Dimensions
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① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

● black	Coding A	(L ⊕ N)
○ white	Coding A	(L ⊕ N)
● red	Coding P	(L ⊕ N)
● orange	Coding R	(LON LON S)
● brown	Coding S	(1 2 L)

For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MIDI

## Snap-In Plugs and Frames, 3-Pole

PUSH-IN CAGE CLAMP®



3

149

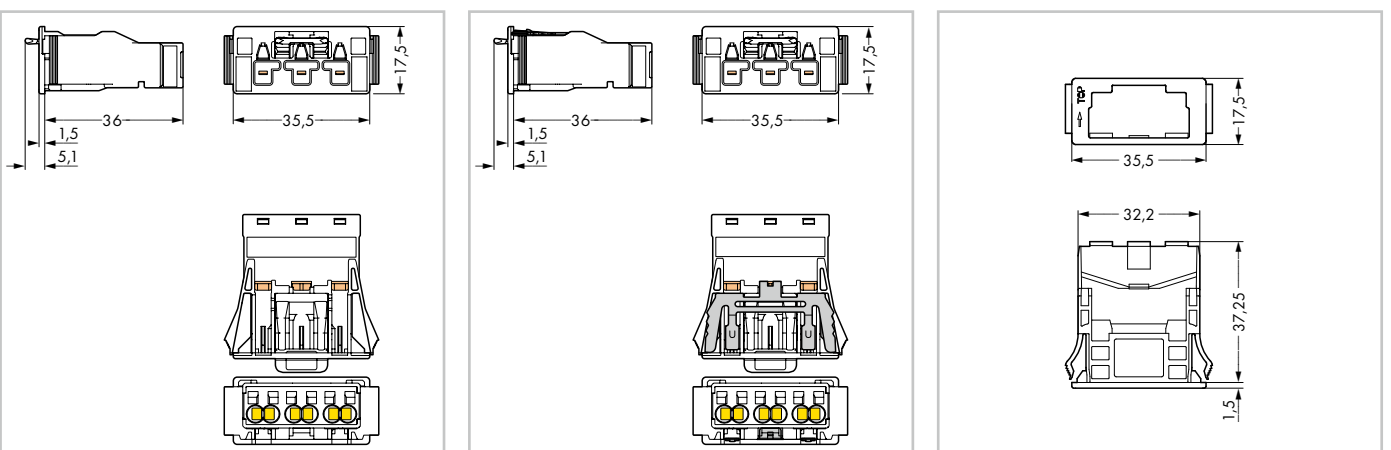
<p>2 x 0.5 ... 4 mm<sup>2</sup> ①</p> <p>250 V/4 kV/3</p> <p>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm<sup>2</sup> ①</p> <p>250 V/4 kV/3</p> <p>I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>Snap-in frame</p> <p>- for 3-pole sockets and plugs</p> <p>(see page 95)</p> <p>Plate thickness: 1 ... 3 mm</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Plug</b>			<b>Plug with direct ground contact</b>			<b>Snap-in frame, 3-pole</b>		
● black	770-713	100	● black	770-713/007-000	100	black	770-318	100
○ white	770-733	100	○ white	770-733/007-000	100	white	770-338	100
● red	770-2313	100	● red	770-2313/007-000	100			
● orange	770-2353	100						


Item-Specific Accessories								
<p><b>Lockout cap, for plug, separable, 5-pole</b></p>  <p>yellow 770-360 100</p>			<p><b>Lockout cap, for plug, separable, 5-pole</b></p>  <p>yellow 770-360 100</p>			<p><b>Locking lever, oversized, tool operated</b></p>  <p>gray 770-140 100 (4x25)</p>		
<p><b>Operating tool, partially insulated 3-way</b></p>  <p>770-383 1</p>			<p><b>Coding pin, for plug (A and B coding)</b></p>  <p>gray 770-401 100</p>			 <p>Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout.</p>		
<p><b>Accessories, 770 Series</b></p>			<p><b>Lockout cap, for cutout, 3-pole</b></p>  <p>black 770-643 100</p> <p>white 770-693 100</p>					

### Dimensions




# WINSTA® MIDI Plugs with Ground Contact, 3-Pole



PUSH-IN CAGE CLAMP®

	<p>2 x 0.5 ... 4 mm<sup>2</sup> 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p><b>1</b> Approvals</p>	<p>2 x 20 ... 12 AWG</p>	
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Description	Color	Item No.	Pack. Unit
Plug with ground contact, device connector	Plug, with ground contact, 3-pole, <b>without</b> strain relief housing; e.g., for assembly on luminaire casings		
	● black	770-213/002-000	25
	○ white	770-233/002-000	25
Please contact factory for other colors and for 4-/5-pole plugs.			

Item-Specific Accessories			
	Lockout cap, for plug, separable, 5-pole		
		yellow	770-360 100

Accessories, 770 Series			
	Locking lever, for "flying leads", manually operated		
		black	770-101 100 (4x25)
		white	770-121 100 (4x25)
	Locking lever, for "flying leads", tool operated		
		black	770-111 100 (4x25)
		white	770-131 100 (4x25)

Info	Application
------	-------------

- 1** For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- 2** Internal connection via 0.8 mm thick current bars is possible. For other thicknesses, please contact factory.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.



Plug with ground contact mounted on luminaire (example shows 5-pole plug).



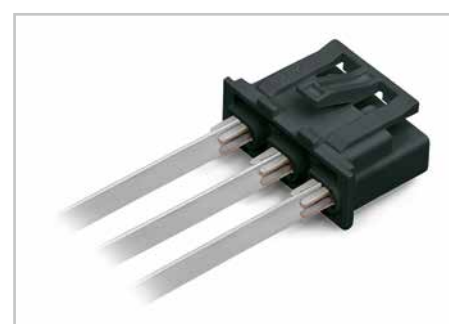
# WINSTA® MIDI

## Device Connectors, 3-pole

250 V/4 kV/3 $I_N$ 25 A  <b>1 Approvals</b>	250 V/4 kV/3 $I_N$ 25 A  <b>1 Approvals</b>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket module ②</b>			<b>Plug module with locking lever ②</b>		
● black	770-408	100	● black	770-418	100
○ white	770-428	100	○ white	770-438	100

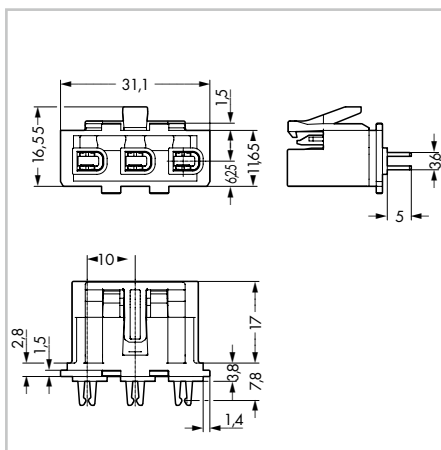
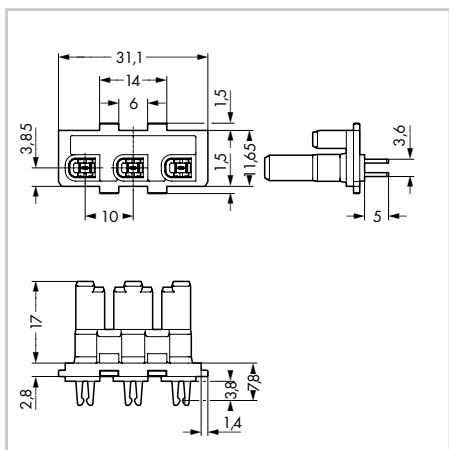


Device connectors can be cost-effectively installed in appropriate guide slots of a housing. Internal electrical connection is performed by contacting the 0.8 mm thick current bars. ②

Item-Specific Accessories		
<b>Lockout cap, for socket, separable, 12-pole</b>		<b>Lockout cap, for plug, separable, 5-pole</b>
	black 770-201 100 white 770-221 100	yellow 770-360 100

Accessories, 770 Series		
<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>
	black 770-101 100 (4x25) white 770-121 100 (4x25)	black 770-111 100 (4x25) white 770-131 100 (4x25)

### Dimensions



# WINSTA® MIDI PCB Connectors, 3-Pole

	250 V/4 kV/3 $I_N$ 25 A  ① Approvals	250 V/4 kV/3 $I_N$ 25 A  ① Approvals
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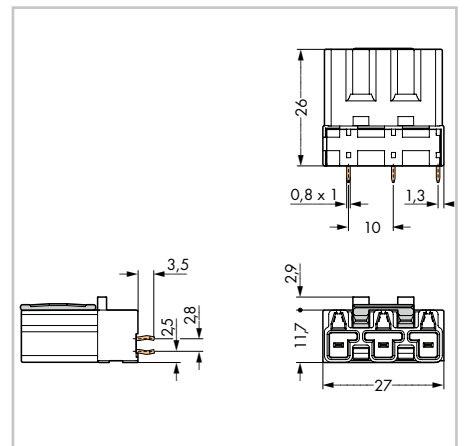
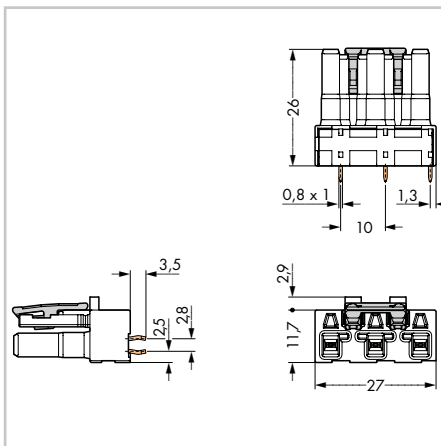


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	770-803	100	● black	770-813	100
	○ white	770-823	100	○ white	770-833	100
<b>Item-Specific Accessories</b>						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	
<b>Accessories, 770 Series</b>						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
<b>Info</b>	<b>Dimensions</b>					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)




For coding information, see page 250.  
Fire load data available upon request.





250 V/4 kV/3 $I_N$ 25 A  ① Approvals	250 V/4 kV/3 $I_N$ 25 A  ① Approvals
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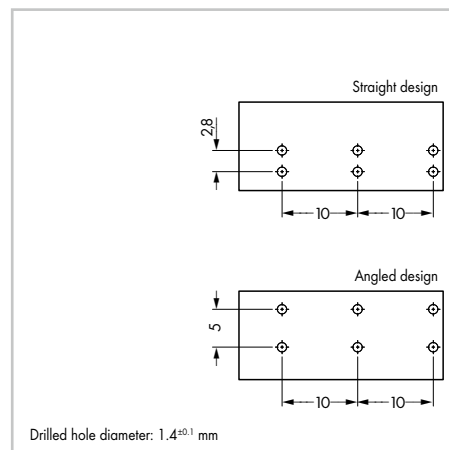
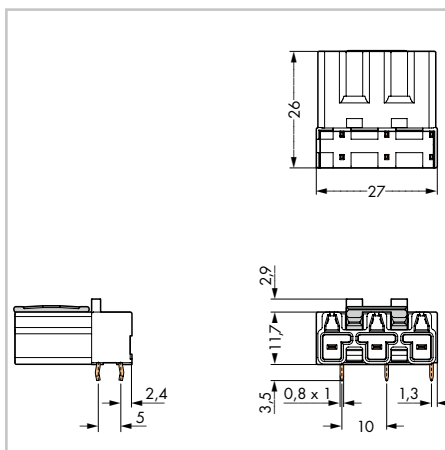
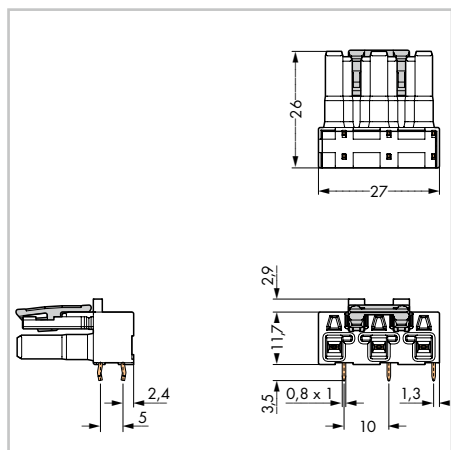


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
● black	770-803/011-000	100	● black	770-813/011-000	100
○ white	770-823/011-000	100	○ white	770-833/011-000	100

Item-Specific Accessories						
<b>Lockout cap, for socket, separable, 12-pole</b> 			<b>Lockout cap, for plug, separable, 5-pole</b> 			
	black	770-201	100	yellow	770-360	100
	white	770-221	100			
<b>Coding pin, for plug (A and B coding)</b> 			gray 770-401 100			

Accessories, 770 Series						
<b>Locking lever, for "flying leads", manually operated</b> 			<b>Locking lever, for "flying leads", tool operated</b> 			
	black	770-101	100 (4x25)	black	770-111	100 (4x25)
	white	770-121	100 (4x25)	white	770-131	100 (4x25)

Dimensions	Hole patterns
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**WINSTA® MIDI**  
**Linect® T-Connector, T-Distribution Connectors, 3-Pole**

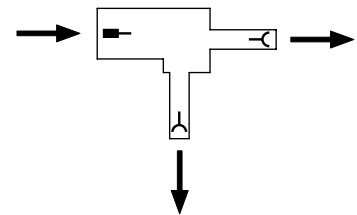
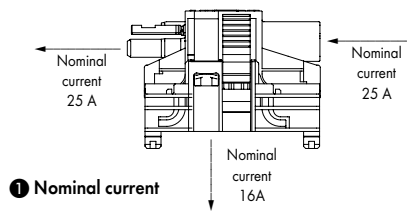


	250 V/4 kV/3 $I_N$ 25 A (16 A) ❶  ❷ Approvals	250 V/4 kV/3 $I_N$ 25 A  ❷ Approvals
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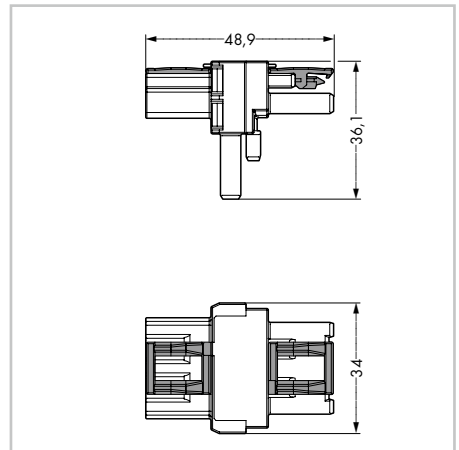
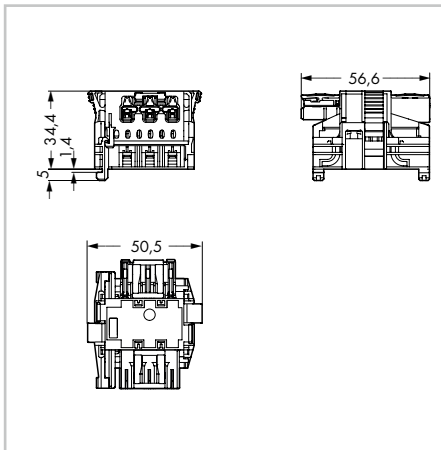


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Linect® T-connector		<b>Linect® T-connector, 3-pole,</b>		<b>T-distribution connector, 1 x plug/2 x socket</b>		
T-distribution connector		socket - plug,		● black	<b>770-606</b>	50
Intermediate coupler		white housing, white cover		○ white	<b>770-656</b>	50
h-distribution connector	○ white	<b>770-6223</b>	25	● orange	<b>770-667</b>	50
		Suitable for 294-8013 and 294-8113 Lighting Connectors		for "flying leads", with 3rd locking lever		
				● black	<b>770-615</b>	50
				○ white	<b>770-665</b>	50
				● orange	<b>770-670</b>	50

Item-Specific Accessories						
		<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for socket, separable, 12-pole</b>	
		black	<b>770-201</b>	100	black	<b>770-201</b> 100
		white	<b>770-221</b>	100	white	<b>770-221</b> 100
		<b>Lockout cap, for plug, separable, 5-pole</b>			<b>Lockout cap, for plug, separable, 5-pole</b>	
		yellow	<b>770-360</b>	100	yellow	<b>770-360</b> 100
		<b>Coding pin, for plug (A and B coding)</b>				
		gray	<b>770-401</b>	100		
<b>Info</b>	<b>Dimensions</b>					



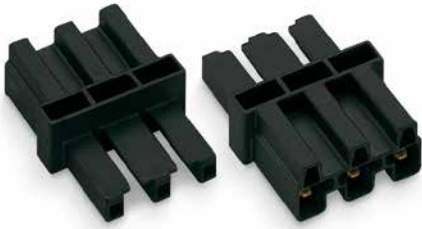
- ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ❹ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- |          |          |             |
|----------|----------|-------------|
| ● black  | Coding A | (L ⊕ N)     |
| ○ white  | Coding A | (L ⊕ N)     |
| ● red    | Coding P | (L ⊕ N)     |
| ● orange | Coding R | (LON LON S) |
- For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MIDI









## Intermediate Couplers and h-Distribution Connectors, 3-Pole

250 V/4 kV/3 $I_N$ 25 A  ② Approvals	250 V/4 kV/3 $I_N$ 25 A  ② Approvals	250 V/4 kV/3 $I_N$ 25 A  ② Approvals
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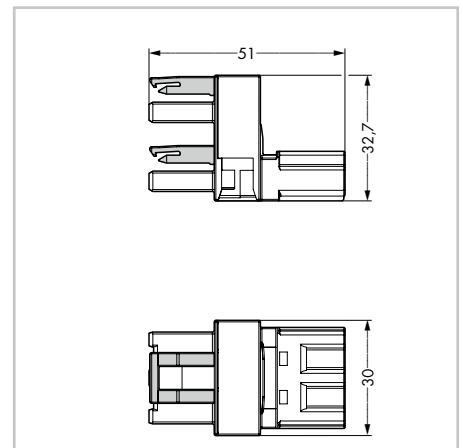
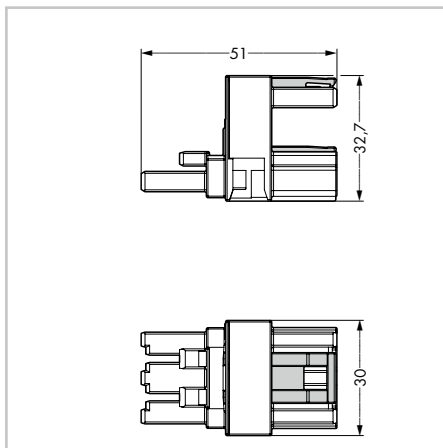
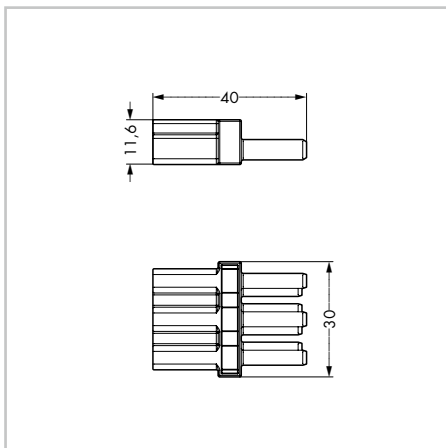
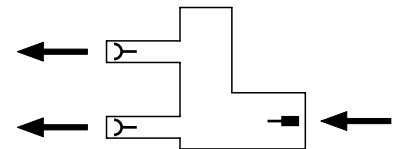
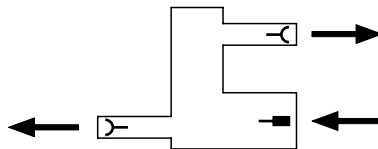
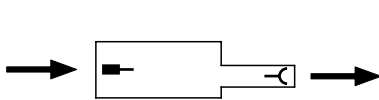


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Intermediate coupler, 1 x plug/1 x socket</b>			<b>h-distribution connector, bi-directional, plug - socket/socket</b>			<b>h-distribution connector, unidirectional, plug/socket - socket</b>		
● black	770-603	100	● black	770-633	50	● black	770-634	50
○ white	770-653	100	○ white	770-683	50	○ white	770-684	50
			for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
● black	770-635	50	● black	770-635	50	● black	770-636	50
○ white	770-685	50	○ white	770-685	50	○ white	770-686	50
						● red		
						770-936		

### Item-Specific Accessories

<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>	<b>Mounting plate, for distribution connectors</b>  <ul style="list-style-type: none"> <li>black 770-623 25</li> <li>white 770-673 25</li> </ul>	<b>Mounting plate, for distribution connectors</b>  <ul style="list-style-type: none"> <li>black 770-623 25</li> <li>white 770-673 25</li> </ul>			
<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>	<b>Fixing pin, for mounting plates</b>  <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>	<b>Fixing pin, for mounting plates</b>  <ul style="list-style-type: none"> <li>③ black 890-601 250</li> <li>④ black 770-601 250</li> </ul>			
<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>			<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>		

### Dimensions



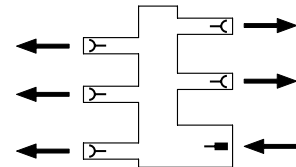
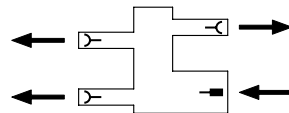
# WINSTA® MIDI Distribution Connectors, 3-Pole

	250 V/4 kV/3 $I_N$ 25 A  ① Approvals	250 V/4 kV/3 $I_N$ 25 A  ① Approvals
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Distribution connectors, pluggable	Distribution connector, 3-way, 1 x plug/3 x socket			Distribution connector, 5-way, 1 x plug / 5 x socket		
	● black	770-607	50	● black	770-608	25
	○ white	770-657	50	○ white	770-658	25
	● red	770-907	50			

Item-Specific Accessories						
	Mounting plate, for distribution connectors			Mounting plate, for distribution connectors		
		black 770-623	25		black 770-623	25
		white 770-673	25		white 770-673	25
	Fixing pin, for mounting plates			Fixing pin, for mounting plates		
		② black 890-601	250		② black 890-601	250
		③ black 770-601	250		③ black 770-601	250
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for socket, separable, 12-pole		
		black 770-201	100		black 770-201	100
		white 770-221	100		white 770-221	100
	Lockout cap, for plug, separable, 5-pole			Lockout cap, for plug, separable, 5-pole		
		yellow 770-360	100		yellow 770-360	100



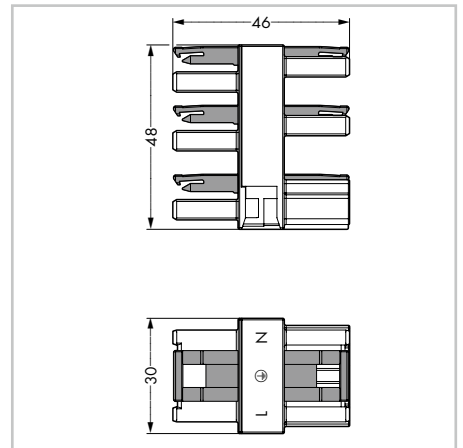
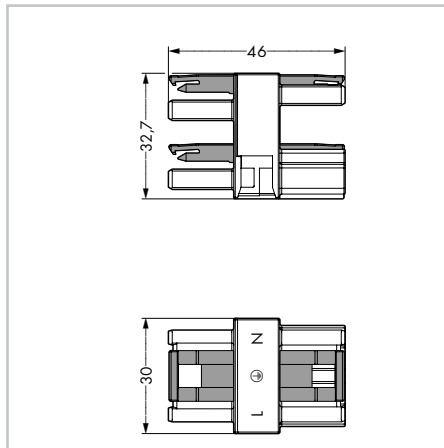
① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness

● black Coding A (L ⊕ N)  
 ○ white Coding A (L ⊕ N)  
 ● red Coding P (L ⊕ N)

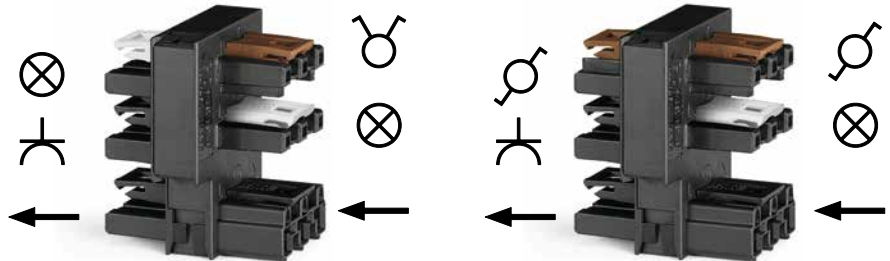
For coding information, see page 250.  
 Fire load data available upon request.





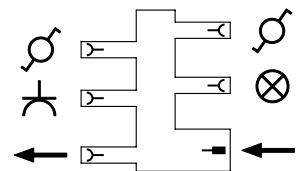
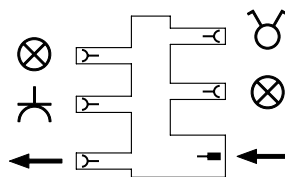
# WINSTA® MIDI Distribution Connectors, 3-Pole

	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Distribution connectors, pluggable	Distribution connector for single-pole switch and series circuits, 1 x plug, coding A, LL ④ black/white			Distribution connector for single-pole switch and two-way circuits, 1 x plug, coding A, LL ④ black/white		
	2 x socket, coding A, LL ④ black/white			2 x socket, coding A, LL ④ black/white		
	2 x socket, coding A (lighting fixtures), LL ④ white/black			2 x socket, coding A (lighting fixtures), LL ④ white/black		
	1 x socket, coding S (switch), LL ④ brown			1 x socket, coding S (switch), LL ④ brown		
	● black	770-637	10	● black	770-638	10
○ white	770-687	10	○ white	770-688	10	

Item-Specific Accessories								
			Mounting plate, for distribution connectors		Mounting plate, for distribution connectors			
			black	770-623	25	black	770-623	25
			white	770-673	25	white	770-673	25
			Fixing pin, for mounting plates		Fixing pin, for mounting plates			
			② black	890-601	250	② black	890-601	250
			③ black	770-601	250	③ black	770-601	250
			Lockout cap, for socket, separable, 12-pole		Lockout cap, for socket, separable, 12-pole			
			black	770-201	100	black	770-201	100
			white	770-221	100	white	770-221	100
			Lockout cap, for plug, separable, 5-pole		Lockout cap, for plug, separable, 5-pole			
			yellow	770-360	100	yellow	770-360	100



① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

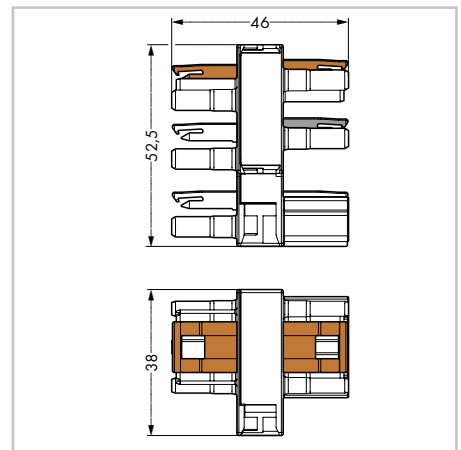
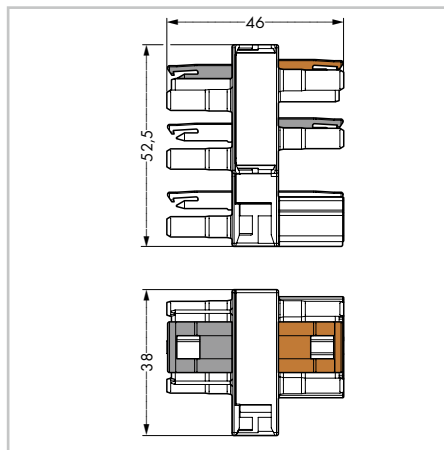
② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness

④ LL = Locking lever

● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)  
● brown Coding S

For coding information, see page 250.  
Fire load data available upon request.





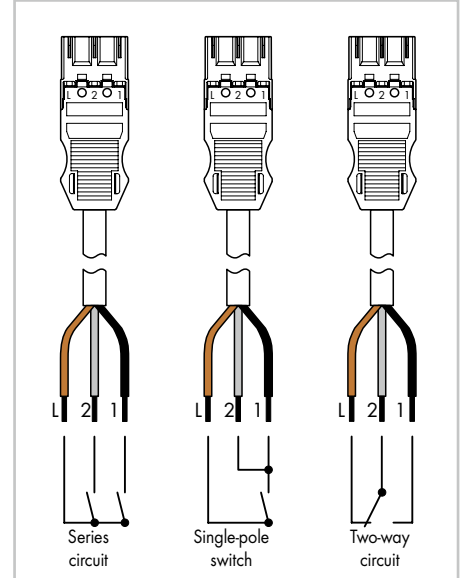
# WINSTA® MIDI Shorting Plugs, 3-Pole

250 V/4 kV/3  
I<sub>N</sub> 25 A

**Note:**  
Before finally connecting the switches, the shorting plugs may be used to switch on or off.

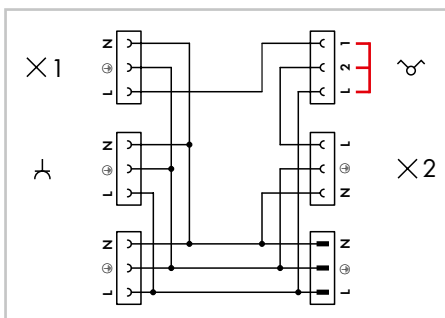
250 V/4 kV/3  
I<sub>N</sub> 25 A

**Note:**  
If this shorting plug is connected to the 770-637 Distribution Connector as shown below, a motion sensor can be connected instead of the switch.

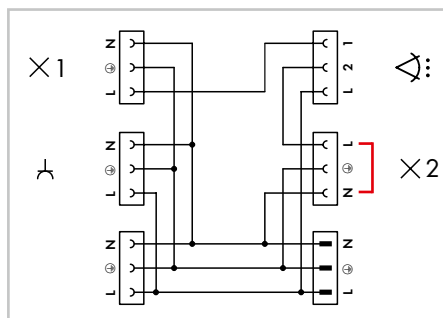


Cable assembly with coding S for connection to 770-637 and 770-638 Distribution Connectors.

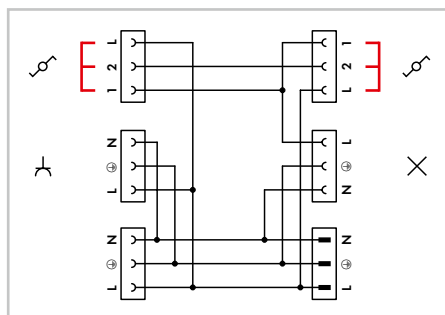
Marking	Item No.	Pack. Unit	Marking	Item No.	Pack. Unit
<b>Shorting plug,</b> brown plug with assembled strain relief housing			<b>Shorting plug,</b> coding A, black plug with assembled strain relief housing and bridge		
	770-1373/146-000	50		770-113/147-000	50
	770-1373/147-000	50			
	770-1373/148-000	50			
	770-1373/149-000	50			
<b>Item-Specific Accessories</b>					
<b>Lockout cap,</b> for plug, separable, 5-pole			<b>Lockout cap,</b> for plug, separable, 5-pole		
	yellow 770-360	100		yellow 770-360	100
<b>Application Notes</b>					



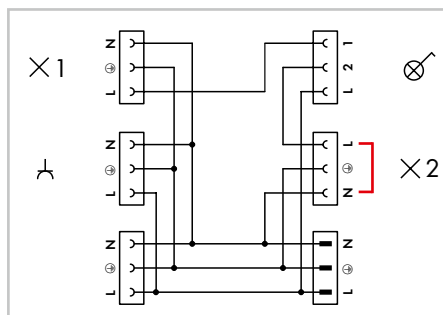
Internal circuit of 770-637 Distribution Connector with possible insertion position of 770-1373/14x-000 Shorting Plug.



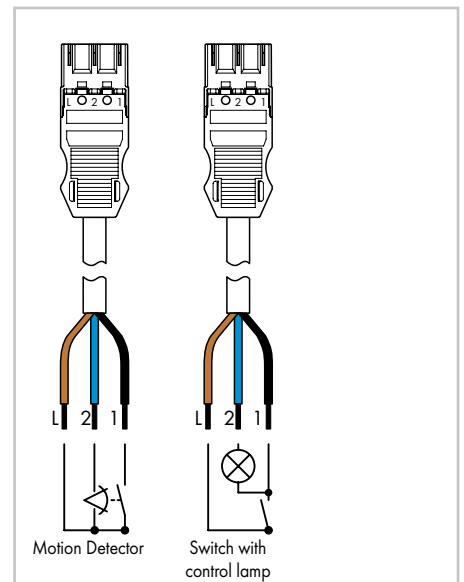
Internal circuit of 770-637 Distribution Connector with insertion position of 770-113/147-000 Shorting Plug for connecting a motion sensor.



Internal circuit of 770-638 Distribution Connector with possible insertion positions of 770-1373/14x-000 Shorting Plug.






Internal circuit of 770-637 Distribution Connector with insertion position of 770-113/147-000 Shorting Plug for connecting a switch with control lamp.



Cable assembly with coding S for connection to 770-637 Distribution Connector when using 770-113/147-000 Shorting Plug.


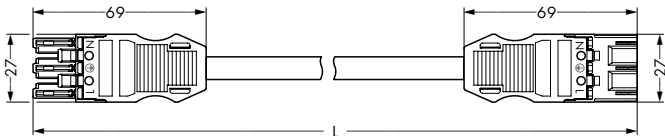



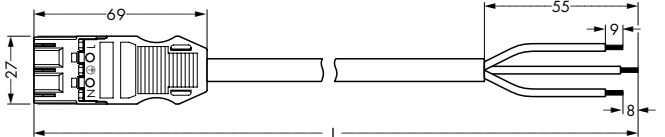





# WINSTA® MIDI Cable Assemblies 3 x 1.5 mm<sup>2</sup>

		PVC H05VV-F 3G1.5 halogen-free H05Z1Z1-F 3G1.5  250 V/4 kV/3 I <sub>N</sub> 16 A  Conductor ends, bonded: 9 mm/16 mm ① Approvals				
Interconnecting cable, socket - plug		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A PVC halogen-free				
		1 m	771-9993/006-101	771-9993/006-102	771-9993/016-101	771-9993/016-102
		2 m	771-9993/006-201	771-9993/006-202	771-9993/016-201	771-9993/016-202
		3 m	771-9993/006-301	771-9993/006-302	771-9993/016-301	771-9993/016-302
		4 m	771-9993/006-401	771-9993/006-402	771-9993/016-401	771-9993/016-402
		5 m	771-9993/006-501	771-9993/006-502	771-9993/016-501	771-9993/016-502
		6 m	771-9993/006-601	771-9993/006-602	771-9993/016-601	771-9993/016-602
		7 m	771-9993/006-701	771-9993/006-702	771-9993/016-701	771-9993/016-702
		8 m	771-9993/006-801	771-9993/006-802	771-9993/016-801	771-9993/016-802
Connecting cable, socket - free end		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A PVC halogen-free				
		1 m	771-9993/106-101	771-9993/106-102	771-9993/116-101	771-9993/116-102
		2 m	771-9993/106-201	771-9993/106-202	771-9993/116-201	771-9993/116-202
		3 m	771-9993/106-301	771-9993/106-302	771-9993/116-301	771-9993/116-302
		4 m	771-9993/106-401	771-9993/106-402	771-9993/116-401	771-9993/116-402
		5 m	771-9993/106-501	771-9993/106-502	771-9993/116-501	771-9993/116-502
		6 m	771-9993/106-601	771-9993/106-602	771-9993/116-601	771-9993/116-602
		7 m	771-9993/106-701	771-9993/106-702	771-9993/116-701	771-9993/116-702
		8 m	771-9993/106-801	771-9993/106-802	771-9993/116-801	771-9993/116-802
Connecting cable, plug - free end		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A ② PVC halogen-free				
		1 m	771-9993/206-101	771-9993/206-102	771-9993/216-101	771-9993/216-102
		2 m	771-9993/206-201	771-9993/206-202	771-9993/216-201	771-9993/216-202
		3 m	771-9993/206-301	771-9993/206-302	771-9993/216-301	771-9993/216-302
		4 m	771-9993/206-401	771-9993/206-402	771-9993/216-401	771-9993/216-402
		5 m	771-9993/206-501	771-9993/206-502	771-9993/216-501	771-9993/216-502
		6 m	771-9993/206-601	771-9993/206-602	771-9993/216-601	771-9993/216-602
		7 m	771-9993/206-701	771-9993/206-702	771-9993/216-701	771-9993/216-702
		8 m	771-9993/206-801	771-9993/206-802	771-9993/216-801	771-9993/216-802
		● Coding A ③ (for installation of switches and outlets)				
		1 m	771-9993/3206-101		771-9993/3216-101	
		2 m	771-9993/3206-201		771-9993/3216-201	
		3 m	771-9993/3206-301		771-9993/3216-301	
		4 m	771-9993/3206-401		771-9993/3216-401	
		5 m	771-9993/3206-501		771-9993/3216-501	
		6 m	771-9993/3206-601		771-9993/3216-601	
		7 m	771-9993/3206-701		771-9993/3216-701	
		8 m	771-9993/3206-801		771-9993/3216-801	
Info		Accessories				
① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.  ● black Coding A (L ⊕ N) ○ white Coding A (L ⊕ N) ● red Coding P (L ⊕ N)  For coding information, see page 250. Fire load data available upon request.		Locking lever, for "flying leads", manually operated				
		 black 770-101 100 (4x25) white 770-121 100 (4x25)				
		for "flying leads", tool operated				
		black 770-111 100 (4x25) white 770-131 100 (4x25)				
		Lockout cap, for socket, separable, 12-pole				
		 black 770-201 100 white 770-221 100				
		Lockout cap, for plug, separable, 5-pole				
		 yellow 770-360 100				

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)
- red Coding P (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.

		PVC	H05VV-F 3G1.5			
		halogen-free	H05Z1Z1-F 3G1.5			
		250 V/4 kV/3	I <sub>N</sub> 16 A			
		Conductor ends, bonded: 9 mm				
		① Approvals				
<b>Interconnecting cable, socket – plug</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/006-101	771-9973/006-102	771-9973/016-101	771-9973/016-102
		2 m	771-9973/006-201	771-9973/006-202	771-9973/016-201	771-9973/016-202
		3 m	771-9973/006-301	771-9973/006-302	771-9973/016-301	771-9973/016-302
		4 m	771-9973/006-401	771-9973/006-402	771-9973/016-401	771-9973/016-402
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		7 m	771-9973/006-701	771-9973/006-702	771-9973/016-701	771-9973/016-702
		8 m	771-9973/006-801	771-9973/006-802	771-9973/016-801	771-9973/016-802
<b>Connecting cable, socket – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/106-101	771-9973/106-102	771-9973/116-101	771-9973/116-102
		2 m	771-9973/106-201	771-9973/106-202	771-9973/116-201	771-9973/116-202
		3 m	771-9973/106-301	771-9973/106-302	771-9973/116-301	771-9973/116-302
		4 m	771-9973/106-401	771-9973/106-402	771-9973/116-401	771-9973/116-402
		5 m	771-9973/106-501	771-9973/106-502	771-9973/116-501	771-9973/116-502
		6 m	771-9973/106-601	771-9973/106-602	771-9973/116-601	771-9973/116-602
		7 m	771-9973/106-701	771-9973/106-702	771-9973/116-701	771-9973/116-702
		8 m	771-9973/106-801	771-9973/106-802	771-9973/116-801	771-9973/116-802
<b>Connecting cable, plug – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/206-101	771-9973/206-102	771-9973/216-101	771-9973/216-102
		2 m	771-9973/206-201	771-9973/206-202	771-9973/216-201	771-9973/216-202
		3 m	771-9973/206-301	771-9973/206-302	771-9973/216-301	771-9973/216-302
		4 m	771-9973/206-401	771-9973/206-402	771-9973/216-401	771-9973/216-402
		5 m	771-9973/206-501	771-9973/206-502	771-9973/216-501	771-9973/216-502
		6 m	771-9973/206-601	771-9973/206-602	771-9973/216-601	771-9973/216-602
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		8 m	771-9973/206-801	771-9973/206-802	771-9973/216-801	771-9973/216-802
		<b>Accessories</b>				
		<b>Locking lever, for "flying leads",</b>				
		manually operated				
				black	770-101	100 (4x25)
				white	770-121	100 (4x25)
		<b>Locking lever, for "flying leads",</b>				
		tool operated				
				black	770-111	100 (4x25)
				white	770-131	100 (4x25)
		<b>Lockout cap, for socket, separable, 12-pole</b>				
				black	770-201	100
				white	770-221	100
<b>Coding pin, for plug (A and B coding)</b>		<b>Lockout cap, for plug, separable, 5-pole</b>				
		gray	770-401	100		
					yellow	770-360 100

# WINSTA® MIDI Cable Assemblies 3 x 1.5 mm<sup>2</sup>

		<b>PVC</b> H05VV-F 3x1.5 <b>halogen-free</b> H05Z1Z1-F 3x1.5  <b>250 V/4 kV/3 I<sub>N</sub> 16 A</b>  <b>Conductor ends, bonded: 11 mm</b> <b>① Approvals</b>																																	
<b>Interconnecting cable, socket – plug</b>		<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td colspan="3">● <b>Coding S</b></td> </tr> <tr> <td colspan="2"><b>PVC</b></td> <td><b>halogen-free</b></td> </tr> <tr> <td>1 m</td> <td>771-9973/006-105</td> <td>771-9973/016-105</td> </tr> <tr> <td>2 m</td> <td>771-9973/006-205</td> <td>771-9973/016-205</td> </tr> <tr> <td>3 m</td> <td>771-9973/006-305</td> <td>771-9973/016-305</td> </tr> <tr> <td>4 m</td> <td>771-9973/006-405</td> <td>771-9973/016-405</td> </tr> <tr> <td>5 m</td> <td>771-9973/006-505</td> <td>771-9973/016-505</td> </tr> <tr> <td>6 m</td> <td>771-9973/006-605</td> <td>771-9973/016-605</td> </tr> <tr> <td>7 m</td> <td>771-9973/006-705</td> <td>771-9973/016-705</td> </tr> <tr> <td>8 m</td> <td>771-9973/006-805</td> <td>771-9973/016-805</td> </tr> </tbody> </table>	Length	Item No. black	Item No. black	● <b>Coding S</b>			<b>PVC</b>		<b>halogen-free</b>	1 m	771-9973/006-105	771-9973/016-105	2 m	771-9973/006-205	771-9973/016-205	3 m	771-9973/006-305	771-9973/016-305	4 m	771-9973/006-405	771-9973/016-405	5 m	771-9973/006-505	771-9973/016-505	6 m	771-9973/006-605	771-9973/016-605	7 m	771-9973/006-705	771-9973/016-705	8 m	771-9973/006-805	771-9973/016-805
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yellow	770-360	100																																	



# WINSTA® MIDI Cable Assemblies 3 x 2.5 mm<sup>2</sup>

		PVC H05VV-F 3G2.5 halogen-free H05Z1Z1-F 3G2.5  250 V/4 kV/3 I <sub>N</sub> 20 A  Conductor ends, bonded: 9 mm/16 mm ① Approvals				
Interconnecting cable, socket - plug		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A PVC halogen-free				
		1 m	771-9993/007-101	771-9993/007-102	771-9993/017-101	771-9993/017-102
		2 m	771-9993/007-201	771-9993/007-202	771-9993/017-201	771-9993/017-202
		3 m	771-9993/007-301	771-9993/007-302	771-9993/017-301	771-9993/017-302
		4 m	771-9993/007-401	771-9993/007-402	771-9993/017-401	771-9993/017-402
		5 m	771-9993/007-501	771-9993/007-502	771-9993/017-501	771-9993/017-502
		6 m	771-9993/007-601	771-9993/007-602	771-9993/017-601	771-9993/017-602
		7 m	771-9993/007-701	771-9993/007-702	771-9993/017-701	771-9993/017-702
		8 m	771-9993/007-801	771-9993/007-802	771-9993/017-801	771-9993/017-802
Connecting cable, socket - free end		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A PVC halogen-free				
		1 m	771-9993/107-101	771-9993/107-102	771-9993/117-101	771-9993/117-102
		2 m	771-9993/107-201	771-9993/107-202	771-9993/117-201	771-9993/117-202
		3 m	771-9993/107-301	771-9993/107-302	771-9993/117-301	771-9993/117-302
		4 m	771-9993/107-401	771-9993/107-402	771-9993/117-401	771-9993/117-402
		5 m	771-9993/107-501	771-9993/107-502	771-9993/117-501	771-9993/117-502
		6 m	771-9993/107-601	771-9993/107-602	771-9993/117-601	771-9993/117-602
		7 m	771-9993/107-701	771-9993/107-702	771-9993/117-701	771-9993/117-702
		8 m	771-9993/107-801	771-9993/107-802	771-9993/117-801	771-9993/117-802
Connecting cable, plug - free end		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● ○ Coding A ② PVC halogen-free				
		1 m	771-9993/207-101	771-9993/207-102	771-9993/217-101	771-9993/217-102
		2 m	771-9993/207-201	771-9993/207-202	771-9993/217-201	771-9993/217-202
		3 m	771-9993/207-301	771-9993/207-302	771-9993/217-301	771-9993/217-302
		4 m	771-9993/207-401	771-9993/207-402	771-9993/217-401	771-9993/217-402
		5 m	771-9993/207-501	771-9993/207-502	771-9993/217-501	771-9993/217-502
		6 m	771-9993/207-601	771-9993/207-602	771-9993/217-601	771-9993/217-602
		7 m	771-9993/207-701	771-9993/207-702	771-9993/217-701	771-9993/217-702
		8 m	771-9993/207-801	771-9993/207-802	771-9993/217-801	771-9993/217-802
		● Coding A ③ (for installation of switches and outlets)				
		1 m	771-9993/3207-101		771-9993/3217-101	
		2 m	771-9993/3207-201		771-9993/3217-201	
		3 m	771-9993/3207-301		771-9993/3217-301	
		4 m	771-9993/3207-401		771-9993/3217-401	
		5 m	771-9993/3207-501		771-9993/3217-501	
		6 m	771-9993/3207-601		771-9993/3217-601	
		7 m	771-9993/3207-701		771-9993/3217-701	
		8 m	771-9993/3207-801		771-9993/3217-801	
Info		Accessories				
① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.  ● black Coding A (L ⊕ N) ○ white Coding A (L ⊕ N) ● red Coding P (L ⊕ N)  For coding information, see page 250. Fire load data available upon request.		Locking lever, for "flying leads", manually operated				
		black 770-101 100 (4x25) white 770-121 100 (4x25)				
		for "flying leads", tool operated				
		black 770-111 100 (4x25) white 770-131 100 (4x25)				
		Lockout cap, for socket, separable, 12-pole				
		black 770-201 100 white 770-221 100				
		Lockout cap, for plug, separable, 5-pole				
		yellow 770-360 100				

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.

- black Coding A (L ⊕ N)
- white Coding A (L ⊕ N)
- red Coding P (L ⊕ N)


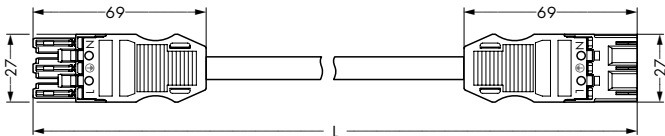



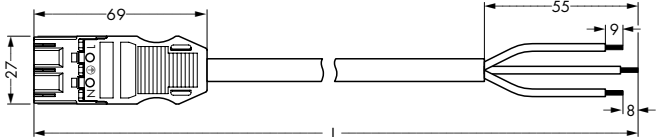





For coding information, see page 250.  
Fire load data available upon request.

Recommended items are shown in red and available for immediate delivery!

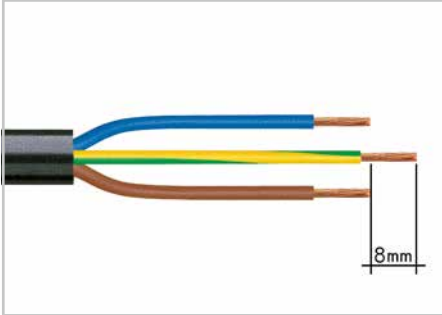
Locking lever, for "flying leads", manually operated  
 black 770-101 100 (4x25)  
 white 770-121 100 (4x25)  
 for "flying leads", tool operated  
 black 770-111 100 (4x25)  
 white 770-131 100 (4x25)

Lockout cap, for socket, separable, 12-pole  
 black 770-201 100  
 white 770-221 100

Lockout cap, for plug, separable, 5-pole  
 yellow 770-360 100

		PVC	H05VV-F 3G2.5			
		halogen-free	H05Z1Z1-F 3G2.5			
		250 V/4 kV/3	I <sub>N</sub> 20 A			
		Conductor ends, bonded: 9 mm				
		① Approvals				
<b>Interconnecting cable, socket – plug</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/007-101	771-9973/007-102	771-9973/017-101	771-9973/017-102
		2 m	771-9973/007-201	771-9973/007-202	771-9973/017-201	771-9973/017-202
		3 m	771-9973/007-301	771-9973/007-302	771-9973/017-301	771-9973/017-302
		4 m	771-9973/007-401	771-9973/007-402	771-9973/017-401	771-9973/017-402
		5 m	771-9973/007-501	771-9973/007-502	771-9973/017-501	771-9973/017-502
		6 m	771-9973/007-601	771-9973/007-602	771-9973/017-601	771-9973/017-602
		7 m	771-9973/007-701	771-9973/007-702	771-9973/017-701	771-9973/017-702
		8 m	771-9973/007-801	771-9973/007-802	771-9973/017-801	771-9973/017-802
<b>Connecting cable, socket – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/107-101	771-9973/107-102	771-9973/117-101	771-9973/117-102
		2 m	771-9973/107-201	771-9973/107-202	771-9973/117-201	771-9973/117-202
		3 m	771-9973/107-301	771-9973/107-302	771-9973/117-301	771-9973/117-302
		4 m	771-9973/107-401	771-9973/107-402	771-9973/117-401	771-9973/117-402
		5 m	771-9973/107-501	771-9973/107-502	771-9973/117-501	771-9973/117-502
		6 m	771-9973/107-601	771-9973/107-602	771-9973/117-601	771-9973/117-602
		7 m	771-9973/107-701	771-9973/107-702	771-9973/117-701	771-9973/117-702
		8 m	771-9973/107-801	771-9973/107-802	771-9973/117-801	771-9973/117-802
<b>Connecting cable, plug – free end</b>		Length	Item No. black	Item No. white	Item No. black	Item No. white
		● Coding P		halogen-free		
		PVC				
		1 m	771-9973/207-101	771-9973/207-102	771-9973/217-101	771-9973/217-102
		2 m	771-9973/207-201	771-9973/207-202	771-9973/217-201	771-9973/217-202
		3 m	771-9973/207-301	771-9973/207-302	771-9973/217-301	771-9973/217-302
		4 m	771-9973/207-401	771-9973/207-402	771-9973/217-401	771-9973/217-402
		5 m	771-9973/207-501	771-9973/207-502	771-9973/217-501	771-9973/217-502
		6 m	771-9973/207-601	771-9973/207-602	771-9973/217-601	771-9973/217-602
		7 m	771-9973/207-701	771-9973/207-702	771-9973/217-701	771-9973/217-702
		8 m	771-9973/207-801	771-9973/207-802	771-9973/217-801	771-9973/217-802
		<b>Accessories</b>				
		<b>Locking lever, for "flying leads",</b>				
		manually operated				
			black	770-101	100	(4x25)
			white	770-121	100	(4x25)
		<b>Locking lever, for "flying leads",</b>				
		tool operated				
			black	770-111	100	(4x25)
			white	770-131	100	(4x25)
		<b>Lockout cap, for socket, separable, 12-pole</b>				
			black	770-201	100	
			white	770-221	100	
<b>Coding pin, for plug (A and B coding)</b>		<b>Lockout cap, for plug, separable, 5-pole</b>				
		gray	770-401	100		
					yellow	770-360 100

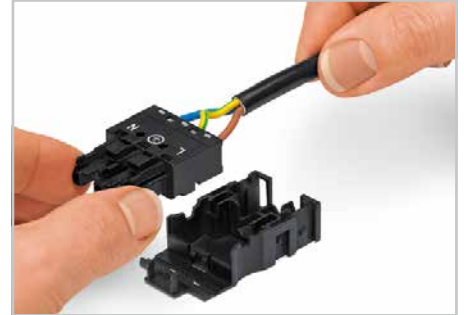
## WINSTA® MIDI IP 2XD, for Easily Accessible Areas



1. Strip length, outer insulation = 48 mm
2. Strip length: = 9 mm
3. Extended ground conductor = 8 mm



To terminate fine-stranded conductors, open clamping unit via 2.5 mm screwdriver and insert stripped conductor until it hits backstop.  
Solid conductors can be connected via push-in termination.



Insert wired connector onto the base of the strain relief housing.

### Strain relief installation

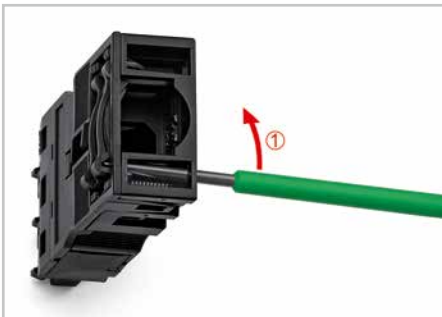


Prepare strain relief housing by snapping together upper and bottom part.

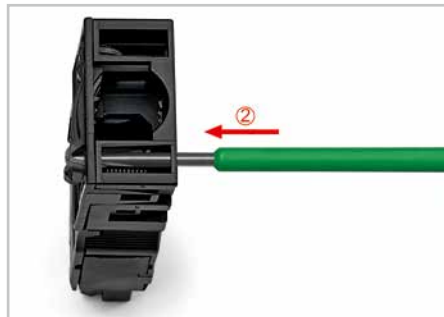


Push down strain relief clamp via 2.5 mm screwdriver alternately on both sides.

### Strain relief removal



First, unlock strain relief clamp via 2.5 mm screwdriver from the bottom.



Then, push strain relief clamp via 2.5 mm screwdriver out of the locking position.





Finally, unlock strain relief housing via 2.5 mm screwdriver on both sides.


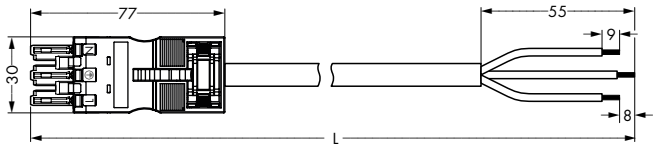



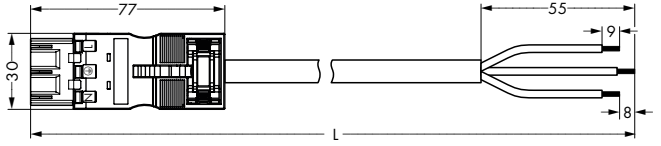


# WINSTA® MIDI IP 2XD, for Easily Accessible Areas Cable Assemblies 3 x 1.5 mm<sup>2</sup>

PVC	H05VV-F 3G1.5
halogen-free	H05Z1Z1-F 3G1.5
250 V/4 kV/3	I <sub>N</sub> 16 A
Conductor ends, bonded: 9 mm	
① Approvals	

Interconnecting cable, socket – plug	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
PVC		halogen-free			
	1 m	771-6993/006-101	771-6993/006-102	771-6993/016-101	771-6993/016-102
	2 m	771-6993/006-201	771-6993/006-202	771-6993/016-201	771-6993/016-202
	3 m	771-6993/006-301	771-6993/006-302	771-6993/016-301	771-6993/016-302
	4 m	771-6993/006-401	771-6993/006-402	771-6993/016-401	771-6993/016-402
	5 m	771-6993/006-501	771-6993/006-502	771-6993/016-501	771-6993/016-502
	6 m	771-6993/006-601	771-6993/006-602	771-6993/016-601	771-6993/016-602
	7 m	771-6993/006-701	771-6993/006-702	771-6993/016-701	771-6993/016-702
	8 m	771-6993/006-801	771-6993/006-802	771-6993/016-801	771-6993/016-802

Connecting cable, socket – free end	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
PVC		halogen-free			
	1 m	771-6993/106-101	771-6993/106-102	771-6993/116-101	771-6993/116-102
	2 m	771-6993/106-201	771-6993/106-202	771-6993/116-201	771-6993/116-202
	3 m	771-6993/106-301	771-6993/106-302	771-6993/116-301	771-6993/116-302
	4 m	771-6993/106-401	771-6993/106-402	771-6993/116-401	771-6993/116-402
	5 m	771-6993/106-501	771-6993/106-502	771-6993/116-501	771-6993/116-502
	6 m	771-6993/106-601	771-6993/106-602	771-6993/116-601	771-6993/116-602
	7 m	771-6993/106-701	771-6993/106-702	771-6993/116-701	771-6993/116-702
	8 m	771-6993/106-801	771-6993/106-802	771-6993/116-801	771-6993/116-802

Connecting cable, plug – free end	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
PVC		halogen-free			
	1 m	771-6993/206-101	771-6993/206-102	771-6993/216-101	771-6993/216-102
	2 m	771-6993/206-201	771-6993/206-202	771-6993/216-201	771-6993/216-202
	3 m	771-6993/206-301	771-6993/206-302	771-6993/216-301	771-6993/216-302
	4 m	771-6993/206-401	771-6993/206-402	771-6993/216-401	771-6993/216-402
	5 m	771-6993/206-501	771-6993/206-502	771-6993/216-501	771-6993/216-502
	6 m	771-6993/206-601	771-6993/206-602	771-6993/216-601	771-6993/216-602
	7 m	771-6993/206-701	771-6993/206-702	771-6993/216-701	771-6993/216-702
	8 m	771-6993/206-801	771-6993/206-802	771-6993/216-801	771-6993/216-802

<b>Info</b>	<b>Accessories</b>
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① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.

● black Coding A (L ⊕ N)  
○ white Coding A (L ⊕ N)

For coding information, see page 250.  
Fire load data available upon request.

**Locking lever, for "flying leads",**



manually operated		
black	770-101	100 (4x25)
white	770-121	100 (4x25)

**Locking lever, for "flying leads",**



tool operated		
black	770-111	100 (4x25)
white	770-131	100 (4x25)

**Lockout cap, for socket, separable, 12-pole**



black	770-201	100
white	770-221	100

**Lockout cap, for plug, separable, 5-pole**





yellow	770-360	100
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**WINSTA® MIDI**  
**IP 2XD, for Easily Accessible Areas**  
**Cable Assemblies 3 x 2.5 mm<sup>2</sup>**

**PUSH-IN CAGE CLAMP®**




	PVC	H05VV-F 3G2.5			
	halogen-free	H05Z1Z1-F 3G2.5			
	250 V/4 kV/3 I <sub>N</sub> 20 A				
	Conductor ends, bonded: 9 mm				
	① Approvals				
<b>Interconnecting cable, socket – plug</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC	halogen-free			
	1 m	771-6993/007-101	771-6993/007-102	771-6993/017-101	771-6993/017-102
	2 m	771-6993/007-201	771-6993/007-202	771-6993/017-201	771-6993/017-202
	3 m	771-6993/007-301	771-6993/007-302	771-6993/017-301	771-6993/017-302
	4 m	771-6993/007-401	771-6993/007-402	771-6993/017-401	771-6993/017-402
	5 m	771-6993/007-501	771-6993/007-502	771-6993/017-501	771-6993/017-502
	6 m	771-6993/007-601	771-6993/007-602	771-6993/017-601	771-6993/017-602
	7 m	771-6993/007-701	771-6993/007-702	771-6993/017-701	771-6993/017-702
	8 m	771-6993/007-801	771-6993/007-802	771-6993/017-801	771-6993/017-802
<b>Connecting cable, socket – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC	halogen-free			
	1 m	771-6993/107-101	771-6993/107-102	771-6993/117-101	771-6993/117-102
	2 m	771-6993/107-201	771-6993/107-202	771-6993/117-201	771-6993/117-202
	3 m	771-6993/107-301	771-6993/107-302	771-6993/117-301	771-6993/117-302
	4 m	771-6993/107-401	771-6993/107-402	771-6993/117-401	771-6993/117-402
	5 m	771-6993/107-501	771-6993/107-502	771-6993/117-501	771-6993/117-502
	6 m	771-6993/107-601	771-6993/107-602	771-6993/117-601	771-6993/117-602
	7 m	771-6993/107-701	771-6993/107-702	771-6993/117-701	771-6993/117-702
	8 m	771-6993/107-801	771-6993/107-802	771-6993/117-801	771-6993/117-802
<b>Connecting cable, plug – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● ○ Coding A				
	PVC	halogen-free			
	1 m	771-6993/207-101	771-6993/207-102	771-6993/217-101	771-6993/217-102
	2 m	771-6993/207-201	771-6993/207-202	771-6993/217-201	771-6993/217-202
	3 m	771-6993/207-301	771-6993/207-302	771-6993/217-301	771-6993/217-302
	4 m	771-6993/207-401	771-6993/207-402	771-6993/217-401	771-6993/217-402
	5 m	771-6993/207-501	771-6993/207-502	771-6993/217-501	771-6993/217-502
	6 m	771-6993/207-601	771-6993/207-602	771-6993/217-601	771-6993/217-602
	7 m	771-6993/207-701	771-6993/207-702	771-6993/217-701	771-6993/217-702
	8 m	771-6993/207-801	771-6993/207-802	771-6993/217-801	771-6993/217-802
<b>Accessories</b>					
<b>Locking lever, for "flying leads",</b>					
manually operated					
		black	770-101	100	(4x25)
		white	770-121	100	(4x25)
<b>Locking lever, for "flying leads",</b>					
tool operated					
		black	770-111	100	(4x25)
		white	770-131	100	(4x25)
<b>Lockout cap, for socket, separable, 12-pole</b>					
		black	770-201	100	
		white	770-221	100	
<b>Lockout cap, for plug, separable, 5-pole</b>					
		yellow	770-360	100	




# WINSTA® MIDI Sockets and Plugs, 4-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>2 x 20 ... 12 AWG</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 4-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 2 cables, 9 ... 13 mm diameter ③, Strip length, outer insulation: 55 mm			Plug with strain relief housing, for 2 cables, 9 ... 13 mm diameter ③, Strip length, outer insulation: 55 mm		
	● black	770-104	25	● black	770-114	25
	○ white	770-124	25	○ white	770-134	25

Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	

Accessories, 770 Series						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
	Marker, for manual marking					
		white 770-450 50				

Info	Dimensions
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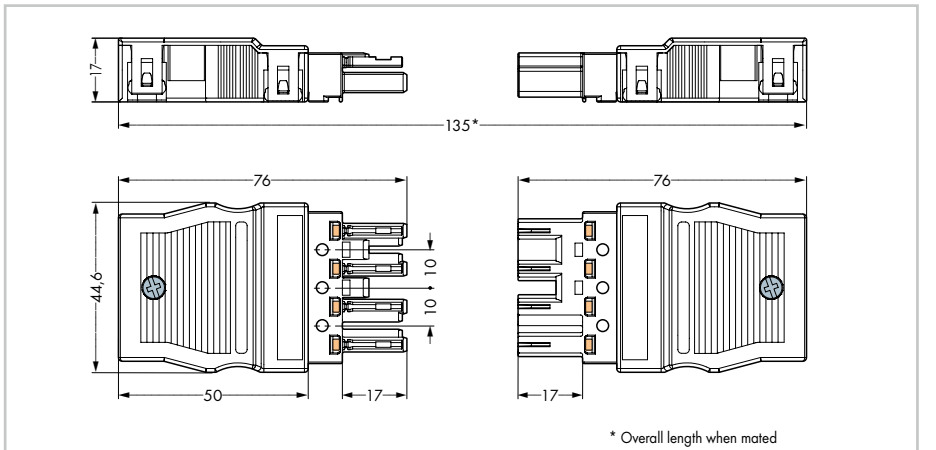
① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"



② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

③ For more strain relief housings, see page 172.

● black Coding A (N ⊕ 2|L 1|L)  
○ white Coding A (N ⊕ 2|L 1|L)  
● green Coding Q (N PE1 PE2 L)

For coding information, see page 250.  
Fire load data available upon request.






2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals
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**Notice:**

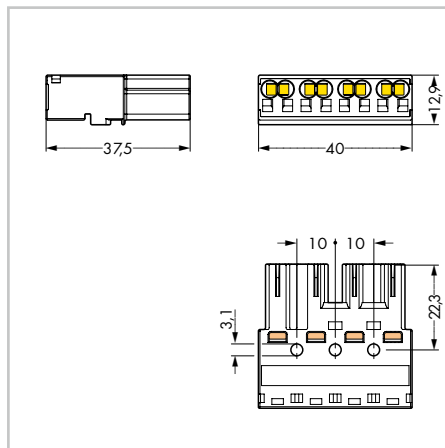
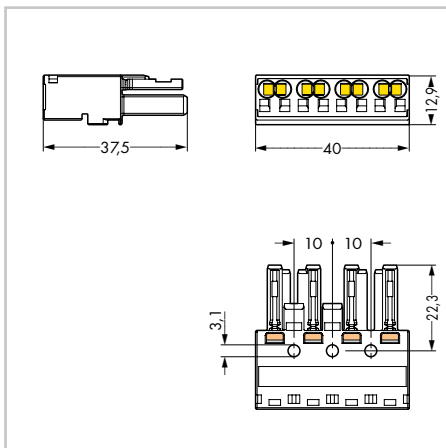
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>		
● black	770-204	50	● black	770-214	50
○ white	770-224	50	○ white	770-234	50
For "Clean Earth" applications (loading up to 32A):			For "Clean Earth" applications (loading up to 32A):		
● green	770-1324	50	● green	770-1334	50

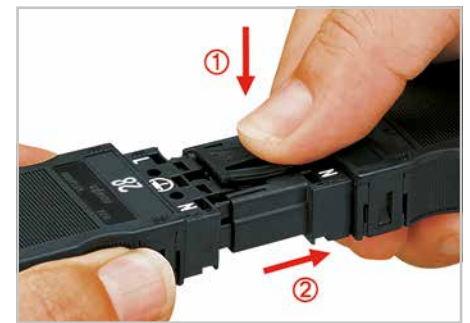
Item-Specific Accessories		
<b>Lockout cap, for socket, separable, 12-pole</b>		<b>Lockout cap, for plug, separable, 5-pole</b>
	black 770-201 100 white 770-221 100	 yellow 770-360 100
		<b>Coding pin, for plug (A and B coding)</b>
		 gray 770-401 100

Accessories, 770 Series		
<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>
	black 770-101 100 (4x25) white 770-121 100 (4x25)	 black 770-111 100 (4x25) white 770-131 100 (4x25)
<b>Marker, for manual marking</b>		
	white 770-450 50	

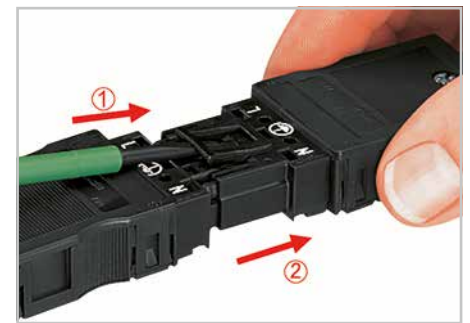
**Dimensions**



Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)





Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

# WINSTA® MIDI Strain Relief Housings, 4-Pole, for Different Cable Diameters

	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 4-pole sockets</li> <li>- 4-pole plugs</li> </ul> <p>① Approvals</p>	<p>Snap-on type strain relief housings for:</p> <ul style="list-style-type: none"> <li>- 4-pole sockets</li> <li>- 4-pole plugs</li> </ul> <p>① Approvals</p>
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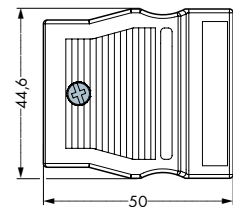
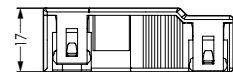
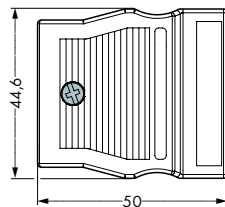
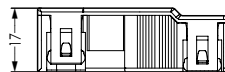


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Strain relief housing	Strain relief housing, for 2 cables, 5 ... 9 mm diameter ②, Strip length, outer insulation: 55 mm			Strain relief housing, for 2 cables, 9 ... 13 mm diameter ②, Strip length, outer insulation: 55 mm		
	black	770-504/023-000	50	black	770-504	50
	white	770-514/023-000	50	white	770-514	50

Item-Specific Accessories						
	<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333 100 Marking area: 38 x 6.5 mm</p>			<p>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long</p>  <p>Strip height: 6 mm    210-333 100 Marking area: 38 x 6.5 mm</p>		

Info	Dimensions
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

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For H05VV and NYM cables  
For other cables, please contact factory.

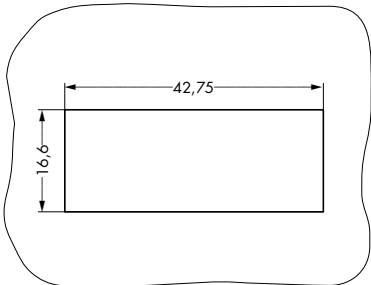


Fire load data available upon request.







# WINSTA® MIDI Snap-In Sockets and Plugs, 4-Pole

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals			 9 mm / 0.35 in. ② Approvals



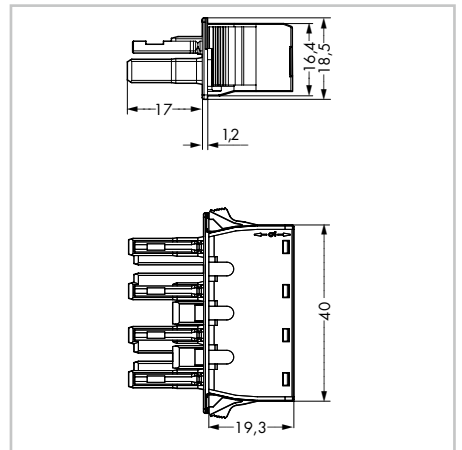
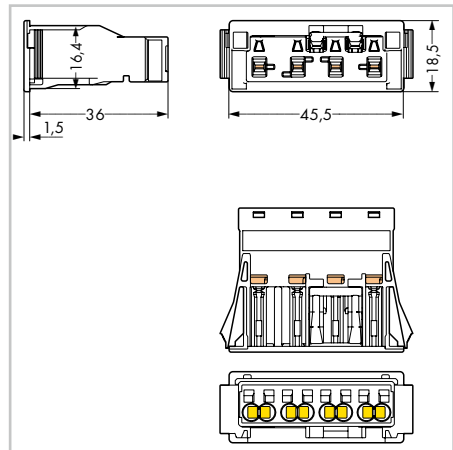
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 4-pole, with Push-in CAGE CLAMP® connection	Socket			Socket with protruding interface		
	● black	770-704	100	● black	770-704/009-000	100
	○ white	770-724	100	○ white	770-724/009-000	100
	● green	770-2324	100			
	For "Clean Earth" applications (loading up to 32A):					

Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for socket, separable, 12-pole		
		black 770-201 100 white 770-221 100			black 770-201 100 white 770-221 100	

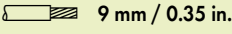
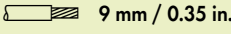
Accessories, 770 Series						
	Lockout cap, for cutout, 4-pole			Lockout cap, for cutout, 4-pole		
		black 770-644 100 white 770-694 100			black 770-644 100 white 770-694 100	

Info	Dimensions
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- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ Direct ground contact on position PE1
- 
- black Coding A (N ⊕ 2|L 1|L)
  - white Coding A (N ⊕ 2|L 1|L)
  - green Coding Q (N PE1 PE2 L)
- For coding information, see page 250.  
Fire load data available upon request.





2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Plug</b>			<b>Plug with direct ground contact</b>		
● black	770-714	100	● black	770-714/007-000	100
○ white	770-734	100	○ white	770-734/007-000	100
For "Clean Earth" applications (loading up to 32A):			For "Clean Earth" applications (loading up to 32A):		
● green	770-2334	100	● green	770-2334/007-000	100 ③

Direct ground contact





Varnish-piercing direct ground contact ③

Item-Specific Accessories					
Lockout cap, for plug, separable, 5-pole			Lockout cap, for plug, separable, 5-pole		
	yellow	770-360 100		yellow	770-360 100
Coding pin, for plug (A and B coding)			Coding pin, for plug (A and B coding)		
	gray	770-401 100		gray	770-401 100

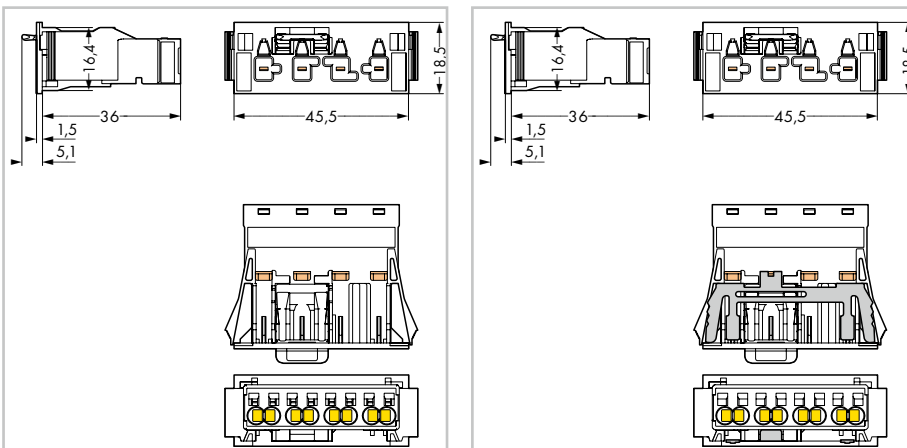
Lockout cap



Seal unused cutout with lockout cap.

Accessories, 770 Series					
Lockout cap, for cutout, 4-pole			Lockout cap, for cutout, 4-pole		
	black	770-644 100		black	770-644 100
	white	770-694 100		white	770-694 100

Dimensions



# WINSTA® MIDI PCB Connectors, 4-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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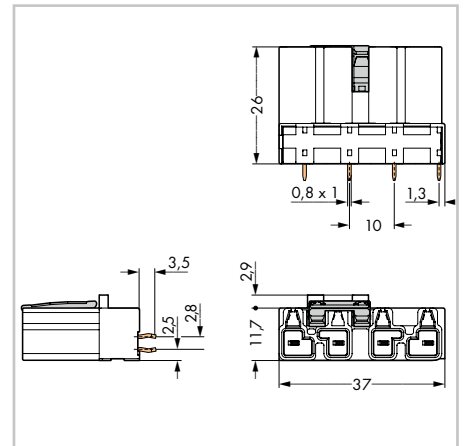
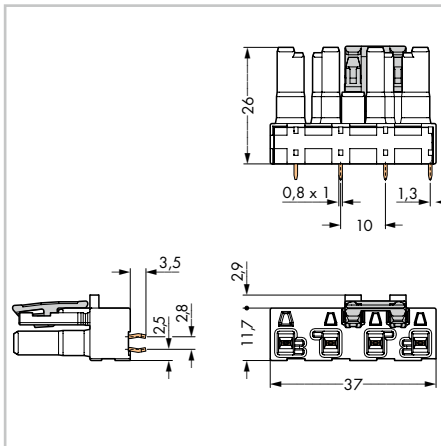


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	770-804	50	● black	770-814	50
	○ white	770-824	50	○ white	770-834	50
<b>Item-Specific Accessories</b>						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	
<b>Accessories, 770 Series</b>						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
<b>Info</b>	<b>Dimensions</b>					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (N ⊕ 2L 1L)
- white Coding A (N ⊕ 2L 1L)




For coding information, see page 250.  
Fire load data available upon request.





400 V/6 kV/3 $I_N$ 25 A  ① Approvals	400 V/6 kV/3 $I_N$ 25 A  ① Approvals
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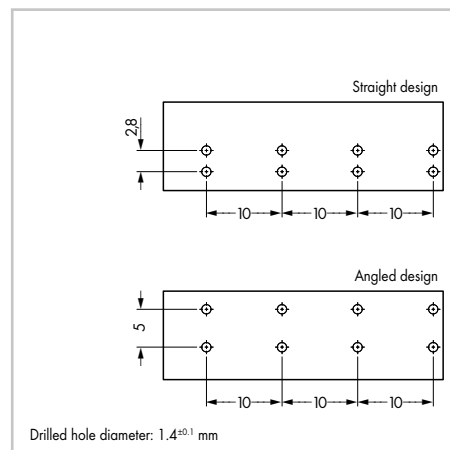
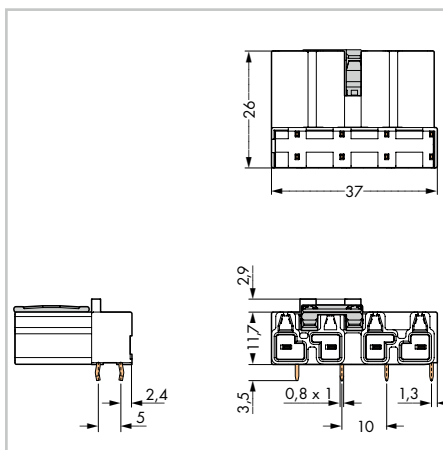
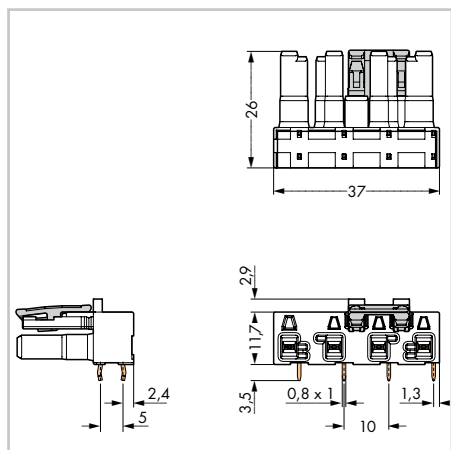


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
● black	770-804/011-000	50	● black	770-814/011-000	50
○ white	770-824/011-000	50	○ white	770-834/011-000	50

Item-Specific Accessories					
<b>Lockout cap, for socket, separable, 12-pole</b>  black 770-201 100 white 770-221 100			<b>Lockout cap, for plug, separable, 5-pole</b>  yellow 770-360 100		
			<b>Coding pin, for plug (A and B coding)</b>  gray 770-401 100		

Accessories, 770 Series					
<b>Locking lever, for "flying leads", manually operated</b>  black 770-101 100 (4x25) white 770-121 100 (4x25)			<b>Locking lever, for "flying leads", tool operated</b>  black 770-111 100 (4x25) white 770-131 100 (4x25)		

Dimensions	Hole patterns
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**WINSTA® MIDI**  
**Linect® T-Connector, T-Distribution Connectors, 4-Pole**



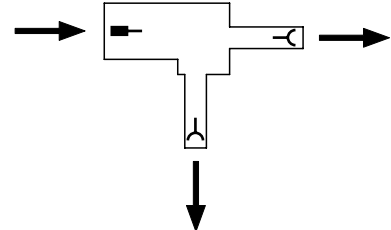
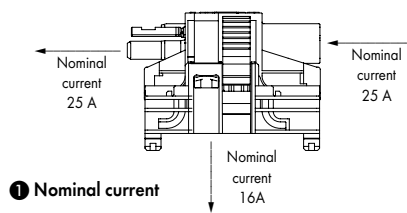
	<p>400 V/6 kV/3 I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>❷ Approvals</p>
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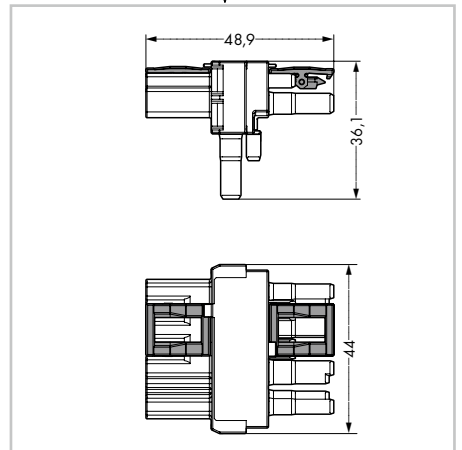
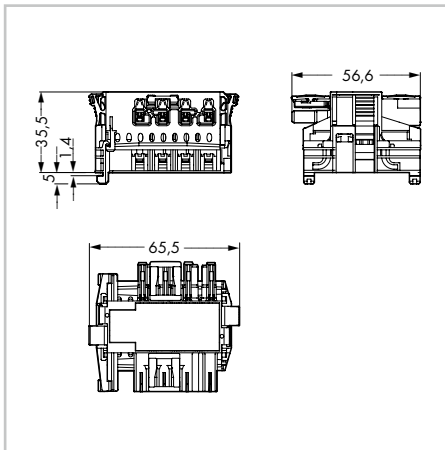
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Linect® T-connector, T-distribution connector	Linect® T-connector, 4-pole, socket - plug, white housing, white cover			T-distribution connector, 1 x plug/2 x socket		
	● black	770-626	50	○ white	770-676	50
	○ white	770-6224	25			
	Suitable for 294-8024 and 294-8124 lighting connectors			for "flying leads", with 3rd locking lever		
				● black	770-627	50
				○ white	770-677	50

Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for socket, separable, 12-pole		
		black	770-201 100		black	770-201 100
		white	770-221 100		white	770-221 100
	Lockout cap, for plug, separable, 5-pole			Lockout cap, for plug, separable, 5-pole		
		yellow	770-360 100		yellow	770-360 100

Info	Dimensions
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- ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ❹ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- black    Coding A    (N ⊕ 2L 1L)
- white    Coding A    (N ⊕ 2L 1L)
- For coding information, see page 250.  
Fire load data available upon request.






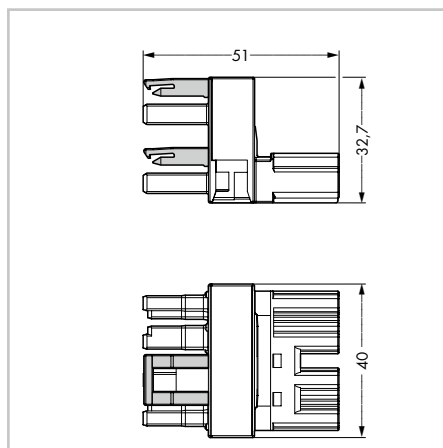
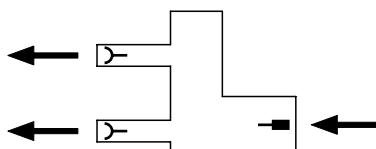
# WINSTA® MIDI h-Distribution Connectors, 4-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>② Approvals</p>	
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Description	Color	Item No.	Pack. Unit
h-distribution connector	h-distribution connector, unidirectional, plug/socket - socket		
	● black	770-944	25
	○ white	770-994	25
	for "flying leads", with 3rd locking lever		
	● black	770-945	25
	○ white	770-995	25

Item-Specific Accessories			
	<b>Mounting plate</b> , for distribution connectors 		
	black	770-624	25
	white	770-674	25
	<b>Fixing pin</b> , for mounting plates 		
	③ black	890-601	250
	④ black	770-601	250
	<b>Lockout cap</b> , for socket, separable, 12-pole 		
	black	770-201	100
	white	770-221	100
	<b>Dimensions</b>		





# WINSTA® MIDI Cable Assemblies 4 x 1.5 mm<sup>2</sup>

		<b>PVC</b> H05VV-F 4G1.5 <b>halogen-free</b> H05Z1Z1-F 4G1.5  <b>400 V/6 kV/3 I<sub>N</sub> 16 A</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>																													
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>																									
		<input type="radio"/> <input type="radio"/> Coding A  <b>PVC</b> <span style="float: right;"><b>halogen-free</b></span>																													
		1 m	771-9994/006-101	771-9994/006-102	771-9994/016-101	771-9994/016-102																									
		2 m	771-9994/006-201	771-9994/006-202	771-9994/016-201	771-9994/016-202																									
		3 m	771-9994/006-301	771-9994/006-302	771-9994/016-301	771-9994/016-302																									
		4 m	771-9994/006-401	771-9994/006-402	771-9994/016-401	771-9994/016-402																									
		5 m	771-9994/006-501	771-9994/006-502	771-9994/016-501	771-9994/016-502																									
		6 m	771-9994/006-601	771-9994/006-602	771-9994/016-601	771-9994/016-602																									
		7 m	771-9994/006-701	771-9994/006-702	771-9994/016-701	771-9994/016-702																									
		8 m	771-9994/006-801	771-9994/006-802	771-9994/016-801	771-9994/016-802																									
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>																									
		<input type="radio"/> <input type="radio"/> Coding A  <b>PVC</b> <span style="float: right;"><b>halogen-free</b></span>																													
		1 m	771-9994/106-101	771-9994/106-102	771-9994/116-101	771-9994/116-102																									
		2 m	771-9994/106-201	771-9994/106-202	771-9994/116-201	771-9994/116-202																									
		3 m	771-9994/106-301	771-9994/106-302	771-9994/116-301	771-9994/116-302																									
		4 m	771-9994/106-401	771-9994/106-402	771-9994/116-401	771-9994/116-402																									
		5 m	771-9994/106-501	771-9994/106-502	771-9994/116-501	771-9994/116-502																									
		6 m	771-9994/106-601	771-9994/106-602	771-9994/116-601	771-9994/116-602																									
		7 m	771-9994/106-701	771-9994/106-702	771-9994/116-701	771-9994/116-702																									
		8 m	771-9994/106-801	771-9994/106-802	771-9994/116-801	771-9994/116-802																									
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>																									
		<input type="radio"/> <input type="radio"/> Coding A  <b>PVC</b> <span style="float: right;"><b>halogen-free</b></span>																													
		1 m	771-9994/206-101	771-9994/206-102	771-9994/216-101	771-9994/216-102																									
		2 m	771-9994/206-201	771-9994/206-202	771-9994/216-201	771-9994/216-202																									
		3 m	771-9994/206-301	771-9994/206-302	771-9994/216-301	771-9994/216-302																									
		4 m	771-9994/206-401	771-9994/206-402	771-9994/216-401	771-9994/216-402																									
		5 m	771-9994/206-501	771-9994/206-502	771-9994/216-501	771-9994/216-502																									
		6 m	771-9994/206-601	771-9994/206-602	771-9994/216-601	771-9994/216-602																									
		7 m	771-9994/206-701	771-9994/206-702	771-9994/216-701	771-9994/216-702																									
		8 m	771-9994/206-801	771-9994/206-802	771-9994/216-801	771-9994/216-802																									
<b>Info</b>		<b>Accessories</b>																													
<p>① For “International Certification Organizations” and “Approvals – User Guide,” see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>For other cables, please contact factory.</p> <p>● black Coding A (N ⊕ 2L 1L) ○ white Coding A (N ⊕ 2L 1L)</p> <p>For coding information, see page 250. Fire load data available upon request.</p>		<p><b>Locking lever, for “flying leads”,</b> manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100</td> <td>(4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100</td> <td>(4x25)</td> </tr> </table> <p><b>Locking lever, for “flying leads”,</b> tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100</td> <td>(4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100</td> <td>(4x25)</td> </tr> </table> <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </table> <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table>					black	770-101	100	(4x25)	white	770-121	100	(4x25)	black	770-111	100	(4x25)	white	770-131	100	(4x25)	black	770-201	100	white	770-221	100	yellow	770-360	100
black	770-101	100	(4x25)																												
white	770-121	100	(4x25)																												
black	770-111	100	(4x25)																												
white	770-131	100	(4x25)																												
black	770-201	100																													
white	770-221	100																													
yellow	770-360	100																													









# WINSTA® MIDI Sockets and Plugs, 5-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>
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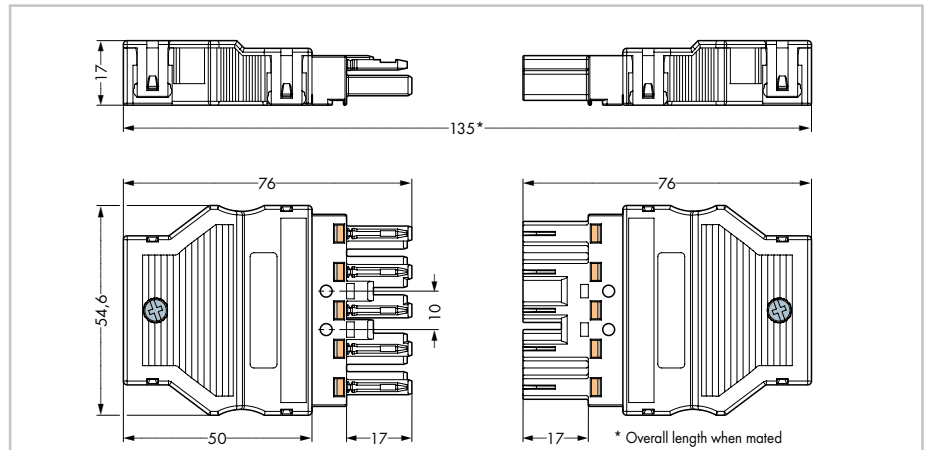
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 5-pole, with Push-in CAGE CLAMP® connection	Socket with strain relief housing, for 2 cables, 9 ... 13 mm diameter ③, strip length, outer insulation: 55 mm			Plug with strain relief housing, for 2 cables, 9 ... 13 mm diameter ③, strip length, outer insulation: 55 mm		
	● black	770-105	25	● black	770-115	25
	○ white	770-125	25	○ white	770-135	25

Item-Specific Accessories						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	



Accessories, 770 Series						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
	Marker, for manual marking					
		white 770-450 50				

Info	Dimensions
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- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ For more strain relief housings, see page 186.
- |             |          |                   |
|-------------|----------|-------------------|
| ● black     | Coding A | (N ⊕ L1 L2 L3)    |
| ○ white     | Coding A | (N ⊕ L1 L2 L3)    |
| ● blue      | Coding I | (N ⊕ L DA- DA+)   |
| ● dark gray | Coding L | (N ⊕ L N' L')     |
| ● red       | Coding P | (N ⊕ L1 L2 L3)    |
| ● green     | Coding Q | (N PE1 PE2 PE3 L) |
- For coding information, see page 250.  
Fire load data available upon request.





2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A   9 mm / 0.35 in. ② Approvals	2 x 20 ... 12 AWG  ② Approvals
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**Notice:**

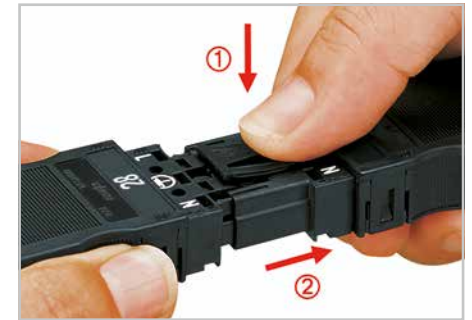
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>		
● black	770-205	50	● black	770-215	50
○ white	770-225	50	○ white	770-235	50
● blue	770-1105	50	● blue	770-1115	50
● dark gray	770-1165	50	● dark gray	770-1175	50
● red	770-1305	50	● red	770-1315	50
For "Clean Earth" applications (loading up to 32A):			For "Clean Earth" applications (loading up to 32A):		
● green	770-1325	50	● green	770-1335	50






Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

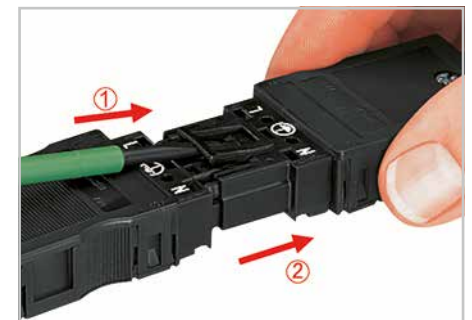
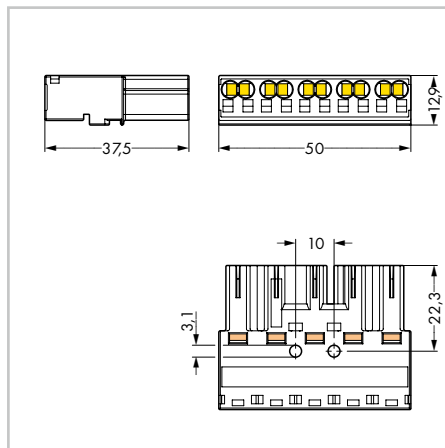
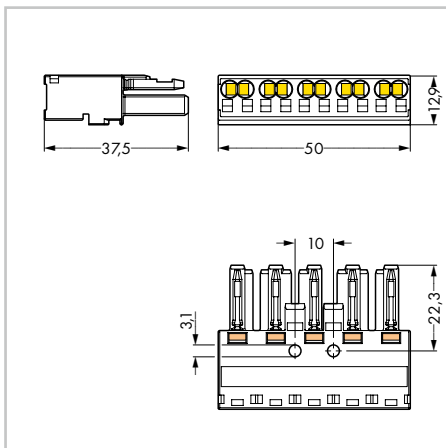
Item-Specific Accessories		
<b>Lockout cap, for socket, separable, 12-pole</b>		<b>Lockout cap, for plug, separable, 5-pole</b>
	black 770-201 100	 yellow 770-360 100
	white 770-221 100	
<b>Coding pin, for plug (A and B coding)</b>		
	 gray 770-401 100	



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

Accessories, 770 Series		
<b>Locking lever, for "flying leads", manually operated</b>		<b>Locking lever, for "flying leads", tool operated</b>
	black 770-101 100 (4x25)	 black 770-111 100 (4x25)
	white 770-121 100 (4x25)	white 770-131 100 (4x25)
<b>Marker, for manual marking</b>		
	white 770-450 50	

**Dimensions**






Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)




# WINSTA® MIDI Sockets and Plugs, 5-Pole, 1-Conductor

<p>0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>20 ... 12 AWG</p>	<p>0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>20 ... 12 AWG</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Connectors, 5-pole, 1-conductor, with Push-in CAGE CLAMP® connection</b>  A large funneled conductor entry simplifies termination, especially with solid conductors (e.g., NYM)	<b>Socket with strain relief housing,</b> for 9 ... 13 mm cable diameter ③, Strip length, outer insulation: 55 mm			<b>Plug with strain relief housing,</b> for 9 ... 13 mm cable diameter ③, Strip length, outer insulation: 55 mm		
	● black	770-305	25	● black	770-315	25
	○ white	770-325	25	○ white	770-335	25

Item-Specific Accessories								
			<b>Lockout cap, for socket, separable, 12-pole</b> 		<b>Lockout cap, for plug, separable, 5-pole</b> 			
			black	770-201	100	yellow	770-360	100
			white	770-221	100			
					<b>Coding pin, for plug (A and B coding)</b> 			
					gray	770-401	100	

Accessories, 770 Series								
			<b>Locking lever, for "flying leads",</b> manually operated 		<b>Locking lever, for "flying leads",</b> tool operated 			
			black	770-101	100 (4x25)	black	770-111	100 (4x25)
			white	770-121	100 (4x25)	white	770-131	100 (4x25)
			<b>Marker, for manual marking</b> 					
			white	770-450	50			

Info	Dimensions
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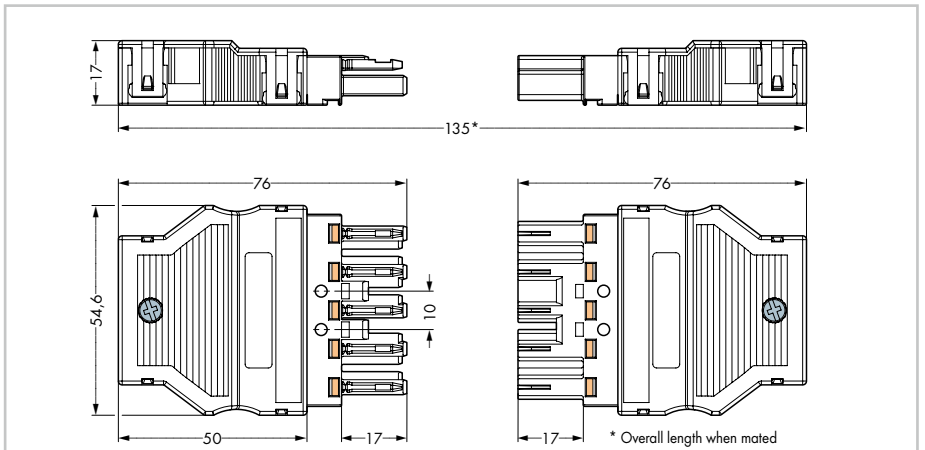
① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"



② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

③ For more strain relief housings, see page 186.

● black Coding A (N ⊕ L1 L2 L3)  
○ white Coding A (N ⊕ L1 L2 L3)

For coding information, see page 250.  
Fire load data available upon request.



0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	20 ... 12 AWG	0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	20 ... 12 AWG
 9 mm / 0.35 in.		 9 mm / 0.35 in.	
② Approvals		② Approvals	









**Notice:**

All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket without strain relief housing</b>			<b>Plug without strain relief housing</b>		
● black	770-405	50	● black	770-415	50
○ white	770-425	50	○ white	770-435	50



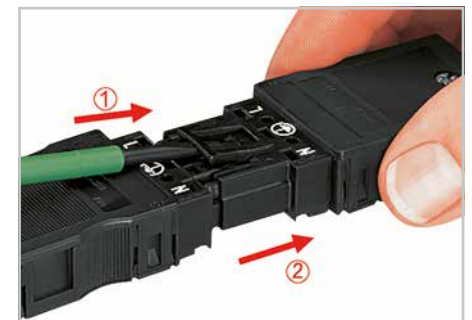
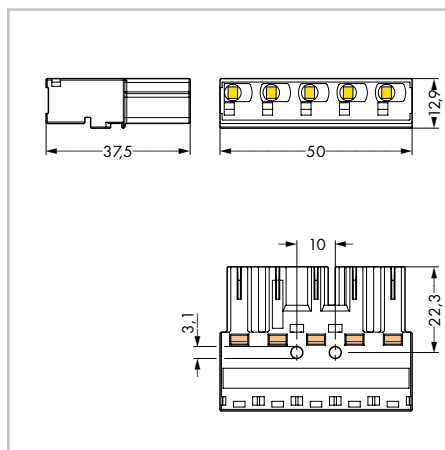
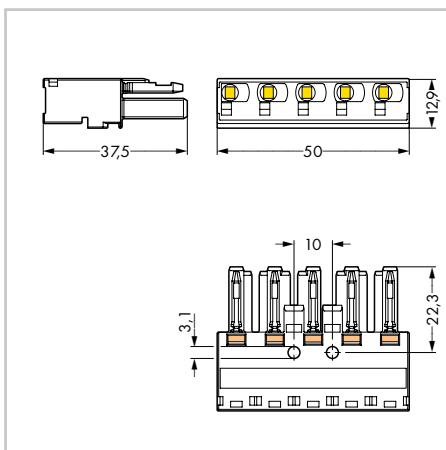
Snap on locking lever. Observe direction!  
(Example shows 3-pole plug)

Item-Specific Accessories					
<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for plug, separable, 5-pole</b>		
	black 770-201	100		yellow 770-360	100
	white 770-221	100			
<b>Coding pin, for plug (A and B coding)</b>					
		gray 770-401		100	
Accessories, 770 Series					
<b>Locking lever, for "flying leads", manually operated</b>			<b>Locking lever, for "flying leads", tool operated</b>		
	black 770-101	100 (4x25)		black 770-111	100 (4x25)
	white 770-121	100 (4x25)		white 770-131	100 (4x25)
<b>Marker, for manual marking</b>					
	white 770-450	50			



Locking lever, manually operated:  
1.) Press on locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

**Dimensions**



Locking lever, tool operated:  
1.) Unlatch locking lever.  
2.) Pull apart the connectors.  
(Example shows 3-pole connectors)

# WINSTA® MIDI Strain Relief Housings, 5-Pole, for Different Cable Diameters

	Snap-on type strain relief housings for: - 5-pole sockets - 5-pole plugs  <b>1</b> Approvals	Snap-on type strain relief housings for: - 5-pole sockets - 5-pole plugs  <b>1</b> Approvals
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Strain relief housing, 5-pole	Strain relief housing, for 2 cables, 5 ... 9 mm diameter <b>2</b> , Strip length, outer insulation: 55 mm			Strain relief housing, for 2 cables, 9 ... 13 mm diameter <b>2</b> , Strip length, outer insulation: 55 mm		
	black	770-505/023-000	25	black	770-505	25
	white	770-515/023-000	25	white	770-515	25

Item-Specific Accessories							
		Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm				Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm long Strip height: 6 mm <b>210-333</b> 100 Marking area: 48 x 6.5 mm	

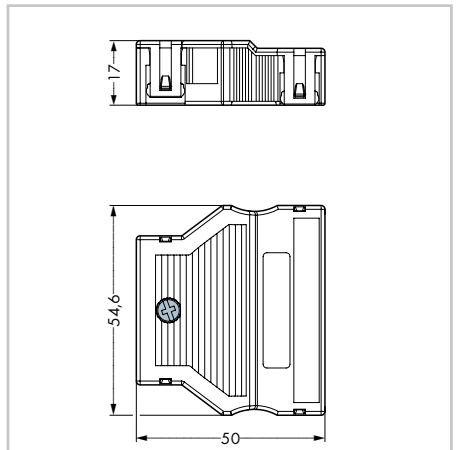
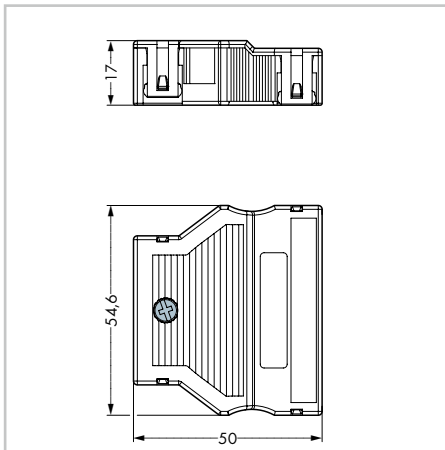
Info	Dimensions
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**1** For "International Certification Organizations" and "Approvals - User Guide," see page 534.

**2** For H05VV and NYM cables

For other cables, please contact factory.


Fire load data available upon request.

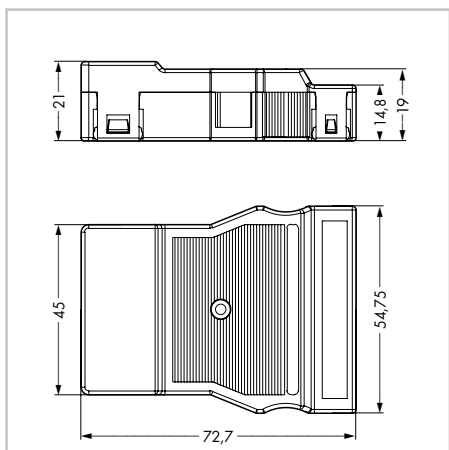


Snap-on type strain relief housings for:  
 - 5-pole sockets  
 - 5-pole plugs

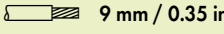
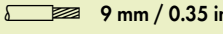
① Approvals

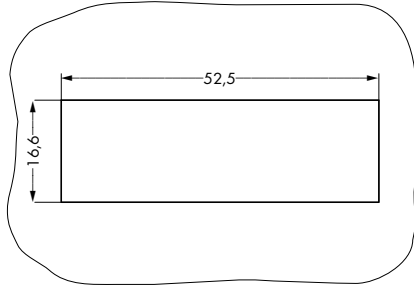


Color	Item No.	Pack. Unit	
<b>Strain relief housing for 4 mm<sup>2</sup> cables,</b>			
for 1 cable, 11.5 ... 16.5 mm diameter ②,			
Strip length, outer insulation: 71 mm			
black	770-505/021-000	25	
white	770-515/021-000	25	
<b>Marking strip, self-adhesive, on DIN A4 carrier card, 182 mm</b>			
long			
	Height: 6 mm	<b>210-333</b>	100
Marking area: 48 x 6.5 mm			
<b>Dimensions</b>			







# WINSTA® MIDI Snap-In Sockets and Plugs, 5-Pole

Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	



Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 5-pole, with Push-in CAGE CLAMP® connection	<b>Socket</b>			<b>Socket with protruding interface</b>		
	● black	770-705	50	● black	770-705/009-000	50
	○ white	770-725	50	○ white	770-725/009-000	50
	● blue	770-2105	50			
	● red	770-2305	50			
	For "Clean Earth" applications (loading up to 32A):					
	● green	770-2325	50			

Item-Specific Accessories						
	<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for socket, separable, 12-pole</b>		
		black 770-201	100		black 770-201	100
		white 770-221	100		white 770-221	100

Accessories, 770 Series						
	<b>Lockout cap, for cutout, 5-pole</b>			<b>Lockout cap, for cutout, 5-pole</b>		
		black 770-645	100		black 770-645	100
		white 770-695	100		white 770-695	100

Info	Dimensions
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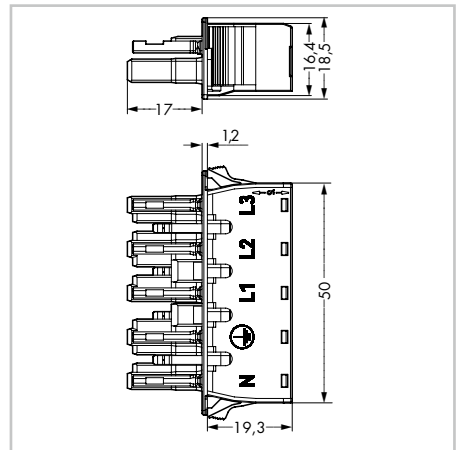
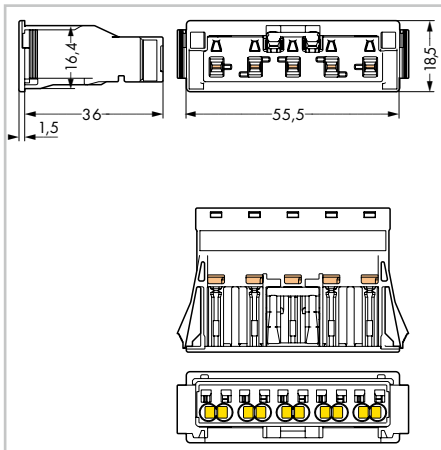
① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"



② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

③ Direct ground contact on position PE/PE1

● black	Coding A	(N ⊕ L1 L2 L3)
○ white	Coding A	(N ⊕ L1 L2 L3)
● blue	Coding I	(N ⊕ L DA- DA+)
● red	Coding P	(N ⊕ L1 L2 L3)
● green	Coding Q	(N PE1 PE2 PE3 L)

For coding information, see page 250.  
Fire load data available upon request.








<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p>	<p>Snap-in frame - for 5-pole sockets and plugs (see pages 133 and 135)</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Plug</b>			<b>Plug with direct ground contact ③</b>			<b>Snap-in frame, 5-pole, for 0.5 ... 2 mm plate thickness</b>		
● black	770-715	50	● black	770-715/007-000	50	black	770-321	100
○ white	770-735	50	○ white	770-735/007-000	50	white	770-341	100
● blue	770-2115	50	● blue	770-2115/007-000	50	<b>Snap-in frame, 5-pole, for 1 ... 3 mm plate thickness, suitable for coding A / B / I / P / Q</b>		
● red	770-2315	50	For "Clean Earth" applications (loading up to 32A):			black	770-320	100
For "Clean Earth" applications (loading up to 32A):			● green	770-2335	50	white	770-340	100

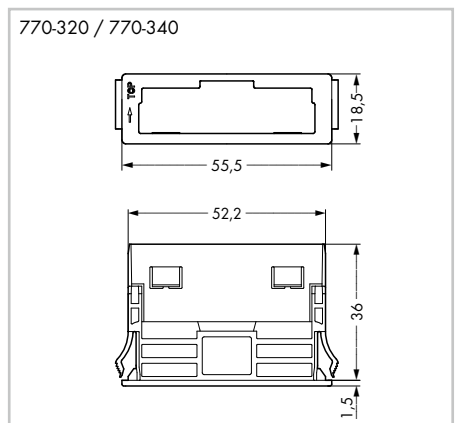
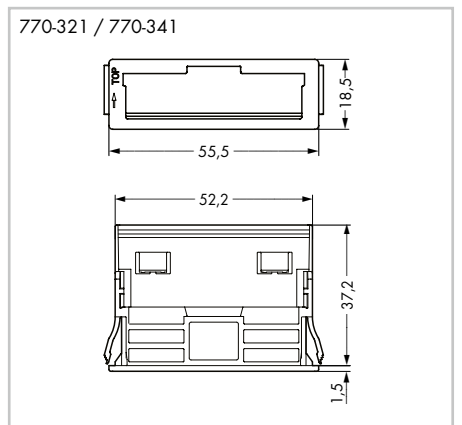
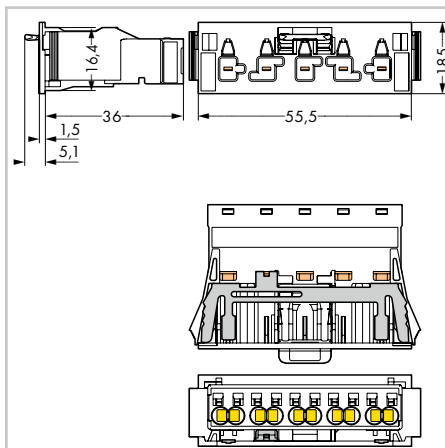
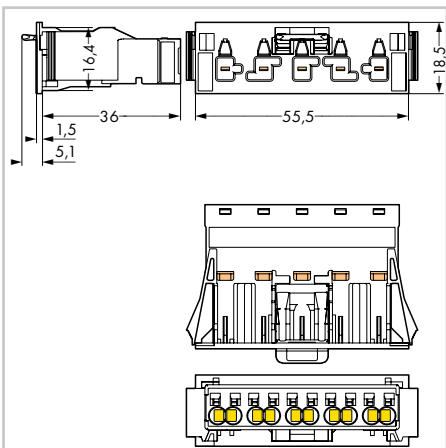
**Item-Specific Accessories**

<p><b>Lockout cap, for plug, separable, 5-pole</b></p> <p> yellow <b>770-360</b> 100</p>	<p><b>Lockout cap, for plug, separable, 5-pole</b></p> <p> yellow <b>770-360</b> 100</p>	<p><b>Locking lever, tool operated</b></p> <p> gray <b>770-140</b> 100 (4x25)</p>
<p><b>Coding pin, for plug (A and B coding)</b></p> <p> gray <b>770-401</b> 100</p>	<p><b>Coding pin, for plug (A and B coding)</b></p> <p> gray <b>770-401</b> 100</p>	

**Accessories, 770 Series**

<p><b>Lockout cap, for cutout, 5-pole</b></p> <p> black <b>770-645</b> 100 white <b>770-695</b> 100</p>	<p><b>Lockout cap, for cutout, 5-pole</b></p> <p> black <b>770-645</b> 100 white <b>770-695</b> 100</p>
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**Dimensions**



# WINSTA® MIDI PCB Connectors, 5-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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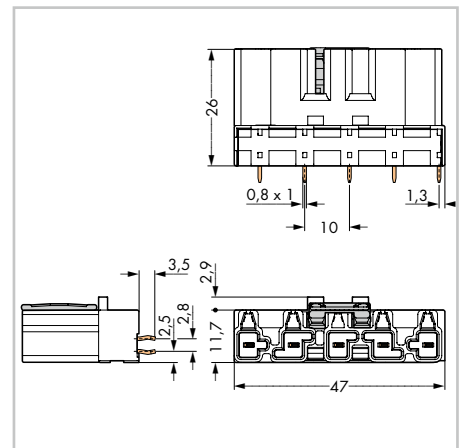
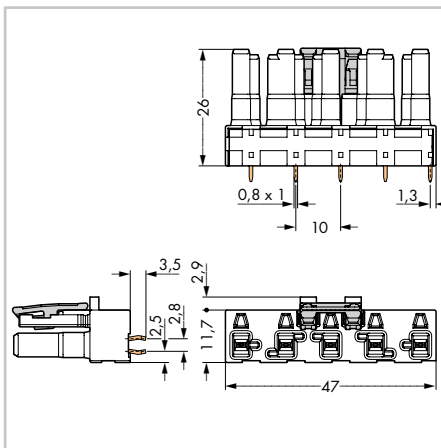


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 5-pole 2 solder pins per pole	Socket, straight			Plug, straight		
	● black	770-805	50	● black	770-815	50
	○ white	770-825	50	○ white	770-835	50
	● blue	770-3105	50	● blue	770-3115	50
<b>Item-Specific Accessories</b>						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	
<b>Accessories, 770 Series</b>						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
<b>Info</b>	<b>Dimensions</b>					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- black Coding A (N ⊕ L1 L2 L3)
- white Coding A (N ⊕ L1 L2 L3)
- blue Coding I (N ⊕ L DA- DA+)

For coding information, see page 250.  
Fire load data available upon request.










400 V/6 kV/3 $I_N$ 25 A  1 Approvals	400 V/6 kV/3 $I_N$ 25 A  1 Approvals
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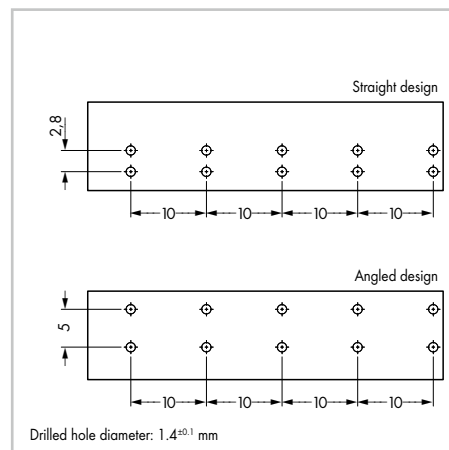
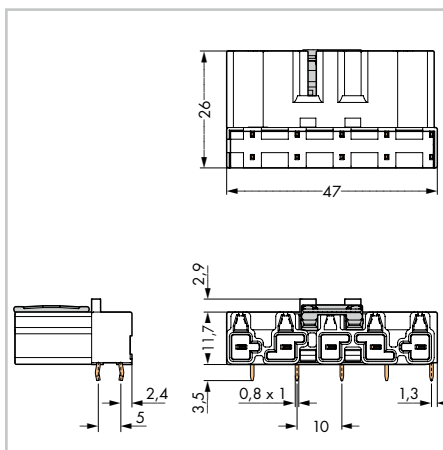
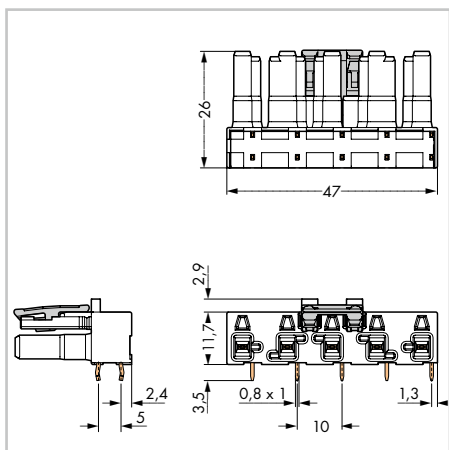


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
● black	770-805/011-000	50	● black	770-815/011-000	50
○ white	770-825/011-000	50	○ white	770-835/011-000	50
● blue	770-3105/011-000	50	● blue	770-3115/011-000	50

Item-Specific Accessories					
<b>Lockout cap, for socket, separable, 12-pole</b>  black 770-201 100 white 770-221 100			<b>Lockout cap, for plug, separable, 5-pole</b>  yellow 770-360 100		
<b>Coding pin, for plug (A and B coding)</b>  gray 770-401 100					

Accessories, 770 Series					
<b>Locking lever, for "flying leads", manually operated</b>  black 770-101 100 (4x25) white 770-121 100 (4x25)			<b>Locking lever, for "flying leads", tool operated</b>  black 770-111 100 (4x25) white 770-131 100 (4x25)		

Dimensions	Hole patterns
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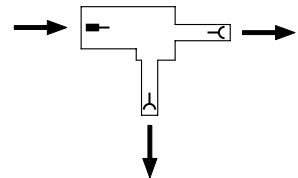
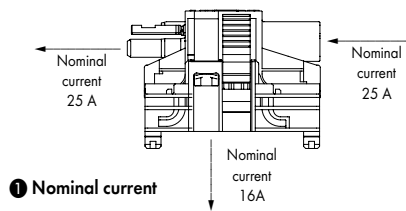
	<p>400 V/6 kV/3 I<sub>N</sub> 25 A (16 A) ❶</p> <p>❷ Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>❷ Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Linect® T-connector		Linect® T-connector ❸, 5-pole,			T-distribution connector, 1 x plug/2 x socket	
T-distribution connector		socket - plug		● black	770-621	50
Intermediate coupler		White housing, white cover		○ white	770-671	50
		○ white	25	● blue	770-617	50
		White housing, blue cover ❹		● red	770-921	50
		● blue	20	for "flying leads", with 3rd locking lever		
		White housing, dark gray cover		● black	770-622	50
		● dark gray	20	○ white	770-672	50
				● blue	770-620	50
				● red	770-922	50

Item-Specific Accessories						
		Lockout cap, for socket, separable, 12-pole			Lockout cap, for socket, separable, 12-pole	
		black	770-201	100	black	770-201
		white	770-221	100	white	770-221
		Lockout cap, for plug, separable, 5-pole			Lockout cap, for plug, separable, 5-pole	
		yellow	770-360	100	yellow	770-360

Info	Dimensions
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❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.

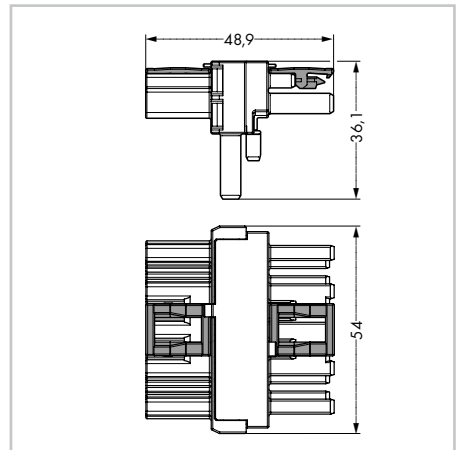
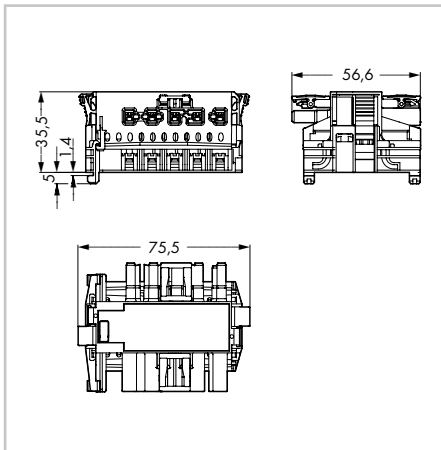
❸ For suitable lighting connectors, see page 55.

❹ Connectors for DALI applications

❺ One locking lever for each intermediate coupler is included.

● black	Coding A	(N ⊕ L1 L2 L3)
○ white	Coding A	(N ⊕ L1 L2 L3)
● blue	Coding I	(N ⊕ L DA- DA+)
● dark gray	Coding L	(N ⊕ L N' L')
● red	Coding P	(N ⊕ L1 L2 L3)

For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MIDI




## Intermediate Couplers, 5-Pole

400 V/6 kV/3 $I_N$ 25 A  ② Approvals	250 V/4 kV/3 400 V/6 kV/3 $I_N$ 25 A  ② Approvals	
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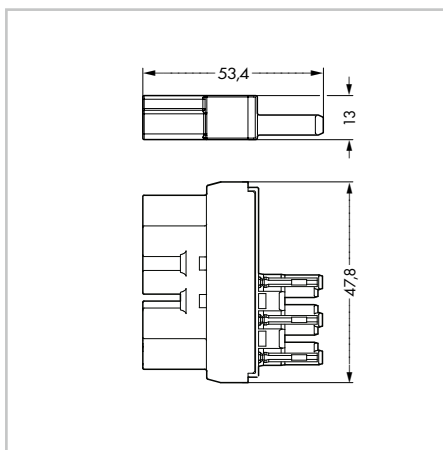
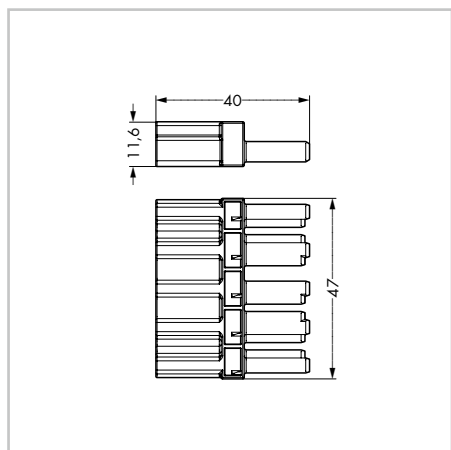


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Intermediate coupler, 1 x plug/1 x socket</b>			<b>Intermediate coupler, 5- to 3-pole ⑤</b>		
● black	770-605	100	● L1 - L	770-901	100
○ white	770-655	100	○ L1 - L	770-951	100
● blue	770-619	100	● L1 - L	770-911	100
			● L2 - L	770-902	100
			○ L2 - L	770-952	100
			● L2 - L	770-912	100
			● L3 - L	770-903	100
			○ L3 - L	770-953	100
			● L3 - L	770-913	100

### Item-Specific Accessories

<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>
<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>

### Dimensions









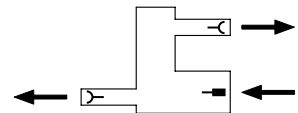
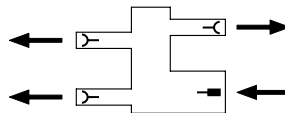
# WINSTA® MIDI Distribution Connectors, 5-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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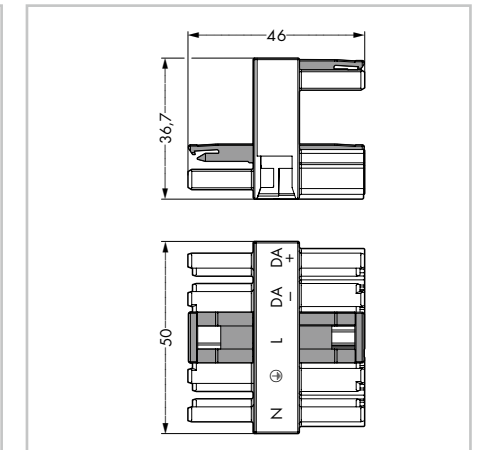
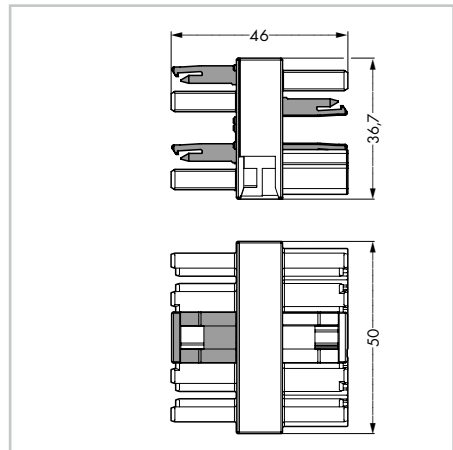


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Distribution connector, 3-way h-distribution connector						
Three-phase to single-phase distribution connectors, 5-pole						
	● black	770-609	25	● blue	770-992	50
	○ white	770-659	25			
	● blue	770-618	50			
	● red	770-909	50			
				● blue	770-993	50

Item-Specific Accessories							
	<b>Mounting plate</b> , for distribution connectors 			<b>Mounting plate</b> , for distribution connectors 			
		black	770-625	25	black	770-625	25
		white	770-675	25	white	770-675	25
	<b>Fixing pin</b> , for mounting plates 			<b>Fixing pin</b> , for mounting plates 			
		③ black	890-601	250	③ black	890-601	250
		④ black	770-601	250	④ black	770-601	250
	<b>Lockout cap</b> , for socket, separable, 12-pole 			<b>Lockout cap</b> , for socket, separable, 12-pole 			
		black	770-201	100	black	770-201	100
		white	770-221	100	white	770-221	100
Info	Dimensions						



- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② Position of jumper when delivered: L2
  - ③ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ④ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- |         |          |                 |
|---------|----------|-----------------|
| ● black | Coding A | (N ⊕ L1 L2 L3)  |
| ○ white | Coding A | (N ⊕ L1 L2 L3)  |
| ● blue  | Coding I | (N ⊕ L DA- DA+) |
| ● red   | Coding P | (N ⊕ L1 L2 L3)  |
- For coding information, see page 250.  
Fire load data available upon request.

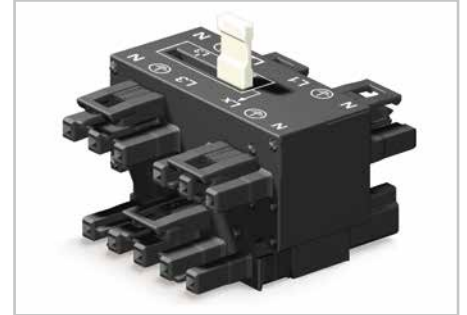


250 V/4 kV/3  
400 V/6 kV/3  
I<sub>N</sub> 25 A

1 Approvals







The different jumper positions allow for a wide range of different tap-off options to be selected. In addition to the 3 set tap-offs (L1/L2/L3), the selectable 4th tap-off provides for a high degree of flexibility before, during and after installation.



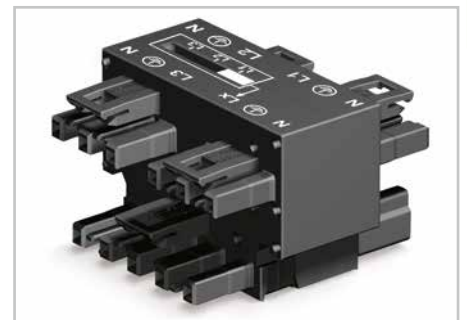
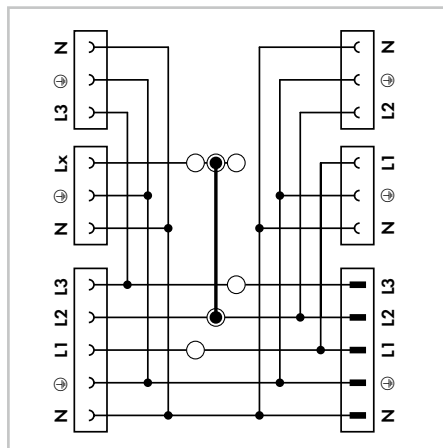
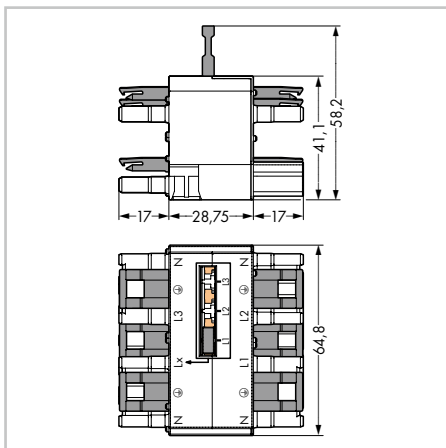
Movable jumper

Color	Item No.	Pack. Unit
<b>Three-phase to single-phase distribution connector ②</b>		
● black	770-640	10
○ white	770-690	10
● red	770-940	10

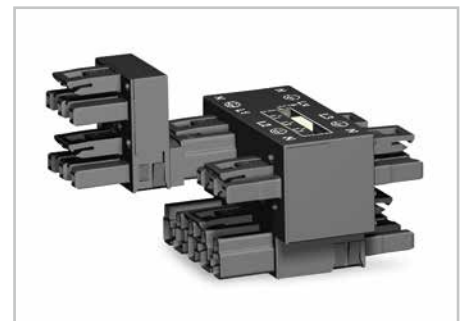
**Item-Specific Accessories**

<p><b>Mounting plate</b>, for distribution connectors</p>  <table border="1"> <tr> <td>● black</td> <td>770-625</td> <td>25</td> </tr> <tr> <td>○ white</td> <td>770-675</td> <td>25</td> </tr> </table>	● black	770-625	25	○ white	770-675	25	<p><b>Lockout cap</b>, for socket, separable, 12-pole</p>  <table border="1"> <tr> <td>● black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>○ white</td> <td>770-221</td> <td>100</td> </tr> </table>	● black	770-201	100	○ white	770-221	100
● black	770-625	25											
○ white	770-675	25											
● black	770-201	100											
○ white	770-221	100											
<p><b>Fixing pin</b>, for mounting plates</p>  <table border="1"> <tr> <td>③ ● black</td> <td>890-601</td> <td>250</td> </tr> <tr> <td>④ ● black</td> <td>770-601</td> <td>250</td> </tr> </table>	③ ● black	890-601	250	④ ● black	770-601	250	<p><b>Lockout cap</b>, for plug, separable, 5-pole</p>  <table border="1"> <tr> <td>● yellow</td> <td>770-360</td> <td>100</td> </tr> </table>	● yellow	770-360	100			
③ ● black	890-601	250											
④ ● black	770-601	250											
● yellow	770-360	100											

**Dimensions and Internal Circuit**



Jumper pushed down, flush with the housing (position L1).



An additional h-distribution connector doubles L1. This results in the following connection options:  
L1/L1/L2/L2/L3 with jumper in position L2  
L1/L1/L2/L3/L3 with jumper in position L3



Additional h-distribution connectors double L1 and L3. This results in the following connection option:  
L1/L1/L2/L2/L3/L3 with jumper in position L2  
NOTICE: h-distribution connectors can only be plugged on L1 and L3.

# WINSTA® MIDI Distribution Connectors with Phase Selection

<p>0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 400 V/6 kV/3 I<sub>N</sub> 25 A 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>20 ... 12 AWG</p>
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Lift jumper out of delivery position (L2) using a screwdriver and move it into the desired position.






Push down jumper in its new position (picture shows L3).



The 5-pole energy circuit can be extended using pluggable cable assemblies.



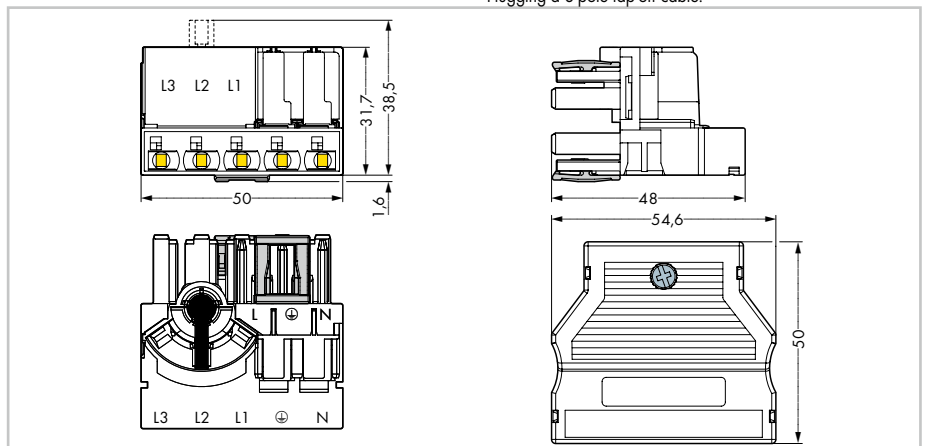
Plugging a 3-pole tap-off cable.

Description	Color	Item No.	Pack. Unit
<b>Distribution connector with phase selection, with Push-in CAGE CLAMP® connection,</b>	<b>Distribution connector with phase selection, with strain relief housing,</b>		
Tap-off: Socket, 3-pole, N ⊕ L	for 9 ... 13 mm cable diameter ④		
Through contact: Socket, 5-pole, N ⊕ L1 L2 L3	Strip length, outer insulation: 55 mm		
	● black	770-611	10
	○ white	770-661	10
<b>Item-Specific Accessories</b>			
	<b>Mounting plate, for distribution connectors</b>		
		black 770-625	25
		white 770-675	25
	<b>Fixing pin, for mounting plates</b>		
		⑤ black 890-601	250
		⑥ black 770-601	250
	<b>Lockout cap, for socket, separable, 12-pole</b>		
		black 770-201	100
		white 770-221	100
<b>Info</b>	<b>Dimensions</b>		

- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
- ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ③ Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.
- ④ For more strain relief housings, see page 186.
- ⑤ 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
- ⑥ 6.0 mm Ø, 1 ... 2.5 mm plate thickness

- black Coding A (N ⊕ L1 L2 L3)
- white Coding A (N ⊕ L1 L2 L3)

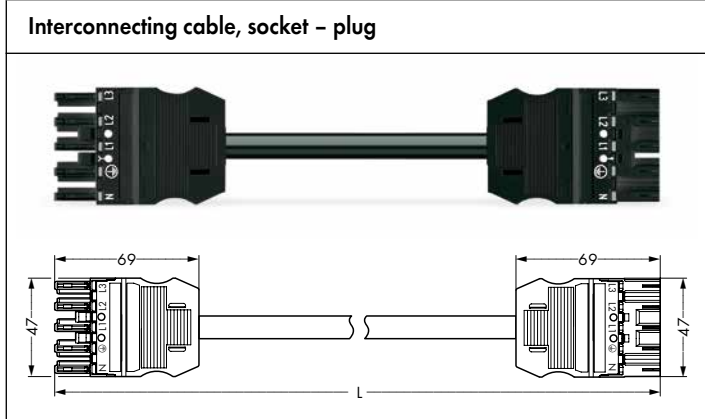
For coding information, see page 250.  
Fire load data available upon request.



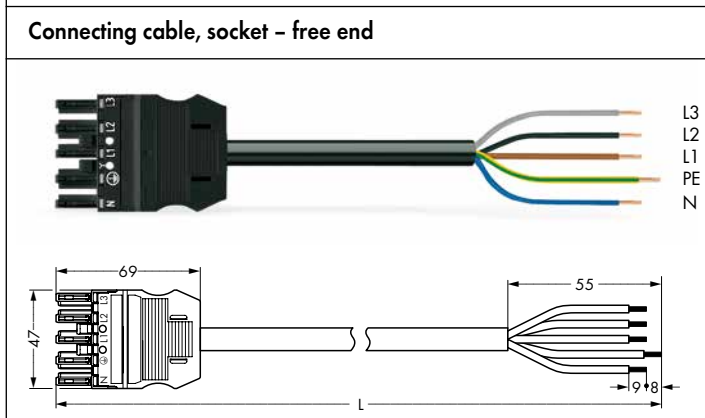


# WINSTA® MIDI Cable Assemblies 5 x 1.5 mm<sup>2</sup>

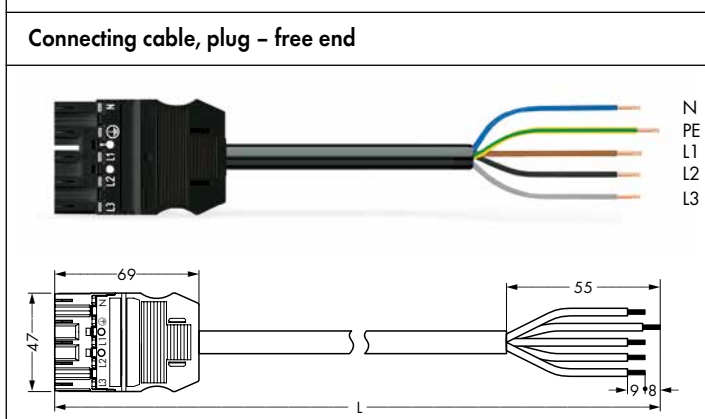
PVC	H05VV-F 5G1.5
halogen-free	H05Z1Z1-F 5G1.5
400 V/6 kV/3	I <sub>N</sub> 16 A
Conductor ends, bonded: 9 mm	
① Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/006-101	771-9995/006-102	771-9995/016-101	771-9995/016-102
2 m	771-9995/006-201	771-9995/006-202	771-9995/016-201	771-9995/016-202
3 m	771-9995/006-301	771-9995/006-302	771-9995/016-301	771-9995/016-302
4 m	771-9995/006-401	771-9995/006-402	771-9995/016-401	771-9995/016-402
5 m	771-9995/006-501	771-9995/006-502	771-9995/016-501	771-9995/016-502
6 m	771-9995/006-601	771-9995/006-602	771-9995/016-601	771-9995/016-602
7 m	771-9995/006-701	771-9995/006-702	771-9995/016-701	771-9995/016-702
8 m	771-9995/006-801	771-9995/006-802	771-9995/016-801	771-9995/016-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/106-101	771-9995/106-102	771-9995/116-101	771-9995/116-102
2 m	771-9995/106-201	771-9995/106-202	771-9995/116-201	771-9995/116-202
3 m	771-9995/106-301	771-9995/106-302	771-9995/116-301	771-9995/116-302
4 m	771-9995/106-401	771-9995/106-402	771-9995/116-401	771-9995/116-402
5 m	771-9995/106-501	771-9995/106-502	771-9995/116-501	771-9995/116-502
6 m	771-9995/106-601	771-9995/106-602	771-9995/116-601	771-9995/116-602
7 m	771-9995/106-701	771-9995/106-702	771-9995/116-701	771-9995/116-702
8 m	771-9995/106-801	771-9995/106-802	771-9995/116-801	771-9995/116-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/206-101	771-9995/206-102	771-9995/216-101	771-9995/216-102
2 m	771-9995/206-201	771-9995/206-202	771-9995/216-201	771-9995/216-202
3 m	771-9995/206-301	771-9995/206-302	771-9995/216-301	771-9995/216-302
4 m	771-9995/206-401	771-9995/206-402	771-9995/216-401	771-9995/216-402
5 m	771-9995/206-501	771-9995/206-502	771-9995/216-501	771-9995/216-502
6 m	771-9995/206-601	771-9995/206-602	771-9995/216-601	771-9995/216-602
7 m	771-9995/206-701	771-9995/206-702	771-9995/216-701	771-9995/216-702
8 m	771-9995/206-801	771-9995/206-802	771-9995/216-801	771-9995/216-802

**Info**

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

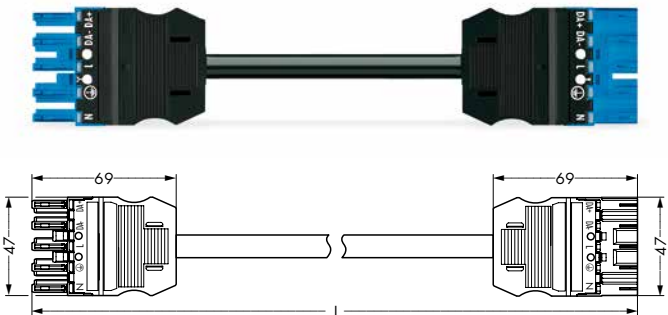
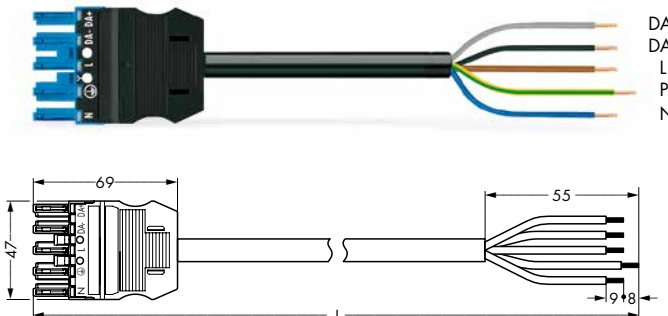
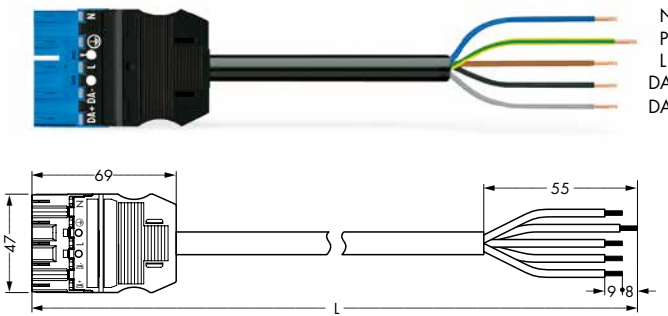


● black	Coding A	(N ⊕ L1 L2 L3)
○ white	Coding A	(N ⊕ L1 L2 L3)
● blue	Coding I	(N ⊕ L DA- DA+)

For coding information, see page 250.  
Fire load data available upon request.

**Accessories**

	manually operated		
	black	770-101	100 (4x25)
	white	770-121	100 (4x25)
	tool operated		
	black	770-111	100 (4x25)
	white	770-131	100 (4x25)
	black	770-201	100
	white	770-221	100
	yellow	770-360	100



		PVC	H05VV-F 5G1.5						
		halogen-free	H05Z1Z1-F 5G1.5						
		400 V/6 kV/3 I <sub>N</sub> 16 A							
		Conductor ends, bonded: 9 mm							
		① Approvals							
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>			
		● <b>Coding I,</b> e.g., for dimming function (DALI)							
		PVC		halogen-free					
		1 m	771-9985/006-101	771-9985/006-102	771-9985/016-101	771-9985/016-102			
		2 m	771-9985/006-201	771-9985/006-202	771-9985/016-201	771-9985/016-202			
		3 m	771-9985/006-301	771-9985/006-302	771-9985/016-301	771-9985/016-302			
		4 m	771-9985/006-401	771-9985/006-402	771-9985/016-401	771-9985/016-402			
		5 m	771-9985/006-501	771-9985/006-502	771-9985/016-501	771-9985/016-502			
		6 m	771-9985/006-601	771-9985/006-602	771-9985/016-601	771-9985/016-602			
		7 m	771-9985/006-701	771-9985/006-702	771-9985/016-701	771-9985/016-702			
		8 m	771-9985/006-801	771-9985/006-802	771-9985/016-801	771-9985/016-802			
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>			
		● <b>Coding I,</b> e.g., for dimming function (DALI)							
		PVC		halogen-free					
		1 m	771-9985/106-101	771-9985/106-102	771-9985/116-101	771-9985/116-102			
		2 m	771-9985/106-201	771-9985/106-202	771-9985/116-201	771-9985/116-202			
		3 m	771-9985/106-301	771-9985/106-302	771-9985/116-301	771-9985/116-302			
		4 m	771-9985/106-401	771-9985/106-402	771-9985/116-401	771-9985/116-402			
		5 m	771-9985/106-501	771-9985/106-502	771-9985/116-501	771-9985/116-502			
		6 m	771-9985/106-601	771-9985/106-602	771-9985/116-601	771-9985/116-602			
		7 m	771-9985/106-701	771-9985/106-702	771-9985/116-701	771-9985/116-702			
		8 m	771-9985/106-801	771-9985/106-802	771-9985/116-801	771-9985/116-802			
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>			
		● <b>Coding I,</b> e.g., for dimming function (DALI)							
		PVC		halogen-free					
		1 m	771-9985/206-101	771-9985/206-102	771-9985/216-101	771-9985/216-102			
		2 m	771-9985/206-201	771-9985/206-202	771-9985/216-201	771-9985/216-202			
		3 m	771-9985/206-301	771-9985/206-302	771-9985/216-301	771-9985/216-302			
		4 m	771-9985/206-401	771-9985/206-402	771-9985/216-401	771-9985/216-402			
		5 m	771-9985/206-501	771-9985/206-502	771-9985/216-501	771-9985/216-502			
		6 m	771-9985/206-601	771-9985/206-602	771-9985/216-601	771-9985/216-602			
		7 m	771-9985/206-701	771-9985/206-702	771-9985/216-701	771-9985/216-702			
		8 m	771-9985/206-801	771-9985/206-802	771-9985/216-801	771-9985/216-802			
		<b>Accessories</b>							
		<b>Locking lever, for "flying leads",</b>							
		manually operated							
		black		770-101	100 (4x25)				
		white		770-121	100 (4x25)				
		<b>Locking lever, for "flying leads",</b>							
		tool operated							
		black		770-111	100 (4x25)				
		white		770-131	100 (4x25)				
		<b>Lockout cap, for socket, separable, 12-pole</b>							
		black		770-201	100				
		white		770-221	100				
<b>Coding pin, for plug (A and B coding)</b>		<b>Lockout cap, for plug, separable, 5-pole</b>							
		gray	770-401	100					
						yellow	770-360	100	

Recommended items are shown in red and available for immediate delivery!

	PVC	H05VV-F 5G1.5
	halogen-free	H05Z1Z1-F 5G1.5
	400 V/6 kV/3	I <sub>N</sub> 16 A
	Conductor ends, bonded: 9 mm	
	① Approvals	

Interconnecting cable, socket – plug	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding L				
	PVC		halogen-free		
	1 m	771-8985/006-103	771-8985/006-104	771-8985/016-103	771-8985/016-104
	2 m	771-8985/006-203	771-8985/006-204	771-8985/016-203	771-8985/016-204
	3 m	771-8985/006-303	771-8985/006-304	771-8985/016-303	771-8985/016-304
	4 m	771-8985/006-403	771-8985/006-404	771-8985/016-403	771-8985/016-404
	5 m	771-8985/006-503	771-8985/006-504	771-8985/016-503	771-8985/016-504
	6 m	771-8985/006-603	771-8985/006-604	771-8985/016-603	771-8985/016-604
	7 m	771-8985/006-703	771-8985/006-704	771-8985/016-703	771-8985/016-704
	8 m	771-8985/006-803	771-8985/006-804	771-8985/016-803	771-8985/016-804

Connecting cable, socket – free end	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding L				
	PVC		halogen-free		
	1 m	771-8985/106-103	771-8985/106-104	771-8985/116-103	771-8985/116-104
	2 m	771-8985/106-203	771-8985/106-204	771-8985/116-203	771-8985/116-204
	3 m	771-8985/106-303	771-8985/106-304	771-8985/116-303	771-8985/116-304
	4 m	771-8985/106-403	771-8985/106-404	771-8985/116-403	771-8985/116-404
	5 m	771-8985/106-503	771-8985/106-504	771-8985/116-503	771-8985/116-504
	6 m	771-8985/106-603	771-8985/106-604	771-8985/116-603	771-8985/116-604
	7 m	771-8985/106-703	771-8985/106-704	771-8985/116-703	771-8985/116-704
	8 m	771-8985/106-803	771-8985/106-804	771-8985/116-803	771-8985/116-804

Connecting cable, plug – free end	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding L				
	PVC		halogen-free		
	1 m	771-8985/206-103	771-8985/206-104	771-8985/216-103	771-8985/216-104
	2 m	771-8985/206-203	771-8985/206-204	771-8985/216-203	771-8985/216-204
	3 m	771-8985/206-303	771-8985/206-304	771-8985/216-303	771-8985/216-304
	4 m	771-8985/206-403	771-8985/206-404	771-8985/216-403	771-8985/216-404
	5 m	771-8985/206-503	771-8985/206-504	771-8985/216-503	771-8985/216-504
	6 m	771-8985/206-603	771-8985/206-604	771-8985/216-603	771-8985/216-604
	7 m	771-8985/206-703	771-8985/206-704	771-8985/216-703	771-8985/216-704
	8 m	771-8985/206-803	771-8985/206-804	771-8985/216-803	771-8985/216-804

<b>Info</b>	<b>Accessories</b>
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① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

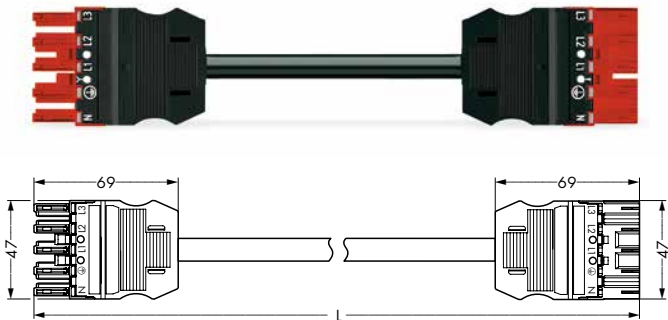
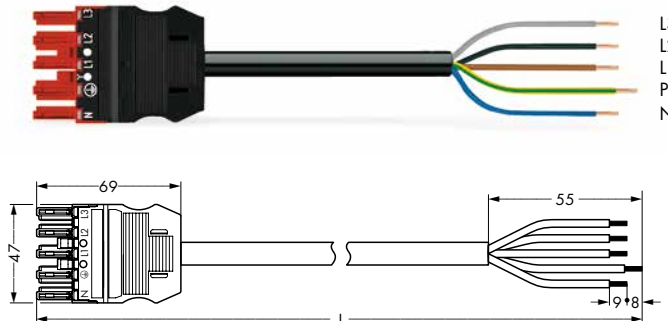
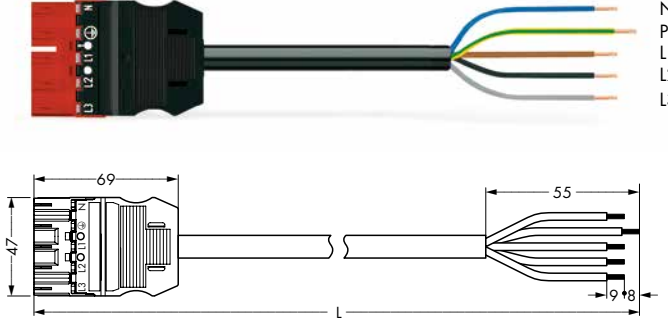




For other cables, please contact factory.

● dark gray Coding L (N ⊕ L N' L')

● red Coding P (N ⊕ L1 L2 L3)

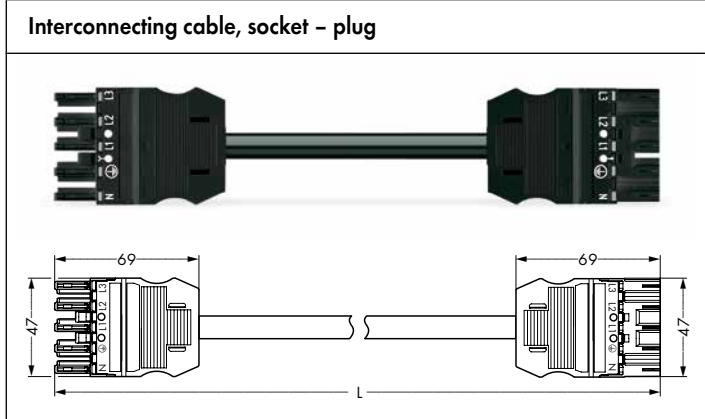
For coding information, see page 250.  
Fire load data available upon request.

	manually operated		
	black	770-101	100 (4x25)
	white	770-121	100 (4x25)
	tool operated		
	black	770-111	100 (4x25)
	white	770-131	100 (4x25)
	lockout cap, for socket, separable, 12-pole		
	black	770-201	100
	white	770-221	100
	lockout cap, for plug, separable, 5-pole		
	yellow	770-360	100

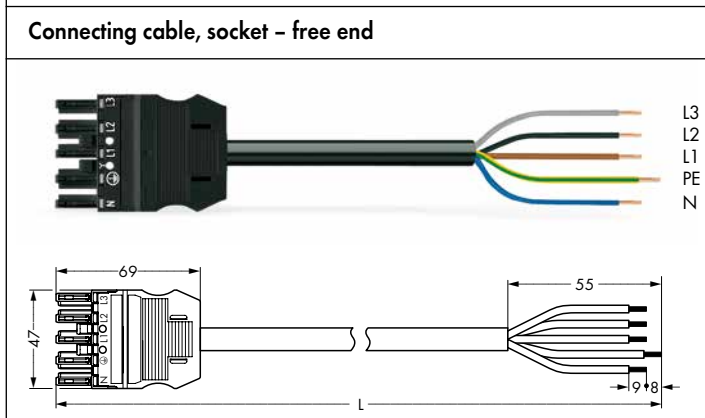
	PVC	H05VV-F 5G1.5			
	halogen-free	H05Z1Z1-F 5G1.5			
	400 V/6 kV/3 I <sub>N</sub> 16 A				
	Conductor ends, bonded: 9 mm				
	① Approvals				
<b>Interconnecting cable, socket – plug</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding P				
	PVC		halogen-free		
	1 m	771-9975/006-101	771-9975/006-102	771-9975/016-101	771-9975/016-102
	2 m	771-9975/006-201	771-9975/006-202	771-9975/016-201	771-9975/016-202
	3 m	771-9975/006-301	771-9975/006-302	771-9975/016-301	771-9975/016-302
	4 m	771-9975/006-401	771-9975/006-402	771-9975/016-401	771-9975/016-402
	5 m	771-9975/006-501	771-9975/006-502	771-9975/016-501	771-9975/016-502
	6 m	771-9975/006-601	771-9975/006-602	771-9975/016-601	771-9975/016-602
	7 m	771-9975/006-701	771-9975/006-702	771-9975/016-701	771-9975/016-702
	8 m	771-9975/006-801	771-9975/006-802	771-9975/016-801	771-9975/016-802
<b>Connecting cable, socket – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding P				
	PVC		halogen-free		
	1 m	771-9975/106-101	771-9975/106-102	771-9975/116-101	771-9975/116-102
	2 m	771-9975/106-201	771-9975/106-202	771-9975/116-201	771-9975/116-202
	3 m	771-9975/106-301	771-9975/106-302	771-9975/116-301	771-9975/116-302
	4 m	771-9975/106-401	771-9975/106-402	771-9975/116-401	771-9975/116-402
	5 m	771-9975/106-501	771-9975/106-502	771-9975/116-501	771-9975/116-502
	6 m	771-9975/106-601	771-9975/106-602	771-9975/116-601	771-9975/116-602
	7 m	771-9975/106-701	771-9975/106-702	771-9975/116-701	771-9975/116-702
	8 m	771-9975/106-801	771-9975/106-802	771-9975/116-801	771-9975/116-802
<b>Connecting cable, plug – free end</b>	Length	Item No. black	Item No. white	Item No. black	Item No. white
	● Coding P				
	PVC		halogen-free		
	1 m	771-9975/206-101	771-9975/206-102	771-9975/216-101	771-9975/216-102
	2 m	771-9975/206-201	771-9975/206-202	771-9975/216-201	771-9975/216-202
	3 m	771-9975/206-301	771-9975/206-302	771-9975/216-301	771-9975/216-302
	4 m	771-9975/206-401	771-9975/206-402	771-9975/216-401	771-9975/216-402
	5 m	771-9975/206-501	771-9975/206-502	771-9975/216-501	771-9975/216-502
	6 m	771-9975/206-601	771-9975/206-602	771-9975/216-601	771-9975/216-602
	7 m	771-9975/206-701	771-9975/206-702	771-9975/216-701	771-9975/216-702
	8 m	771-9975/206-801	771-9975/206-802	771-9975/216-801	771-9975/216-802
	<b>Accessories</b>				
	<b>Locking lever, for "flying leads",</b>				
		manually operated			
		black	770-101	100 (4x25)	
		white	770-121	100 (4x25)	
	<b>Locking lever, for "flying leads",</b>				
		tool operated			
		black	770-111	100 (4x25)	
		white	770-131	100 (4x25)	
	<b>Lockout cap, for socket, separable, 12-pole</b>				
		black		770-201 100	
		white		770-221 100	
	<b>Lockout cap, for plug, separable, 5-pole</b>				
		yellow		770-360 100	

# WINSTA® MIDI Cable Assemblies 5 x 2.5 mm<sup>2</sup>

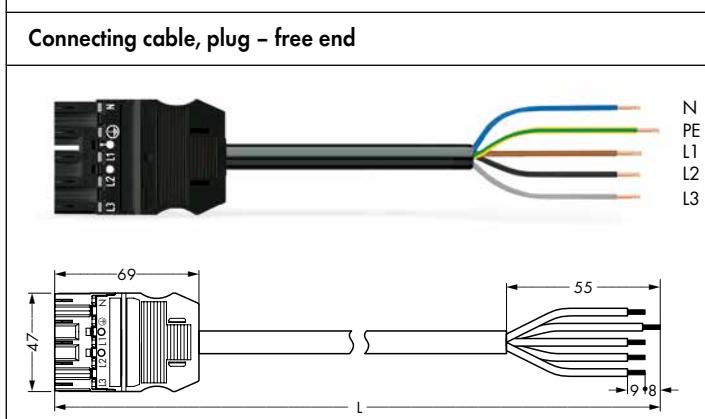
PVC	H05VV-F 5G2.5
halogen-free	H05Z1Z1-F 5G2.5
400 V/6 kV/3	I <sub>N</sub> 20 A
Conductor ends, bonded: 9 mm	
① Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/007-101	771-9995/007-102	771-9995/017-101	771-9995/017-102
2 m	771-9995/007-201	771-9995/007-202	771-9995/017-201	771-9995/017-202
3 m	771-9995/007-301	771-9995/007-302	771-9995/017-301	771-9995/017-302
4 m	771-9995/007-401	771-9995/007-402	771-9995/017-401	771-9995/017-402
5 m	771-9995/007-501	771-9995/007-502	771-9995/017-501	771-9995/017-502
6 m	771-9995/007-601	771-9995/007-602	771-9995/017-601	771-9995/017-602
7 m	771-9995/007-701	771-9995/007-702	771-9995/017-701	771-9995/017-702
8 m	771-9995/007-801	771-9995/007-802	771-9995/017-801	771-9995/017-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/107-101	771-9995/107-102	771-9995/117-101	771-9995/117-102
2 m	771-9995/107-201	771-9995/107-202	771-9995/117-201	771-9995/117-202
3 m	771-9995/107-301	771-9995/107-302	771-9995/117-301	771-9995/117-302
4 m	771-9995/107-401	771-9995/107-402	771-9995/117-401	771-9995/117-402
5 m	771-9995/107-501	771-9995/107-502	771-9995/117-501	771-9995/117-502
6 m	771-9995/107-601	771-9995/107-602	771-9995/117-601	771-9995/117-602
7 m	771-9995/107-701	771-9995/107-702	771-9995/117-701	771-9995/117-702
8 m	771-9995/107-801	771-9995/107-802	771-9995/117-801	771-9995/117-802



Length	Item No. black	Item No. white	Item No. black	Item No. white
● ○ Coding A				
PVC		halogen-free		
1 m	771-9995/207-101	771-9995/207-102	771-9995/217-101	771-9995/217-102
2 m	771-9995/207-201	771-9995/207-202	771-9995/217-201	771-9995/217-202
3 m	771-9995/207-301	771-9995/207-302	771-9995/217-301	771-9995/217-302
4 m	771-9995/207-401	771-9995/207-402	771-9995/217-401	771-9995/217-402
5 m	771-9995/207-501	771-9995/207-502	771-9995/217-501	771-9995/217-502
6 m	771-9995/207-601	771-9995/207-602	771-9995/217-601	771-9995/217-602
7 m	771-9995/207-701	771-9995/207-702	771-9995/217-701	771-9995/217-702
8 m	771-9995/207-801	771-9995/207-802	771-9995/217-801	771-9995/217-802

**Info**

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

● black	Coding A	(N ⊕ L1 L2 L3)
○ white	Coding A	(N ⊕ L1 L2 L3)
● blue	Coding I	(N ⊕ L DA- DA+)

For coding information, see page 250.  
Fire load data available upon request.

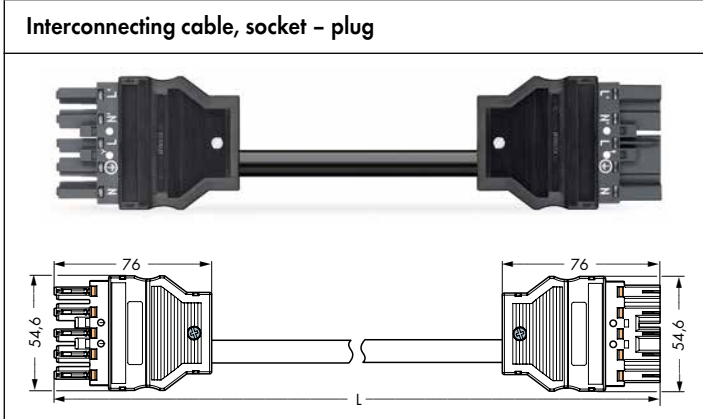
**Accessories**

	manually operated		
	black	770-101	100 (4x25)
	white	770-121	100 (4x25)
	tool operated		
	black	770-111	100 (4x25)
	white	770-131	100 (4x25)
	black	770-201	100
	white	770-221	100
	yellow	770-360	100

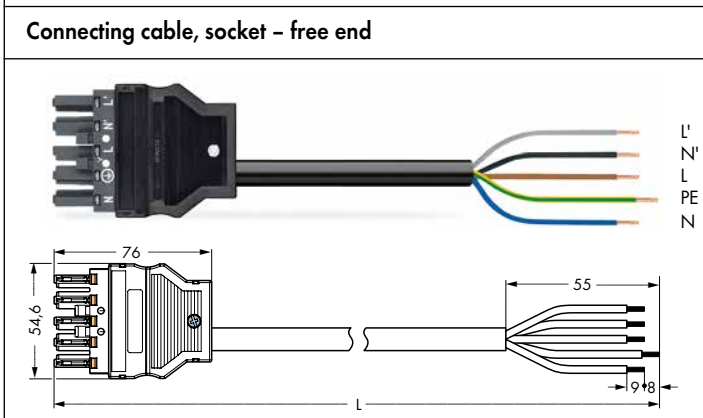
	PVC	H05VV-F 5G2.5			
	halogen-free	H05Z1Z1-F 5G2.5			
	400 V/6 kV/3 I <sub>N</sub> 20 A				
	Conductor ends, bonded: 9 mm				
	① Approvals				
<b>Interconnecting cable, socket – plug</b>	<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>
	● <b>Coding I,</b> e.g., for dimming function (DALI)				
	<b>PVC</b>		<b>halogen-free</b>		
	1 m	771-9985/007-101	771-9985/007-102	771-9985/017-101	771-9985/017-102
	2 m	771-9985/007-201	771-9985/007-202	771-9985/017-201	771-9985/017-202
	3 m	771-9985/007-301	771-9985/007-302	771-9985/017-301	771-9985/017-302
	4 m	771-9985/007-401	771-9985/007-402	771-9985/017-401	771-9985/017-402
	5 m	771-9985/007-501	771-9985/007-502	771-9985/017-501	771-9985/017-502
	6 m	771-9985/007-601	771-9985/007-602	771-9985/017-601	771-9985/017-602
	7 m	771-9985/007-701	771-9985/007-702	771-9985/017-701	771-9985/017-702
	8 m	771-9985/007-801	771-9985/007-802	771-9985/017-801	771-9985/017-802
<b>Connecting cable, socket – free end</b>	<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>
	● <b>Coding I,</b> e.g., for dimming function (DALI)				
	<b>PVC</b>		<b>halogen-free</b>		
	1 m	771-9985/107-101	771-9985/107-102	771-9985/117-101	771-9985/117-102
	2 m	771-9985/107-201	771-9985/107-202	771-9985/117-201	771-9985/117-202
	3 m	771-9985/107-301	771-9985/107-302	771-9985/117-301	771-9985/117-302
	4 m	771-9985/107-401	771-9985/107-402	771-9985/117-401	771-9985/117-402
	5 m	771-9985/107-501	771-9985/107-502	771-9985/117-501	771-9985/117-502
	6 m	771-9985/107-601	771-9985/107-602	771-9985/117-601	771-9985/117-602
	7 m	771-9985/107-701	771-9985/107-702	771-9985/117-701	771-9985/117-702
	8 m	771-9985/107-801	771-9985/107-802	771-9985/117-801	771-9985/117-802
<b>Connecting cable, plug – free end</b>	<b>Length</b>	<b>Item No. black</b>	<b>Item No. white</b>	<b>Item No. black</b>	<b>Item No. white</b>
	● <b>Coding I,</b> e.g., for dimming function (DALI)				
	<b>PVC</b>		<b>halogen-free</b>		
	1 m	771-9985/207-101	771-9985/207-102	771-9985/217-101	771-9985/217-102
	2 m	771-9985/207-201	771-9985/207-202	771-9985/217-201	771-9985/217-202
	3 m	771-9985/207-301	771-9985/207-302	771-9985/217-301	771-9985/217-302
	4 m	771-9985/207-401	771-9985/207-402	771-9985/217-401	771-9985/217-402
	5 m	771-9985/207-501	771-9985/207-502	771-9985/217-501	771-9985/217-502
	6 m	771-9985/207-601	771-9985/207-602	771-9985/217-601	771-9985/217-602
	7 m	771-9985/207-701	771-9985/207-702	771-9985/217-701	771-9985/217-702
	8 m	771-9985/207-801	771-9985/207-802	771-9985/217-801	771-9985/217-802
<b>Accessories</b>					
<b>Locking lever, for "flying leads",</b>					
manually operated					
		black	770-101	100	(4x25)
		white	770-121	100	(4x25)
<b>Locking lever, for "flying leads",</b>					
tool operated					
		black	770-111	100	(4x25)
		white	770-131	100	(4x25)
<b>Lockout cap, for socket, separable, 12-pole</b>					
		black	770-201	100	
		white	770-221	100	
<b>Lockout cap, for plug, separable, 5-pole</b>					
		yellow	770-360	100	

Recommended items are shown in red and available for immediate delivery!

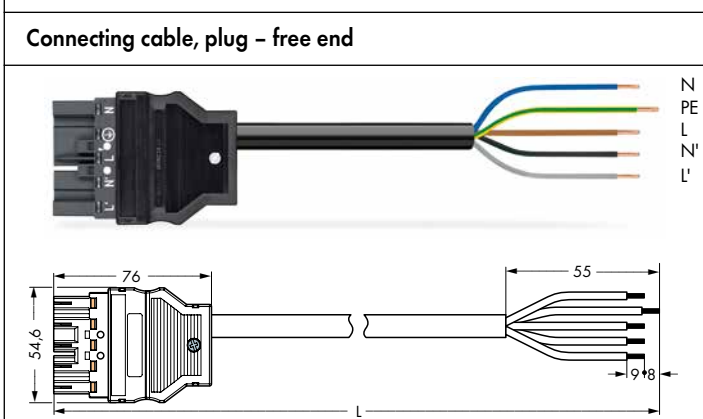
	PVC	H05VV-F 5G2.5
	halogen-free	H05Z1Z1-F 5G2.5
	400 V/6 kV/3	I <sub>N</sub> 20 A
	Conductor ends, bonded: 9 mm	
	① Approvals	



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8985/007-103	771-8985/007-104	771-8985/017-103	771-8985/017-104
2 m	771-8985/007-203	771-8985/007-204	771-8985/017-203	771-8985/017-204
3 m	771-8985/007-303	771-8985/007-304	771-8985/017-303	771-8985/017-304
4 m	771-8985/007-403	771-8985/007-404	771-8985/017-403	771-8985/017-404
5 m	771-8985/007-503	771-8985/007-504	771-8985/017-503	771-8985/017-504
6 m	771-8985/007-603	771-8985/007-604	771-8985/017-603	771-8985/017-604
7 m	771-8985/007-703	771-8985/007-704	771-8985/017-703	771-8985/017-704
8 m	771-8985/007-803	771-8985/007-804	771-8985/017-803	771-8985/017-804



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8985/107-103	771-8985/107-104	771-8985/117-103	771-8985/117-104
2 m	771-8985/107-203	771-8985/107-204	771-8985/117-203	771-8985/117-204
3 m	771-8985/107-303	771-8985/107-304	771-8985/117-303	771-8985/117-304
4 m	771-8985/107-403	771-8985/107-404	771-8985/117-403	771-8985/117-404
5 m	771-8985/107-503	771-8985/107-504	771-8985/117-503	771-8985/117-504
6 m	771-8985/107-603	771-8985/107-604	771-8985/117-603	771-8985/117-604
7 m	771-8985/107-703	771-8985/107-704	771-8985/117-703	771-8985/117-704
8 m	771-8985/107-803	771-8985/107-804	771-8985/117-803	771-8985/117-804



Length	Item No. black	Item No. white	Item No. black	Item No. white
● Coding L				
PVC		halogen-free		
1 m	771-8985/207-103	771-8985/207-104	771-8985/217-103	771-8985/217-104
2 m	771-8985/207-203	771-8985/207-204	771-8985/217-203	771-8985/217-204
3 m	771-8985/207-303	771-8985/207-304	771-8985/217-303	771-8985/217-304
4 m	771-8985/207-403	771-8985/207-404	771-8985/217-403	771-8985/217-404
5 m	771-8985/207-503	771-8985/207-504	771-8985/217-503	771-8985/217-504
6 m	771-8985/207-603	771-8985/207-604	771-8985/217-603	771-8985/217-604
7 m	771-8985/207-703	771-8985/207-704	771-8985/217-703	771-8985/217-704
8 m	771-8985/207-803	771-8985/207-804	771-8985/217-803	771-8985/217-804

**Info**

**Accessories**

① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.

For other cables, please contact factory.

- dark gray Coding L (N ⊕ L N' L')
- red Coding P (N ⊕ L1 L2 L3)

For coding information, see page 250.  
Fire load data available upon request.

**Locking lever, for "flying leads",**



manually operated		
black	770-101	100 (4x25)
white	770-121	100 (4x25)

**Locking lever, for "flying leads",**



tool operated		
black	770-111	100 (4x25)
white	770-131	100 (4x25)

**Lockout cap, for socket, separable, 12-pole**

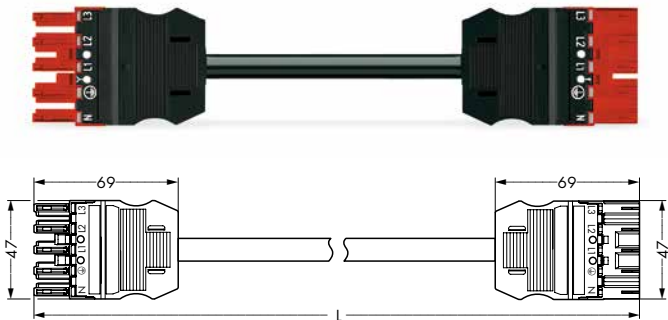
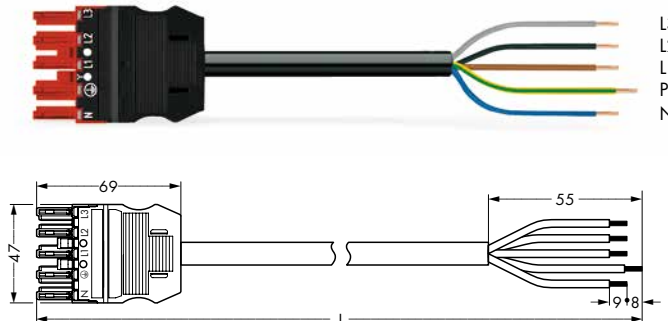
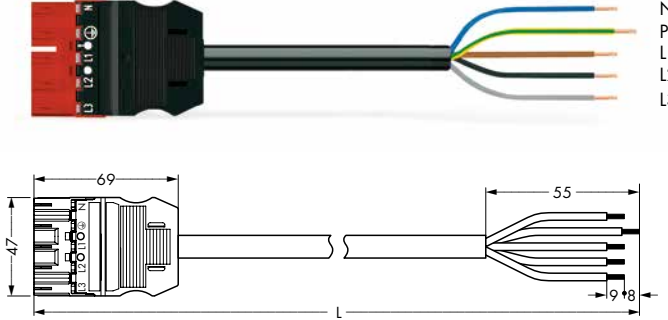


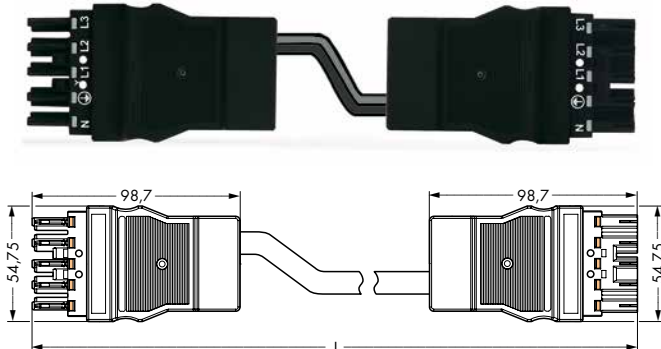
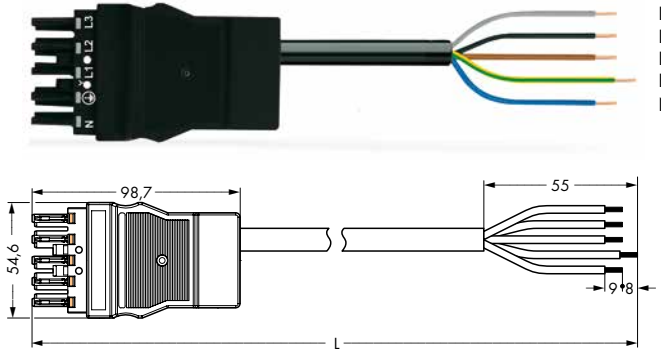
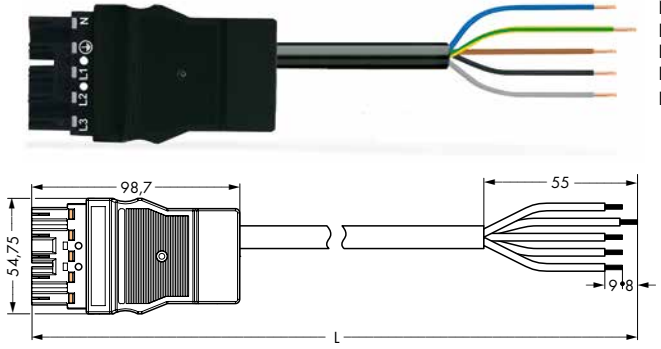
black	770-201	100
white	770-221	100

**Lockout cap, for plug, separable, 5-pole**



yellow	770-360	100
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	<p>PVC H05VV-F 5G2.5 halogen-free H05Z1Z1-F 5G2.5</p> <p>400 V/6 kV/3 I<sub>N</sub> 20 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																																							
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		<p>PVC H05VV-F 5G4 halogen-free (H)05 Z1Z1-F 5G4</p> <p>400 V/6 kV/3 I<sub>N</sub> 25 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																	
<p>Interconnecting cable, socket – plug</p> 		<table border="1"> <thead> <tr> <th>Length</th> <th>Item No. black</th> <th>Item No. black</th> </tr> </thead> <tbody> <tr> <td colspan="3">● Coding A</td> </tr> <tr> <td colspan="2">PVC</td> <td>halogen-free</td> </tr> <tr> <td>1 m</td> <td>771-8995/008-101</td> <td>771-8995/018-101</td> </tr> <tr> <td>2 m</td> <td>771-8995/008-201</td> <td>771-8995/018-201</td> </tr> <tr> <td>3 m</td> <td>771-8995/008-301</td> <td>771-8995/018-301</td> </tr> <tr> <td>4 m</td> <td>771-8995/008-401</td> <td>771-8995/018-401</td> </tr> <tr> <td>5 m</td> <td>771-8995/008-501</td> <td>771-8995/018-501</td> </tr> <tr> <td>6 m</td> <td>771-8995/008-601</td> <td>771-8995/018-601</td> </tr> <tr> <td>7 m</td> <td>771-8995/008-701</td> <td>771-8995/018-701</td> </tr> <tr> <td>8 m</td> <td>771-8995/008-801</td> <td>771-8995/018-801</td> </tr> </tbody> </table>	Length	Item No. black	Item No. black	● Coding A			PVC		halogen-free	1 m	771-8995/008-101	771-8995/018-101	2 m	771-8995/008-201	771-8995/018-201	3 m	771-8995/008-301	771-8995/018-301	4 m	771-8995/008-401	771-8995/018-401	5 m	771-8995/008-501	771-8995/018-501	6 m	771-8995/008-601	771-8995/018-601	7 m	771-8995/008-701	771-8995/018-701	8 m	771-8995/008-801	771-8995/018-801
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<p>Info</p> <p>① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>For other cables, please contact factory.</p> <p>● black Coding A (N ⊕ L1 L2 L3)</p> <p>For coding information, see page 250. Fire load data available upon request.</p>		<p>Accessories</p> <p>Locking lever, for "flying leads", manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </table> <p>Locking lever, for "flying leads", tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </table> <p>Lockout cap, for socket, separable, 12-pole</p> <table border="1"> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </table> <p>Lockout cap, for plug, separable, 5-pole</p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table>	black	770-101	100 (4x25)	white	770-121	100 (4x25)	black	770-111	100 (4x25)	white	770-131	100 (4x25)	black	770-201	100	white	770-221	100	yellow	770-360	100												
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# WINSTA® MIDI Strain Relief Housings, 6-Pole

Snap-on type strain relief housings for:  
 - two 3-pole sockets  
 - two 3-pole plugs  
 - 3-pole socket and 3-pole plug



Application example: 6-pole connector

Description	Color	Item No.	Pack. Unit
<b>Strain relief housing</b>	<b>Strain relief housing,</b> for 2 cables, 8.5 ... 13.5 mm diameter ❶, Strip length, outer insulation: 55 mm		
	black	770-506/029-000	50
	white	770-516/029-000	50

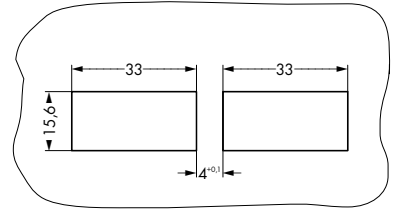

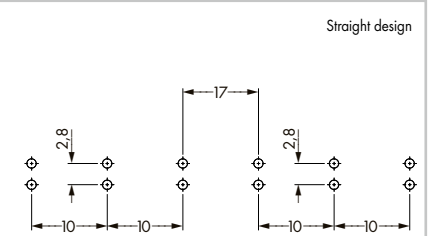


Plate thickness: 0.5 ... 2 mm  
 Cutout tolerance: + 0.1 mm

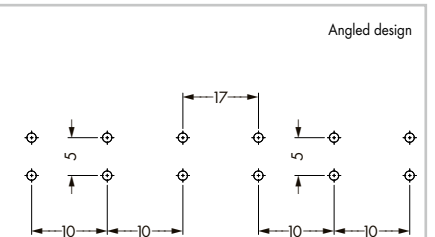
Using a 6-pole strain relief housing with snap-in connectors requires the cutout dimensions shown above.

Item-Specific Accessories	
	<b>Marking strip</b> , self-adhesive, on DIN A4 carrier card, 182 mm long  Strip height: 6 mm <b>210-333 100</b> Marking area: 62 x 6.5 mm
<b>Info</b>	<b>Dimensions</b>



Drilled hole diameter: 1.4<sup>±0.1</sup> mm

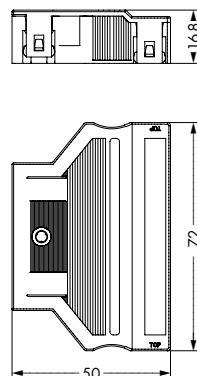
Using a straight, 6-pole PCB connector requires the hole patterns shown above.



Drilled hole diameter: 1.4<sup>±0.1</sup> mm

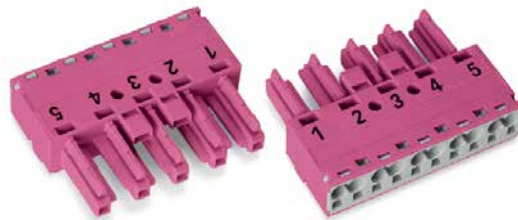
Using an angled, 6-pole PCB connector requires the hole patterns shown above.

❶ For H05VV and NYM cables  
 For other cables, please contact factory.



Fire load data available upon request.








**Important note:**

B-Coded components of the *WINSTA*<sup>®</sup> MIDI special series are designed for specialty applications (e.g., measurement, control and regulation technology) and certified per DIN EN 61984. In addition to the gray models for 110–400 V voltages, there is now also a variant in light green for low voltages up to 48 V, as well as a pink one for bus applications. Each of the three versions is available in 2-, 3-, 4- or 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-coded products are protected against mismatching with all other coding types found in the *WINSTA*<sup>®</sup> system. Within B coding, all special variants can mate with each other. The variable coding system provides clear circuit identification. Special variants can be clearly differentiated according to color and pole marking. They can be coded on-site or delivered with factory-installed custom coding.

# WINSTA® MIDI special

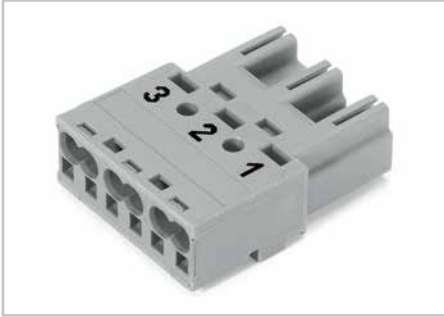
## 770/771 Series, up to 4 mm<sup>2</sup> / 25 A

- Note:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with other systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.

	Page	
	<b>770 Series</b>	
	<b>Connectors, 2-Pole</b>	213
	<b>Connectors, 3-Pole</b>	218
	<b>Connectors, 4-Pole</b>	226
	<b>Connectors, 5-Pole</b>	234
	<b>770 Series</b>	
	<b>Snap-In Device Connectors, 2-Pole</b>	214
	<b>Snap-In Device Connectors, 3-Pole</b>	219
	<b>Snap-In Device Connectors, 4-Pole</b>	227
	<b>Snap-In Device Connectors, 5-Pole</b>	235
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	<b>PCB Connectors, 4-Pole</b>	228
	<b>PCB Connectors, 5-Pole</b>	236
	<b>770 Series</b>	
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	<b>Distribution Connectors, 4-Pole</b>	230
	<b>Distribution Connectors, 5-Pole</b>	238
	<b>771 Series</b>	
	<b>Cable Assemblies, 2-Pole</b>	216
	<b>Cable Assemblies, 3-Pole</b>	224
	<b>Cable Assemblies, 4-Pole</b>	232
	<b>Cable Assemblies, 5-Pole</b>	240

# WINSTA® MIDI special, 770 Series Handling:

## Pole marking



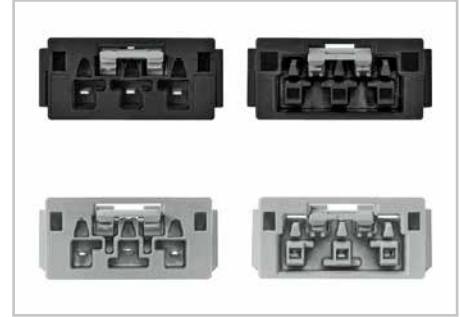
Gray, B-coded connector with "3 2 1" marking; e.g., control signal (A circuit)

## Circuit identification



Easy circuit identification via different marking and colors

## Compatibility



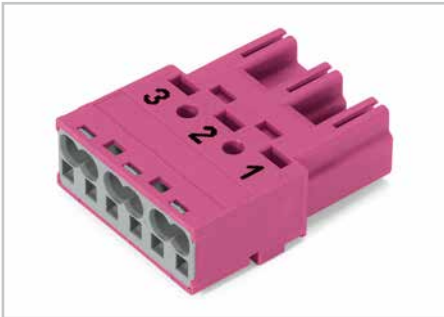
B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

## Pole marking

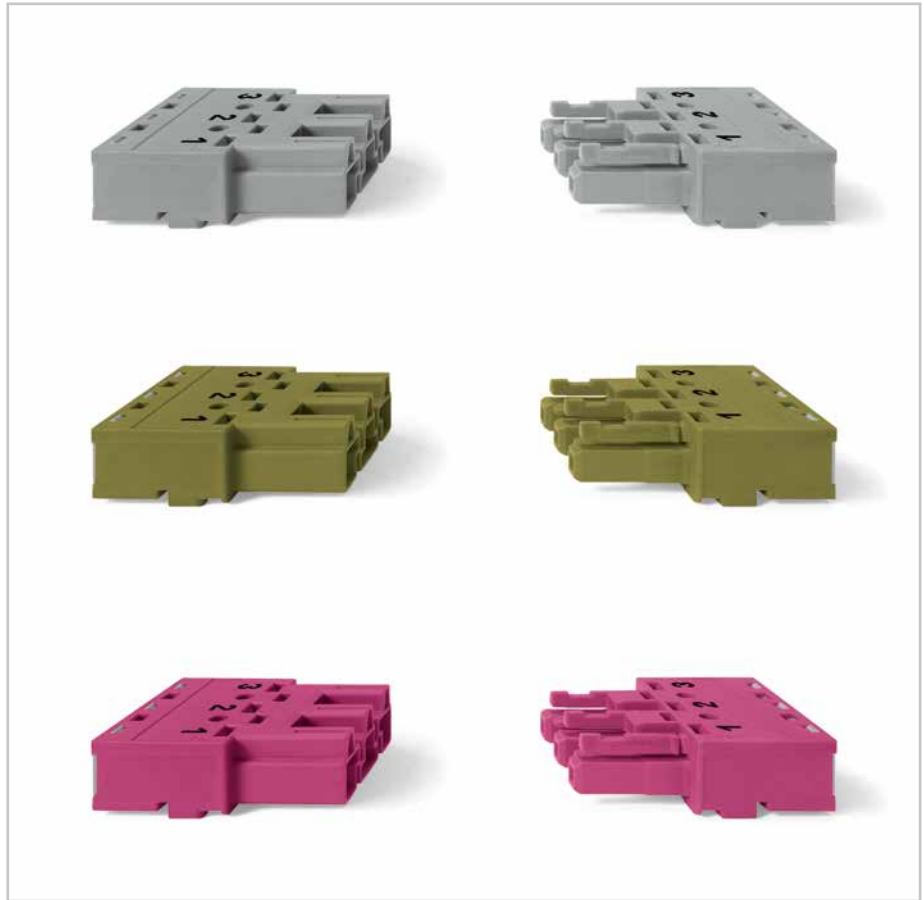


Light green, B-coded connector with "3 2 1" marking; e.g., DC power supply (24V circuit)

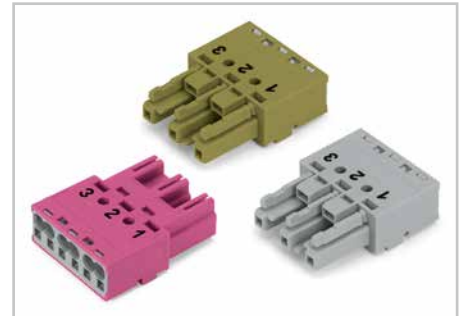
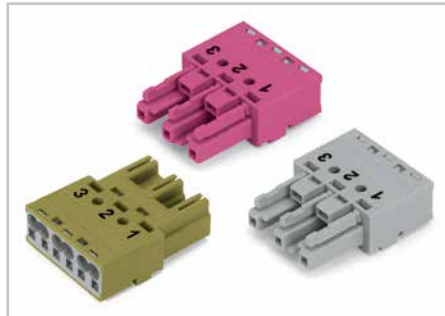
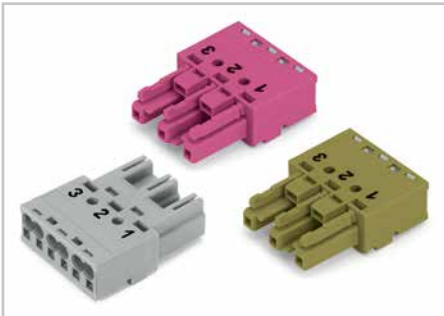
## Pole marking



Pink, B-coded connector with "3 2 1" marking; e.g., bus signal (B circuit)



## Plug compatibility





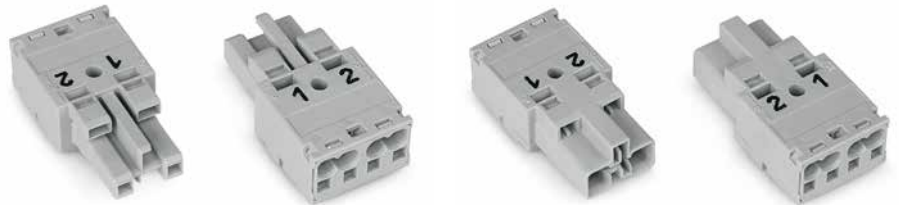
B-coded connectors with different colors can be plugged together.

### Important note:









Different colors and/or pole marking are used for circuit identification.



Only connectors of the same color and same pole marking must be plugged together.

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p> <p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 2-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	770-242	100	gray	770-252	100
	gray	770-242/060-000*	100	gray	770-252/060-000*	100
	light green	770-262	100	light green	770-272	100
	pink	770-282	100	pink	770-292	100
	pink	770-282/080-000*	100	pink	770-292/080-000*	100
	pink	770-282/082-000*	100	pink	770-292/082-000*	100
	*For pole marking, see page 253.			*For pole marking, see page 253.		

Item-Specific Accessories							
Strain relief housing, for 1 cable, ③			Strain relief housing, for 1 cable, ③				
5 ... 9 mm diameter			5 ... 9 mm diameter				
	black	770-502/042-000	50		black	770-502/042-000	50
	white	770-512/042-000	50		white	770-512/042-000	50
Strain relief housing, for 1 cable, ③			Strain relief housing, for 1 cable, ③				
7 ... 10.5 mm diameter			7 ... 10.5 mm diameter				
	black	770-502/041-000	50		black	770-502/041-000	50
	white	770-512/041-000	50		white	770-512/041-000	50

Accessories, 770 Series							
Locking lever, for "flying leads",			Locking lever, for "flying leads",				
manually operated			tool operated				
	black	770-101	100 (4x25)		black	770-111	100 (4x25)
	white	770-121	100 (4x25)		white	770-131	100 (4x25)
Info	Dimensions						

① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

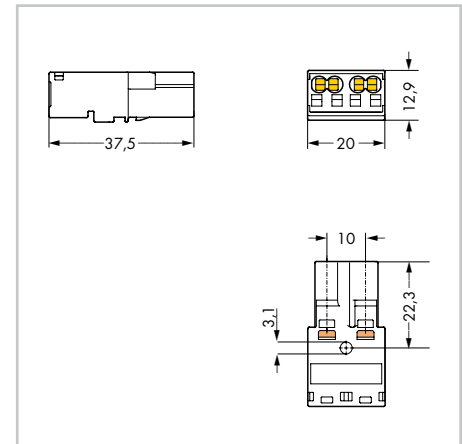
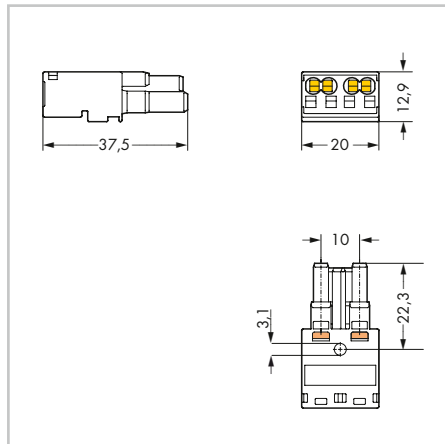
③ For more strain relief housings, see page 134.

Standard printing (without suffix number)

- gray Coding B (1 2)
- light green Coding B (1 2)
- pink Coding B (1 2)

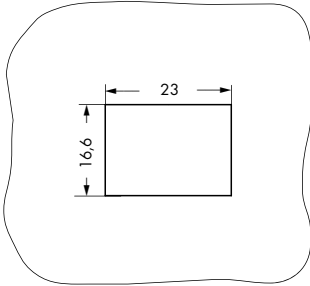
For additional pole marking, see page 253.


For coding information, see page 250.  
Fire load data available upon request.



# WINSTA® MIDI special Snap-in frame, 2-pole

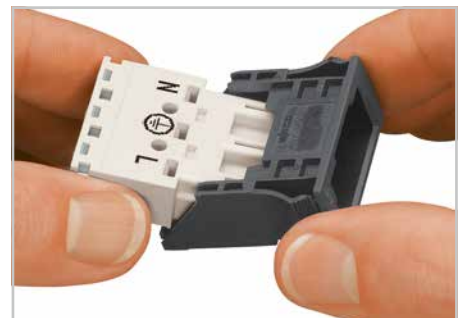
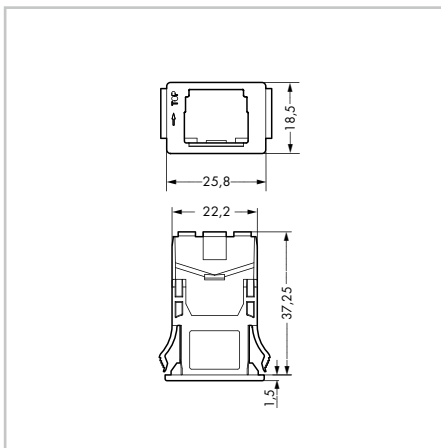
<p><b>Cutout dimensions</b></p> <p>Plate thickness: 1 ... 3 mm Cutout tolerance: + 0.1 mm</p>	<p><b>Snap-in frame</b> – for 2-pole sockets and plugs (see page 163) Plate thickness: 1 ... 3 mm</p>	
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Description	Color	Item No.	Pack. Unit
<b>Snap-in frame, 2-pole</b>	<b>Snap-in frame, 2-pole</b>		
	black	770-317	100
	white	770-337	100
<b>Item-Specific Accessories</b>			
	<b>Locking lever, oversized,</b>  tool operated gray <b>770-140</b> 100 (4x25)		
<b>Info</b>		<b>Dimensions</b>	

- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- gray Coding B (1 2)  
● light green Coding B (1 2)  
● pink Coding B (1 2)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.



Insert the socket or plug into the frame (observe the "TOP" marking on the frame!). Snap the assembled unit into the cutout (example shows a 3-pole connector).








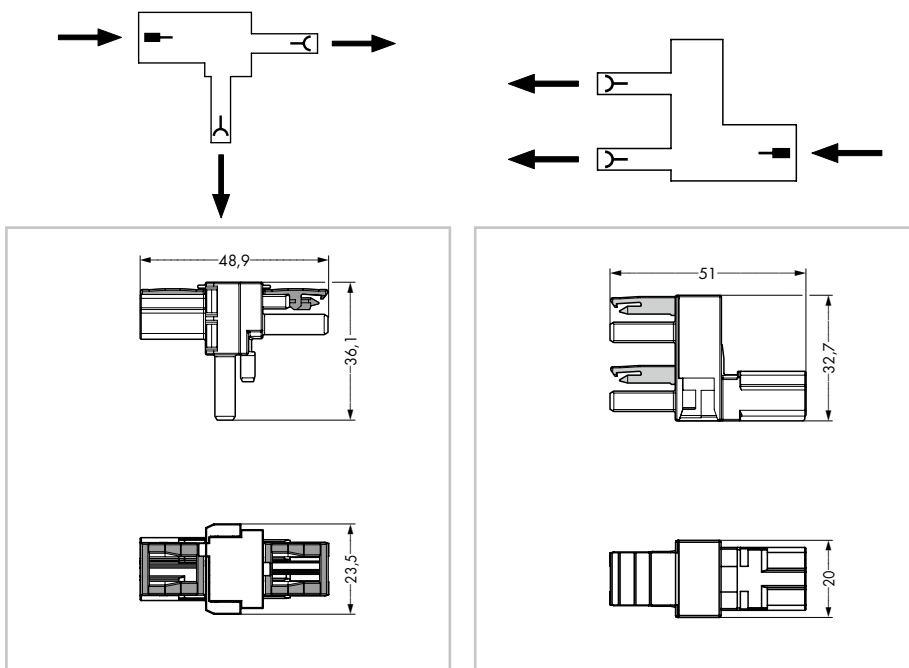
# WINSTA® MIDI special T- and h-Distribution Connectors, 2-Pole

	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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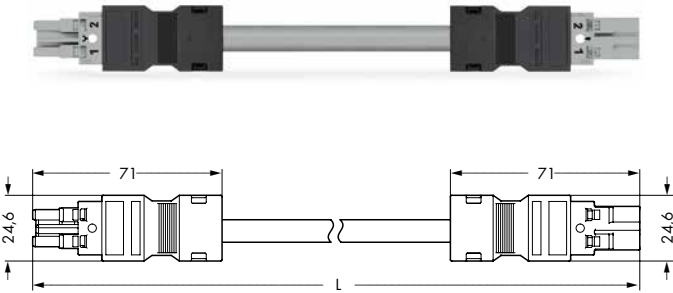
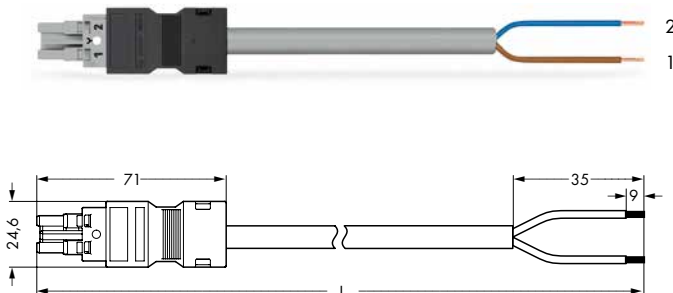
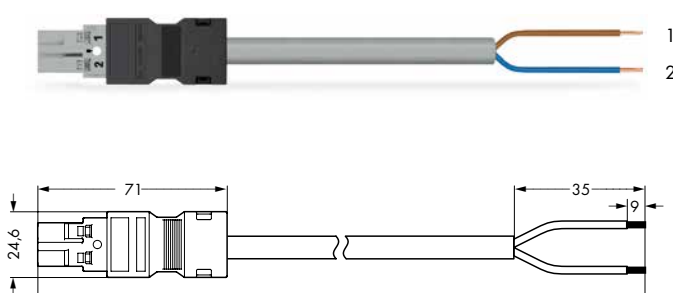


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector, h-distribution connector, 2-pole	T-distribution connector, 1 x plug/2 x socket			h-distribution connector, unidirectional, plug/socket - socket		
	gray	770-1601	50	gray	770-1651	50
	light green	770-1602	50	light green	770-1652	50
	pink	770-1603	50	pink	770-1653	50
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	gray	770-1701	50	gray	770-1751	50
	light green	770-1702	50	light green	770-1752	50
	pink	770-1703	50	pink	770-1753	50

Item-Specific Accessories						
	<b>Lockout cap</b> , for socket, separable, 12-pole  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>			<b>Mounting plate</b> , for distribution connectors  <ul style="list-style-type: none"> <li>black 770-1626 25</li> <li>white 770-1627 25</li> </ul>		
	<b>Lockout cap</b> , for plug, separable, 5-pole  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>			<b>Fixing pin</b> , for mounting plates  <ul style="list-style-type: none"> <li>② black 890-601 250</li> <li>③ black 770-601 250</li> </ul>		
				<b>Lockout cap</b> , for socket, separable, 12-pole  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>		
<b>Dimensions</b>						



# WINSTA® MIDI special Cable Assemblies 2 x 1 mm<sup>2</sup>

	<p>PVC Control line: 2 x 1, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>🔌 Approvals</p>																																												
<p>Interconnecting cable, socket – plug</p>	<table border="1"> <thead> <tr> <th>Length</th> <th>Item No.</th> <th>Item No.</th> <th>Item No.</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Coding B</b></td> </tr> <tr> <td colspan="4"><b>PVC</b></td> </tr> <tr> <td>1 m</td> <td>771-8992/005-103</td> <td>771-8992/005-105</td> <td>771-8992/005-107</td> </tr> <tr> <td>2 m</td> <td>771-8992/005-203</td> <td>771-8992/005-205</td> <td>771-8992/005-207</td> </tr> <tr> <td>3 m</td> <td>771-8992/005-303</td> <td>771-8992/005-305</td> <td>771-8992/005-307</td> </tr> <tr> <td>4 m</td> <td>771-8992/005-403</td> <td>771-8992/005-405</td> <td>771-8992/005-407</td> </tr> <tr> <td>5 m</td> <td>771-8992/005-503</td> <td>771-8992/005-505</td> <td>771-8992/005-507</td> </tr> <tr> <td>6 m</td> <td>771-8992/005-603</td> <td>771-8992/005-605</td> <td>771-8992/005-607</td> </tr> <tr> <td>7 m</td> <td>771-8992/005-703</td> <td>771-8992/005-705</td> <td>771-8992/005-707</td> </tr> <tr> <td>8 m</td> <td>771-8992/005-803</td> <td>771-8992/005-805</td> <td>771-8992/005-807</td> </tr> </tbody> </table>	Length	Item No.	Item No.	Item No.	<b>Coding B</b>				<b>PVC</b>				1 m	771-8992/005-103	771-8992/005-105	771-8992/005-107	2 m	771-8992/005-203	771-8992/005-205	771-8992/005-207	3 m	771-8992/005-303	771-8992/005-305	771-8992/005-307	4 m	771-8992/005-403	771-8992/005-405	771-8992/005-407	5 m	771-8992/005-503	771-8992/005-505	771-8992/005-507	6 m	771-8992/005-603	771-8992/005-605	771-8992/005-607	7 m	771-8992/005-703	771-8992/005-705	771-8992/005-707	8 m	771-8992/005-803	771-8992/005-805	771-8992/005-807
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<p>🔌 For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.</p> <p> <span style="color: gray;">●</span> gray Coding B (1 2)  <span style="color: lightgreen;">●</span> light green Coding B (1 2)  <span style="color: pink;">●</span> pink Coding B (1 2)         </p> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250. Fire load data available upon request.</p>	<p>Locking lever, for "flying leads", manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100 (4x25)</td> </tr> </table> <p>Locking lever, for "flying leads", tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100 (4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100 (4x25)</td> </tr> </table> <p>Lockout cap, for socket, separable, 12-pole</p> <table border="1"> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </table> <p>Lockout cap, for plug, separable, 5-pole</p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table>	black	770-101	100 (4x25)	white	770-121	100 (4x25)	black	770-111	100 (4x25)	white	770-131	100 (4x25)	black	770-201	100	white	770-221	100	yellow	770-360	100																							
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		<b>PVC</b> <b>Control line: 2 x 1.5, gray</b>  <b>250 V/4 kV/3 I<sub>N</sub> 16 A</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>			
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-8992/006-103    ● 771-8992/006-105    ● 771-8992/006-107 2 m    ● 771-8992/006-203    ● 771-8992/006-205    ● 771-8992/006-207 3 m    ● 771-8992/006-303    ● 771-8992/006-305    ● 771-8992/006-307 4 m    ● 771-8992/006-403    ● 771-8992/006-405    ● 771-8992/006-407 5 m    ● 771-8992/006-503    ● 771-8992/006-505    ● 771-8992/006-507 6 m    ● 771-8992/006-603    ● 771-8992/006-605    ● 771-8992/006-607 7 m    ● 771-8992/006-703    ● 771-8992/006-705    ● 771-8992/006-707 8 m    ● 771-8992/006-803    ● 771-8992/006-805    ● 771-8992/006-807			
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-8992/106-103    ● 771-8992/106-105    ● 771-8992/106-107 2 m    ● 771-8992/106-203    ● 771-8992/106-205    ● 771-8992/106-207 3 m    ● 771-8992/106-303    ● 771-8992/106-305    ● 771-8992/106-307 4 m    ● 771-8992/106-403    ● 771-8992/106-405    ● 771-8992/106-407 5 m    ● 771-8992/106-503    ● 771-8992/106-505    ● 771-8992/106-507 6 m    ● 771-8992/106-603    ● 771-8992/106-605    ● 771-8992/106-607 7 m    ● 771-8992/106-703    ● 771-8992/106-705    ● 771-8992/106-707 8 m    ● 771-8992/106-803    ● 771-8992/106-805    ● 771-8992/106-807			
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-8992/206-103    ● 771-8992/206-105    ● 771-8992/206-107 2 m    ● 771-8992/206-203    ● 771-8992/206-205    ● 771-8992/206-207 3 m    ● 771-8992/206-303    ● 771-8992/206-305    ● 771-8992/206-307 4 m    ● 771-8992/206-403    ● 771-8992/206-405    ● 771-8992/206-407 5 m    ● 771-8992/206-503    ● 771-8992/206-505    ● 771-8992/206-507 6 m    ● 771-8992/206-603    ● 771-8992/206-605    ● 771-8992/206-607 7 m    ● 771-8992/206-703    ● 771-8992/206-705    ● 771-8992/206-707 8 m    ● 771-8992/206-803    ● 771-8992/206-805    ● 771-8992/206-807			



**Item numbers overview for other cable lengths**

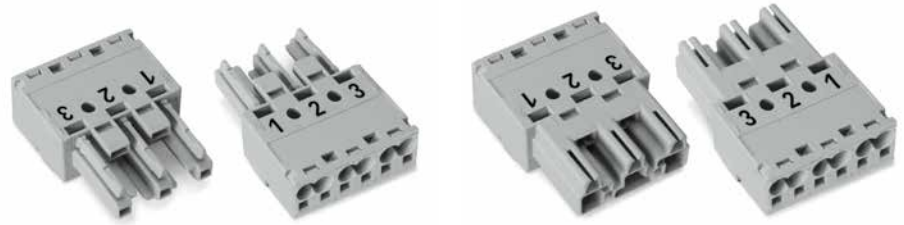
Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	771	-	8	9	9	2	/	0	0	6	-	1	0	3
light green	771	-	8	9	9	2	/	0	0	6	-	1	0	5
pink	771	-	8	9	9	2	/	0	0	6	-	1	0	7

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 2-pole, socket – plug, PVC control line, 2 x 1.5 mm<sup>2</sup>, 1 m long





The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-8992/016-107.  
The 10th position defines the cable cross-section. For example, a 2 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-8992/006-105.  
The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 771-8992/006-503.



# WINSTA® MIDI special Sockets and Plugs, 3-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>	<p>2 x 20 ... 12 AWG</p> <p>2 x 0.5 ... 4 mm<sup>2</sup> ① 250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p> 9 mm / 0.35 in.</p> <p>② Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 3-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	gray	770-243	100	gray	770-253	100
	gray	770-243/060-000*	100	gray	770-253/060-000*	100
	gray	770-243/062-000*	100	gray	770-253/062-000*	100
	light green	770-263	100	light green	770-273	100
	light green	770-263/071-000*	100	light green	770-273/071-000*	100
	light green	770-263/073-000*	100	light green	770-273/073-000*	100
	pink	770-283	100	pink	770-293	100
	pink	770-283/081-000*	100	pink	770-293/081-000*	100
	pink	770-283/082-000*	100	pink	770-293/082-000*	100
	* For pole marking, see page 253.			* For pole marking, see page 253.		

Item-Specific Accessories	
<p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 4.5 ... 8 mm diameter</p> <p>black 770-503/023-000 50</p> <p>white 770-513/023-000 50</p>	<p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 4.5 ... 8 mm diameter</p> <p>black 770-503/023-000 50</p> <p>white 770-513/023-000 50</p>
<p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 8 ... 11.5 mm diameter</p> <p>black 770-503 50</p> <p>white 770-513 50</p>	<p><b>Strain relief housing, for 2 cables, ③</b></p> <p> 8 ... 11.5 mm diameter</p> <p>black 770-503 50</p> <p>white 770-513 50</p>

Accessories, 770 Series	
<p><b>Locking lever, for "flying leads",</b></p> <p> manually operated</p> <p>black 770-101 100 (4x25)</p> <p>white 770-121 100 (4x25)</p>	<p><b>Locking lever, for "flying leads",</b></p> <p> tool operated</p> <p>black 770-111 100 (4x25)</p> <p>white 770-131 100 (4x25)</p>

Info	Dimensions
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① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"

② For "International Certification Organizations" and "Approvals - User Guide," see page 534.

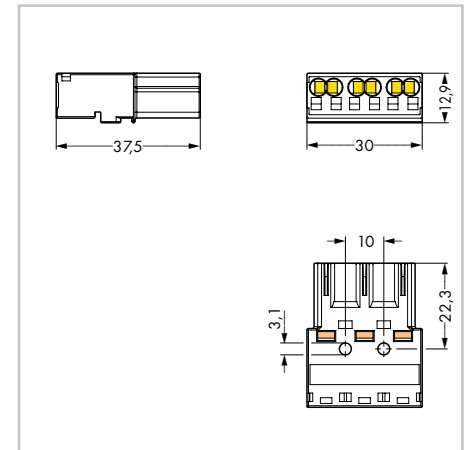
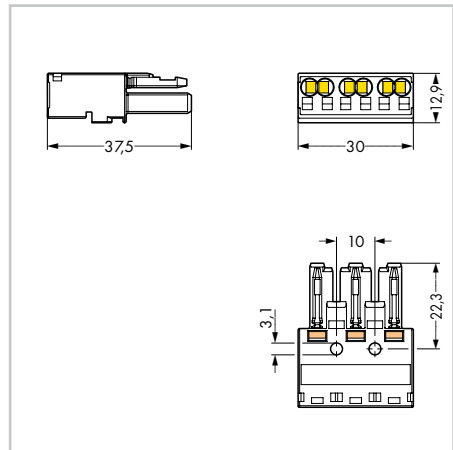
③ For more strain relief housings, see page 146.

Standard printing (without suffix number)

- gray Coding B (1 2 3)
- light green Coding B (1 2 3)
- pink Coding B (1 2 3)

For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.





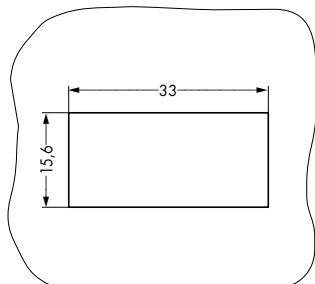
# WINSTA® MIDI special Snap-In Sockets and Plugs, 3-Pole

PUSH-IN CAGE CLAMP®

3





219



Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 250 V/4 kV/3 I <sub>N</sub> 25 A	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	

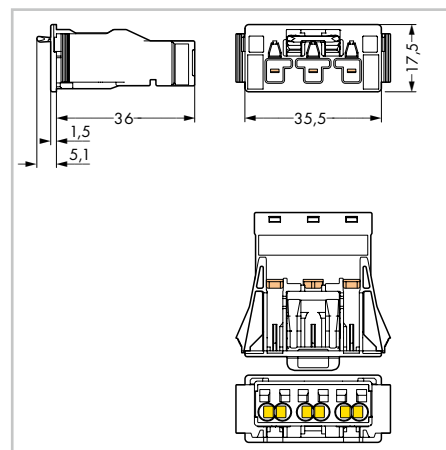
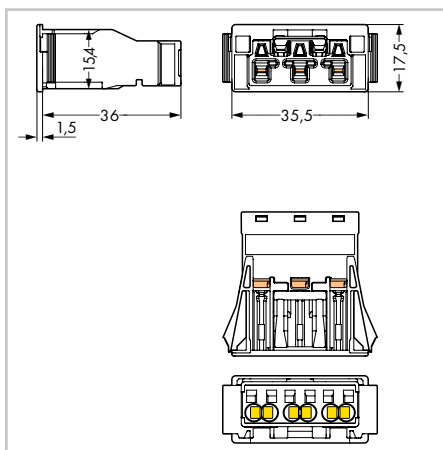


3

Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 3-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	gray	770-743	100	gray	770-753	100
	gray	770-743/060-000*	100	gray	770-753/060-000*	100
	gray	770-743/062-000*	100	gray	770-753/062-000*	100
	light green	770-763	100	light green	770-773	100
	light green	770-763/071-000*	100	light green	770-773/071-000*	100
	light green	770-763/073-000*	100	light green	770-773/073-000*	100
	pink	770-783	100	pink	770-793	100
	pink	770-783/081-000*	100	pink	770-793/081-000*	100
	pink	770-783/082-000*	100	pink	770-793/082-000*	100
	For snap in frame for sockets and plugs, see page 149.			For snap in frame for sockets and plugs, see page 149.		
	*For pole marking, see page 253.			*For pole marking, see page 253.		

Item-Specific Accessories							
	<b>Lockout cap</b> , for socket, separable, 12-pole 			<b>Lockout cap</b> , for plug, separable, 5-pole 			
		black	770-201	100	yellow	770-360	100
		white	770-221	100			
	<b>Operating tool</b> , partially insulated 			<b>Operating tool</b> , partially insulated 			
		3-way	770-383	1	3-way	770-383	1

Accessories, 770 Series							
	<b>Lockout cap</b> , for cutout, 3-pole 			<b>Lockout cap</b> , for cutout, 3-pole 			
		black	770-643	100	black	770-643	100
		white	770-693	100	white	770-693	100
	<b>Dimensions</b>						



# WINSTA® MIDI special PCB Connectors, 3-Pole

	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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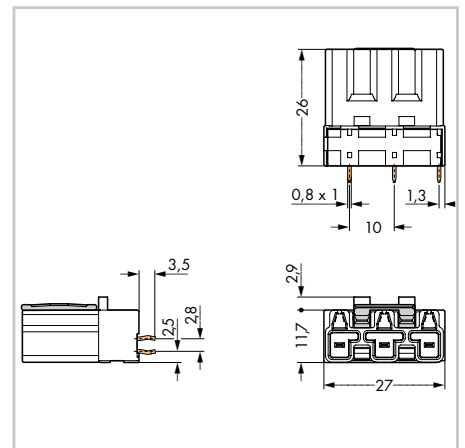
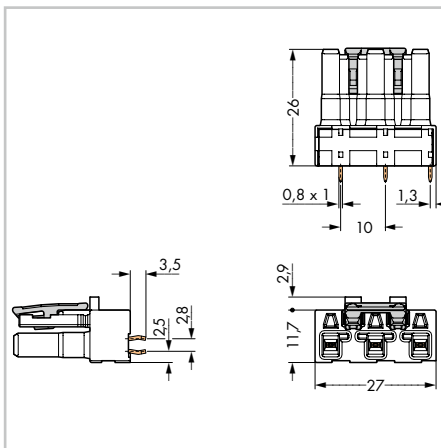


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	770-843	100	gray	770-853	100
	light green	770-863	100	light green	770-873	100
	pink	770-883	100	pink	770-893	100
<b>Item-Specific Accessories</b>						
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole		
		black 770-201 100 white 770-221 100			yellow 770-360 100	
				Coding pin, for plug (A and B coding)		
					gray 770-401 100	
<b>Accessories, 770 Series</b>						
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated		
		black 770-101 100 (4x25) white 770-121 100 (4x25)			black 770-111 100 (4x25) white 770-131 100 (4x25)	
<b>Info</b>	<b>Dimensions</b>					

① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 253.

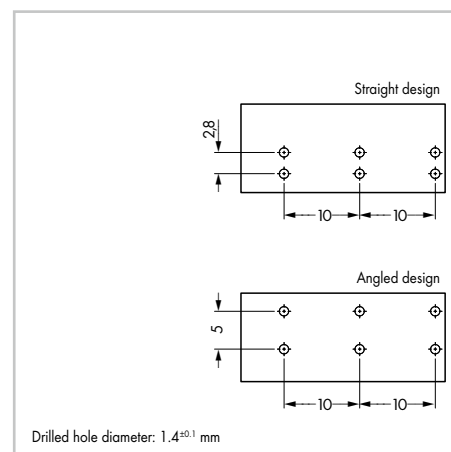
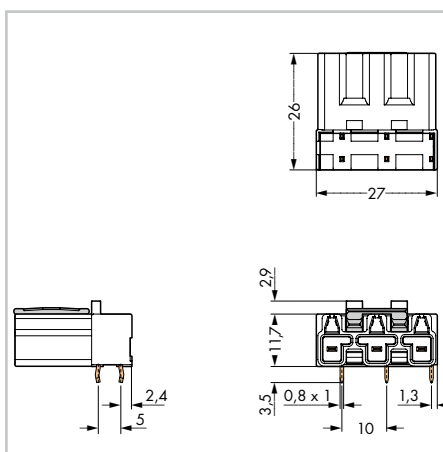
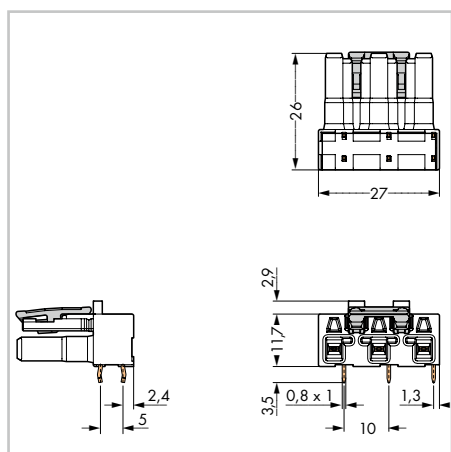
For coding information, see page 250.  
Fire load data available upon request.



250 V/4 kV/3 $I_N$ 25 A  ① Approvals	250 V/4 kV/3 $I_N$ 25 A  ① Approvals
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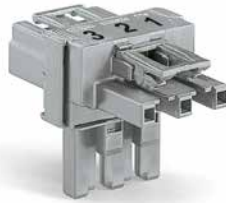


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
gray	770-843/011-000	100	gray	770-853/011-000	100
light green	770-863/011-000	100	light green	770-873/011-000	100
pink	770-883/011-000	100	pink	770-893/011-000	100
<b>Item-Specific Accessories</b>					
<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for plug, separable, 5-pole</b>		
	black 770-201	100		yellow 770-360	100
	white 770-221	100			
			<b>Coding pin, for plug</b>		
				gray 770-401	100
<b>Accessories, 770 Series</b>					
<b>Locking lever, for "flying leads", manually operated</b>			<b>Locking lever, for "flying leads", tool operated</b>		
	black 770-101	100 (4x25)		black 770-111	100 (4x25)
	white 770-121	100 (4x25)		white 770-131	100 (4x25)
<b>Dimensions</b>			<b>Hole patterns</b>		








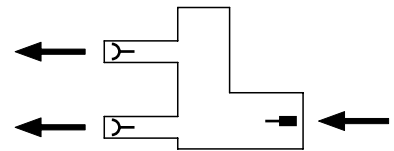
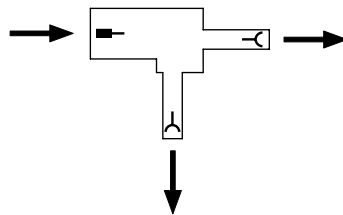
# WINSTA® MIDI special T- and h-Distribution Connectors, 3-Pole

	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>	<p>250 V/4 kV/3 I<sub>N</sub> 25 A</p> <p>① Approvals</p>
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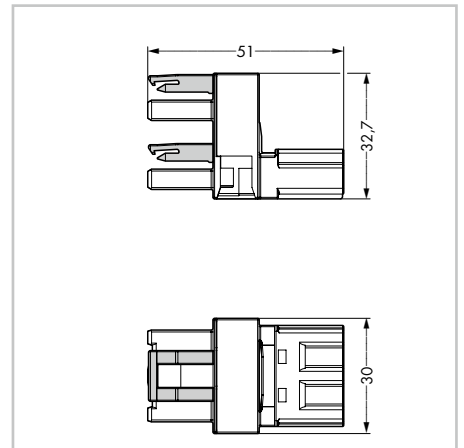
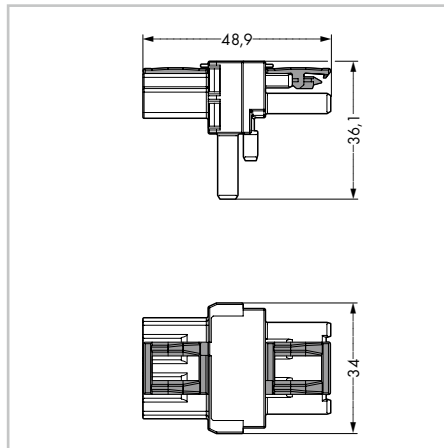


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector	T-distribution connector, 1 x plug/2 x socket			h-distribution connector, unidirectional, plug/socket - socket		
h-distribution connector	gray	770-967	50	gray	770-1661	50
	light green	770-1612	50	light green	770-1662	50
	pink	770-1613	50	pink	770-1663	50
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	gray	770-970	50	gray	770-1761	50
	light green	770-1712	50	light green	770-1762	50
	pink	770-1713	50	pink	770-1763	50

Item-Specific Accessories						
	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>			<b>Mounting plate, for distribution connectors</b>  <ul style="list-style-type: none"> <li>black 770-623 100</li> <li>white 770-673 100</li> </ul>		
	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>			<b>Fixing pin, for mounting plates</b>  <ul style="list-style-type: none"> <li>② black 890-601 250</li> <li>③ black 770-601 250</li> </ul>		
				<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>		
<b>Info</b>	<b>Dimensions</b>					



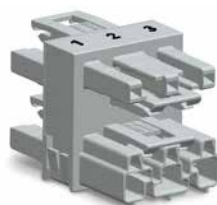
- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
- 
- gray Coding B (1 2 3)
  - light green Coding B (1 2 3)
  - pink Coding B (1 2 3)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.







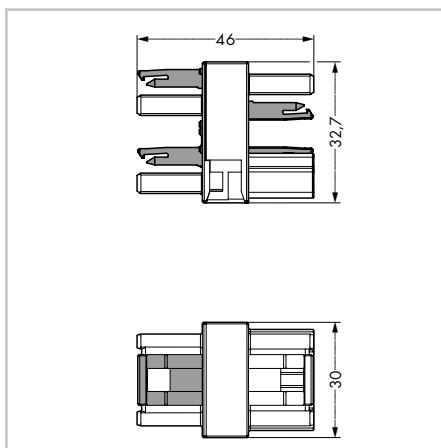
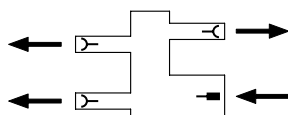


# WINSTA® MIDI special Distribution Connectors, 3-Pole

	250 V/4 kV/3 $I_N$ 25 A  ① Approvals	
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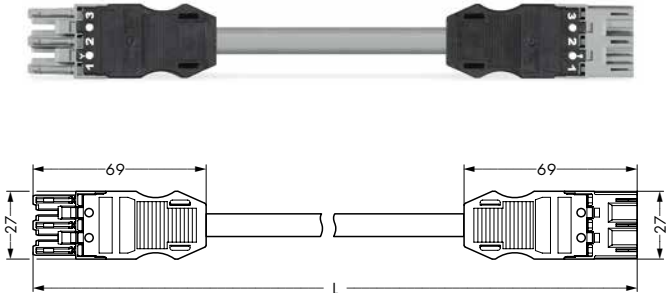
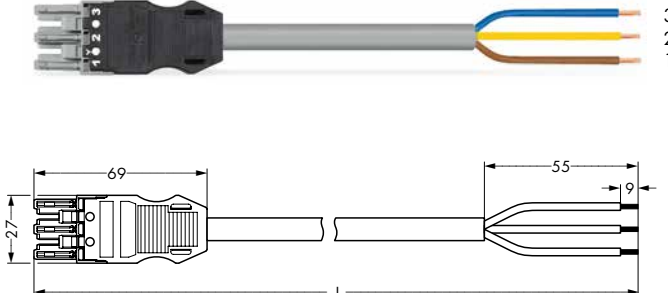
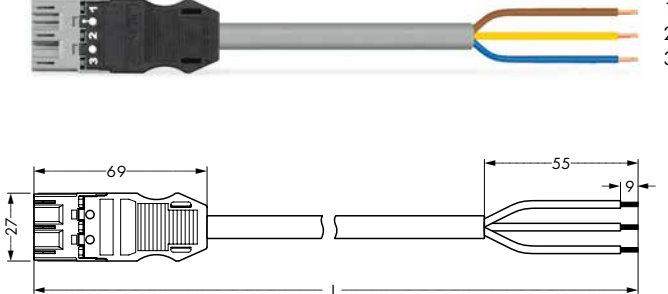
Description	Color	Item No.	Pack. Unit
Distribution connectors, 3-pole	Distribution connector, 3-way, 1 x plug/3 x socket		
	● gray	770-1714	50
	● light green	770-1715	50
	● pink	770-1716	50
<b>Item-Specific Accessories</b>			
	Mounting plate, for distribution connectors		
		black 770-623	25
		white 770-673	25
	Fixing pin, for mounting plates		
		② black 890-601	250
		③ black 770-601	250
	Lockout cap, for socket, separable, 12-pole		
		black 770-201	100
		white 770-221	100
	Lockout cap, for plug, separable, 5-pole		
		yellow 770-360	100
	<b>Dimensions</b>		



# WINSTA® MIDI special Cable Assemblies 3 x 1 mm<sup>2</sup>

		<p>PVC Control line: 3 x 1, gray</p> <p>250 V/4 kV/3 I<sub>N</sub> 10 A</p> <p>Conductor ends, bonded: 9 mm</p> <p>🔌 Approvals</p>																																			
<p>Interconnecting cable, socket – plug</p>		Length	Item No.	Item No.	Item No.																																
		<p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>1 m</td><td>🟡 771-9993/005-103</td><td>🟢 771-9993/005-105</td><td>🟣 771-9993/005-107</td></tr> <tr><td>2 m</td><td>🟡 771-9993/005-203</td><td>🟢 771-9993/005-205</td><td>🟣 771-9993/005-207</td></tr> <tr><td>3 m</td><td>🟡 771-9993/005-303</td><td>🟢 771-9993/005-305</td><td>🟣 771-9993/005-307</td></tr> <tr><td>4 m</td><td>🟡 771-9993/005-403</td><td>🟢 771-9993/005-405</td><td>🟣 771-9993/005-407</td></tr> <tr><td>5 m</td><td>🟡 771-9993/005-503</td><td>🟢 771-9993/005-505</td><td>🟣 771-9993/005-507</td></tr> <tr><td>6 m</td><td>🟡 771-9993/005-603</td><td>🟢 771-9993/005-605</td><td>🟣 771-9993/005-607</td></tr> <tr><td>7 m</td><td>🟡 771-9993/005-703</td><td>🟢 771-9993/005-705</td><td>🟣 771-9993/005-707</td></tr> <tr><td>8 m</td><td>🟡 771-9993/005-803</td><td>🟢 771-9993/005-805</td><td>🟣 771-9993/005-807</td></tr> </table>				1 m	🟡 771-9993/005-103	🟢 771-9993/005-105	🟣 771-9993/005-107	2 m	🟡 771-9993/005-203	🟢 771-9993/005-205	🟣 771-9993/005-207	3 m	🟡 771-9993/005-303	🟢 771-9993/005-305	🟣 771-9993/005-307	4 m	🟡 771-9993/005-403	🟢 771-9993/005-405	🟣 771-9993/005-407	5 m	🟡 771-9993/005-503	🟢 771-9993/005-505	🟣 771-9993/005-507	6 m	🟡 771-9993/005-603	🟢 771-9993/005-605	🟣 771-9993/005-607	7 m	🟡 771-9993/005-703	🟢 771-9993/005-705	🟣 771-9993/005-707	8 m	🟡 771-9993/005-803	🟢 771-9993/005-805	🟣 771-9993/005-807
1 m	🟡 771-9993/005-103	🟢 771-9993/005-105	🟣 771-9993/005-107																																		
2 m	🟡 771-9993/005-203	🟢 771-9993/005-205	🟣 771-9993/005-207																																		
3 m	🟡 771-9993/005-303	🟢 771-9993/005-305	🟣 771-9993/005-307																																		
4 m	🟡 771-9993/005-403	🟢 771-9993/005-405	🟣 771-9993/005-407																																		
5 m	🟡 771-9993/005-503	🟢 771-9993/005-505	🟣 771-9993/005-507																																		
6 m	🟡 771-9993/005-603	🟢 771-9993/005-605	🟣 771-9993/005-607																																		
7 m	🟡 771-9993/005-703	🟢 771-9993/005-705	🟣 771-9993/005-707																																		
8 m	🟡 771-9993/005-803	🟢 771-9993/005-805	🟣 771-9993/005-807																																		
<p>Connecting cable, socket – free end</p>		Length	Item No.	Item No.	Item No.																																
		<p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>1 m</td><td>🟡 771-9993/105-103</td><td>🟢 771-9993/105-105</td><td>🟣 771-9993/105-107</td></tr> <tr><td>2 m</td><td>🟡 771-9993/105-203</td><td>🟢 771-9993/105-205</td><td>🟣 771-9993/105-207</td></tr> <tr><td>3 m</td><td>🟡 771-9993/105-303</td><td>🟢 771-9993/105-305</td><td>🟣 771-9993/105-307</td></tr> <tr><td>4 m</td><td>🟡 771-9993/105-403</td><td>🟢 771-9993/105-405</td><td>🟣 771-9993/105-407</td></tr> <tr><td>5 m</td><td>🟡 771-9993/105-503</td><td>🟢 771-9993/105-505</td><td>🟣 771-9993/105-507</td></tr> <tr><td>6 m</td><td>🟡 771-9993/105-603</td><td>🟢 771-9993/105-605</td><td>🟣 771-9993/105-607</td></tr> <tr><td>7 m</td><td>🟡 771-9993/105-703</td><td>🟢 771-9993/105-705</td><td>🟣 771-9993/105-707</td></tr> <tr><td>8 m</td><td>🟡 771-9993/105-803</td><td>🟢 771-9993/105-805</td><td>🟣 771-9993/105-807</td></tr> </table>				1 m	🟡 771-9993/105-103	🟢 771-9993/105-105	🟣 771-9993/105-107	2 m	🟡 771-9993/105-203	🟢 771-9993/105-205	🟣 771-9993/105-207	3 m	🟡 771-9993/105-303	🟢 771-9993/105-305	🟣 771-9993/105-307	4 m	🟡 771-9993/105-403	🟢 771-9993/105-405	🟣 771-9993/105-407	5 m	🟡 771-9993/105-503	🟢 771-9993/105-505	🟣 771-9993/105-507	6 m	🟡 771-9993/105-603	🟢 771-9993/105-605	🟣 771-9993/105-607	7 m	🟡 771-9993/105-703	🟢 771-9993/105-705	🟣 771-9993/105-707	8 m	🟡 771-9993/105-803	🟢 771-9993/105-805	🟣 771-9993/105-807
1 m	🟡 771-9993/105-103	🟢 771-9993/105-105	🟣 771-9993/105-107																																		
2 m	🟡 771-9993/105-203	🟢 771-9993/105-205	🟣 771-9993/105-207																																		
3 m	🟡 771-9993/105-303	🟢 771-9993/105-305	🟣 771-9993/105-307																																		
4 m	🟡 771-9993/105-403	🟢 771-9993/105-405	🟣 771-9993/105-407																																		
5 m	🟡 771-9993/105-503	🟢 771-9993/105-505	🟣 771-9993/105-507																																		
6 m	🟡 771-9993/105-603	🟢 771-9993/105-605	🟣 771-9993/105-607																																		
7 m	🟡 771-9993/105-703	🟢 771-9993/105-705	🟣 771-9993/105-707																																		
8 m	🟡 771-9993/105-803	🟢 771-9993/105-805	🟣 771-9993/105-807																																		
<p>Connecting cable, plug – free end</p>		Length	Item No.	Item No.	Item No.																																
		<p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>1 m</td><td>🟡 771-9993/205-103</td><td>🟢 771-9993/205-105</td><td>🟣 771-9993/205-107</td></tr> <tr><td>2 m</td><td>🟡 771-9993/205-203</td><td>🟢 771-9993/205-205</td><td>🟣 771-9993/205-207</td></tr> <tr><td>3 m</td><td>🟡 771-9993/205-303</td><td>🟢 771-9993/205-305</td><td>🟣 771-9993/205-307</td></tr> <tr><td>4 m</td><td>🟡 771-9993/205-403</td><td>🟢 771-9993/205-405</td><td>🟣 771-9993/205-407</td></tr> <tr><td>5 m</td><td>🟡 771-9993/205-503</td><td>🟢 771-9993/205-505</td><td>🟣 771-9993/205-507</td></tr> <tr><td>6 m</td><td>🟡 771-9993/205-603</td><td>🟢 771-9993/205-605</td><td>🟣 771-9993/205-607</td></tr> <tr><td>7 m</td><td>🟡 771-9993/205-703</td><td>🟢 771-9993/205-705</td><td>🟣 771-9993/205-707</td></tr> <tr><td>8 m</td><td>🟡 771-9993/205-803</td><td>🟢 771-9993/205-805</td><td>🟣 771-9993/205-807</td></tr> </table>				1 m	🟡 771-9993/205-103	🟢 771-9993/205-105	🟣 771-9993/205-107	2 m	🟡 771-9993/205-203	🟢 771-9993/205-205	🟣 771-9993/205-207	3 m	🟡 771-9993/205-303	🟢 771-9993/205-305	🟣 771-9993/205-307	4 m	🟡 771-9993/205-403	🟢 771-9993/205-405	🟣 771-9993/205-407	5 m	🟡 771-9993/205-503	🟢 771-9993/205-505	🟣 771-9993/205-507	6 m	🟡 771-9993/205-603	🟢 771-9993/205-605	🟣 771-9993/205-607	7 m	🟡 771-9993/205-703	🟢 771-9993/205-705	🟣 771-9993/205-707	8 m	🟡 771-9993/205-803	🟢 771-9993/205-805	🟣 771-9993/205-807
1 m	🟡 771-9993/205-103	🟢 771-9993/205-105	🟣 771-9993/205-107																																		
2 m	🟡 771-9993/205-203	🟢 771-9993/205-205	🟣 771-9993/205-207																																		
3 m	🟡 771-9993/205-303	🟢 771-9993/205-305	🟣 771-9993/205-307																																		
4 m	🟡 771-9993/205-403	🟢 771-9993/205-405	🟣 771-9993/205-407																																		
5 m	🟡 771-9993/205-503	🟢 771-9993/205-505	🟣 771-9993/205-507																																		
6 m	🟡 771-9993/205-603	🟢 771-9993/205-605	🟣 771-9993/205-607																																		
7 m	🟡 771-9993/205-703	🟢 771-9993/205-705	🟣 771-9993/205-707																																		
8 m	🟡 771-9993/205-803	🟢 771-9993/205-805	🟣 771-9993/205-807																																		
<p>Info</p> <p>🔌 For “International Certification Organizations” and “Approvals – User Guide,” see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications. For other cables, please contact factory.</p> <p>🟡 gray Coding B (1 2 3)          🟢 light green Coding B (1 2 3)          🟣 pink Coding B (1 2 3)</p> <p>For additional pole marking, see page 253.</p> <p>For coding information, see pages 250.          Fire load data available upon request.</p>		<p>Accessories</p> <p>Locking lever, for “flying leads”, manually operated</p> <table border="1"> <tr><td>black</td><td>770-101</td><td>100</td><td>(4x25)</td></tr> <tr><td>white</td><td>770-121</td><td>100</td><td>(4x25)</td></tr> </table> <p>Locking lever, for “flying leads”, tool operated</p> <table border="1"> <tr><td>black</td><td>770-111</td><td>100</td><td>(4x25)</td></tr> <tr><td>white</td><td>770-131</td><td>100</td><td>(4x25)</td></tr> </table> <p>Lockout cap, for socket, separable, 12-pole</p> <table border="1"> <tr><td>black</td><td>770-201</td><td>100</td><td></td></tr> <tr><td>white</td><td>770-221</td><td>100</td><td></td></tr> </table> <p>Lockout cap, for plug, separable, 5-pole</p> <table border="1"> <tr><td>yellow</td><td>770-360</td><td>100</td><td></td></tr> </table>				black	770-101	100	(4x25)	white	770-121	100	(4x25)	black	770-111	100	(4x25)	white	770-131	100	(4x25)	black	770-201	100		white	770-221	100		yellow	770-360	100					
black	770-101	100	(4x25)																																		
white	770-121	100	(4x25)																																		
black	770-111	100	(4x25)																																		
white	770-131	100	(4x25)																																		
black	770-201	100																																			
white	770-221	100																																			
yellow	770-360	100																																			

# WINSTA® MIDI special Cable Assemblies 3 x 1.5 mm<sup>2</sup>

		PVC Control line: 3 x 1.5, gray			
		250 V/4 kV/3 I <sub>N</sub> 16 A			
		Conductor ends, bonded: 9 mm			
		ⓘ Approvals			
<b>Interconnecting cable, socket – plug</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	771-9993/006-103	771-9993/006-105	771-9993/006-107
		2 m	771-9993/006-203	771-9993/006-205	771-9993/006-207
		3 m	771-9993/006-303	771-9993/006-305	771-9993/006-307
		4 m	771-9993/006-403	771-9993/006-405	771-9993/006-407
		5 m	771-9993/006-503	771-9993/006-505	771-9993/006-507
		6 m	771-9993/006-603	771-9993/006-605	771-9993/006-607
		7 m	771-9993/006-703	771-9993/006-705	771-9993/006-707
		8 m	771-9993/006-803	771-9993/006-805	771-9993/006-807
<b>Connecting cable, socket – free end</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	771-9993/106-103	771-9993/106-105	771-9993/106-107
		2 m	771-9993/106-203	771-9993/106-205	771-9993/106-207
		3 m	771-9993/106-303	771-9993/106-305	771-9993/106-307
		4 m	771-9993/106-403	771-9993/106-405	771-9993/106-407
		5 m	771-9993/106-503	771-9993/106-505	771-9993/106-507
		6 m	771-9993/106-603	771-9993/106-605	771-9993/106-607
		7 m	771-9993/106-703	771-9993/106-705	771-9993/106-707
		8 m	771-9993/106-803	771-9993/106-805	771-9993/106-807
<b>Connecting cable, plug – free end</b>		Length	Item No.	Item No.	Item No.
		<b>Coding B</b>			
		PVC			
		1 m	771-9993/206-103	771-9993/206-105	771-9993/206-107
		2 m	771-9993/206-203	771-9993/206-205	771-9993/206-207
		3 m	771-9993/206-303	771-9993/206-305	771-9993/206-307
		4 m	771-9993/206-403	771-9993/206-405	771-9993/206-407
		5 m	771-9993/206-503	771-9993/206-505	771-9993/206-507
		6 m	771-9993/206-603	771-9993/206-605	771-9993/206-607
		7 m	771-9993/206-703	771-9993/206-705	771-9993/206-707
		8 m	771-9993/206-803	771-9993/206-805	771-9993/206-807

### Item numbers overview for other cable lengths

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	771	-	9	9	9	3	/	0	0	6	-	1	0	3
light green	771	-	9	9	9	3	/	0	0	6	-	1	0	5
pink	771	-	9	9	9	3	/	0	0	6	-	1	0	7



The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 3-pole, socket – plug, PVC control line, 3 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-9993/016-107.

The 10th position defines the cable cross-section. For example, a 3 x 1 mm<sup>2</sup> cable with light green connectors has the following item number: 771-9993/005-105.





The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 771-9993/006-503.



# WINSTA® MIDI special Sockets and Plugs, 4-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in. ❷ Approvals</p>	<p>2 x 20 ... 12 AWG</p> <p>2 x 0.5 ... 4 mm<sup>2</sup> ❶ 400 V/6 kV/3 I<sub>N</sub> 25 A ❸</p> <p> 9 mm / 0.35 in. ❷ Approvals</p>
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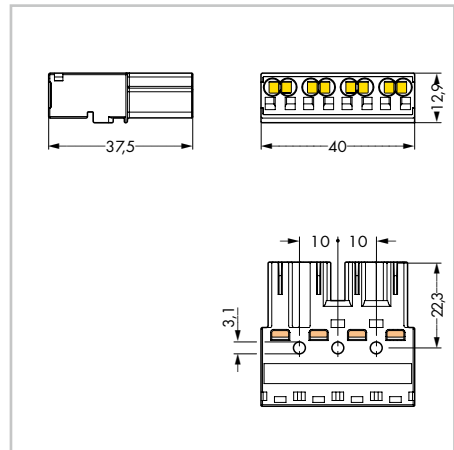
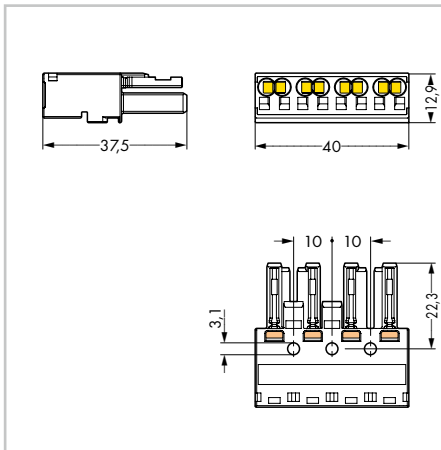


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 4-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	770-244	50	gray	770-254	50
	gray	770-244/060-000*	50	gray	770-254/060-000*	50
	gray	770-244/062-000*	50	gray	770-254/062-000*	50
	gray	770-244/064-000*	50	gray	770-254/064-000*	50
	light green	770-264	50	light green	770-274	50
	light green	770-264/071-000*	50	light green	770-274/071-000*	50
	light green	770-264/072-000*	50	light green	770-274/072-000*	50
	light green	770-264/073-000*	50	light green	770-274/073-000*	50
	pink	770-284	50	pink	770-294	50
pink	770-284/081-000*	50	pink	770-294/081-000*	50	
* For pole marking, see page 253.			* For pole marking, see page 253.			

Item-Specific Accessories							
		<b>Strain relief housing, for 2 cables, ❹</b>  5 ... 9 mm diameter black 770-504/023-000 50 white 770-514/023-000 50				<b>Strain relief housing, for 2 cables, ❹</b>  5 ... 9 mm diameter black 770-504/023-000 50 white 770-514/023-000 50	
		<b>Strain relief housing, for 2 cables, ❹</b>  9 ... 13 mm diameter black 770-504 50 white 770-514 50				<b>Strain relief housing, for 2 cables, ❹</b>  9 ... 13 mm diameter black 770-504 50 white 770-514 50	

Accessories, 770 Series							
		<b>Locking lever, for "flying leads",</b>  manually operated black 770-101 100 (4x25) white 770-121 100 (4x25)				<b>Locking lever, for "flying leads",</b>  tool operated black 770-111 100 (4x25) white 770-131 100 (4x25)	
<b>Info</b>		<b>Dimensions</b>					

- ❶ Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ❷ For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ❸ For 3-pole load I<sub>N</sub> = 25 A!  
For 4-pole load I<sub>N</sub> = 20 A!
  - ❹ For more strain relief housings, see page 172.
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.





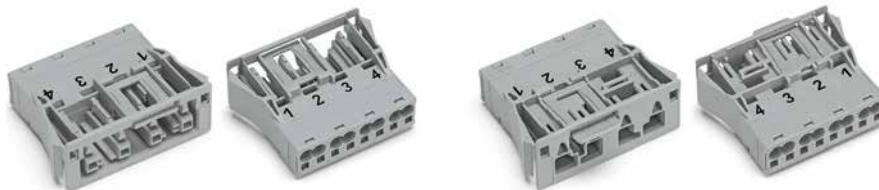
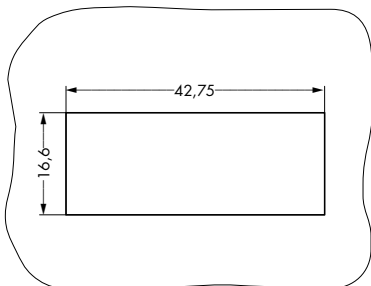
# WINSTA® MIDI special Snap-In Sockets and Plugs, 4-Pole

PUSH-IN CAGE CLAMP®

3

227



Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A ③	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A ③	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	





3

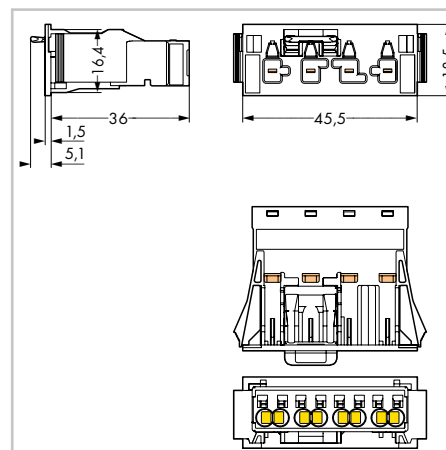
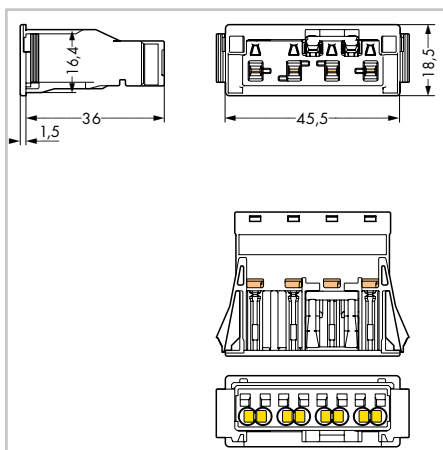
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 3-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	● gray	770-744	50	● gray	770-754	50
	● gray	770-744/060-000*	50	● gray	770-754/060-000*	50
	● gray	770-744/062-000*	50	● gray	770-754/062-000*	50
	● gray	770-744/064-000*	50	● gray	770-754/064-000*	50
	● light green	770-764	50	● light green	770-774	50
	● light green	770-764/071-000*	50	● light green	770-774/071-000*	50
	● light green	770-764/072-000*	50	● light green	770-774/072-000*	50
	● light green	770-764/073-000*	50	● light green	770-774/073-000*	50
	● pink	770-784	50	● pink	770-794	50
	● pink	770-784/081-000*	50	● pink	770-794/081-000*	50
		*For pole marking, see page 253.			*For pole marking, see page 253.	

## Item-Specific Accessories

	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>
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## Accessories, 770 Series

	<b>Lockout cap, for cutout, 4-pole</b>  <ul style="list-style-type: none"> <li>black 770-644 100</li> <li>white 770-694 100</li> </ul>	<b>Lockout cap, for cutout, 4-pole</b>  <ul style="list-style-type: none"> <li>black 770-644 100</li> <li>white 770-694 100</li> </ul>
<b>Dimensions</b>		



# WINSTA® MIDI special PCB Connectors, 4-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ②</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ②</p> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	770-844	100	gray	770-854	100
	light green	770-864	100	light green	770-874	100
	pink	770-884	100	pink	770-894	100

Item-Specific Accessories								
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole				
		black	770-201	100		yellow	770-360	100
		white	770-221	100		gray	770-401	100
					Coding pin, for plug (A and B coding)			
					gray	770-401	100	

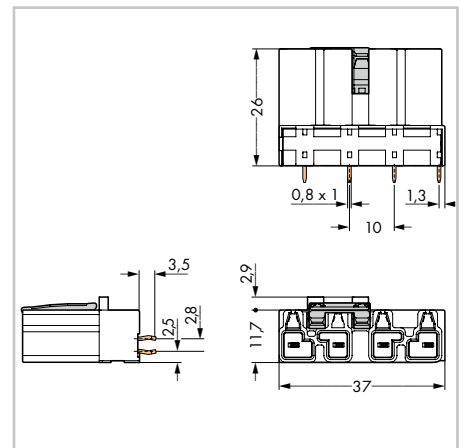
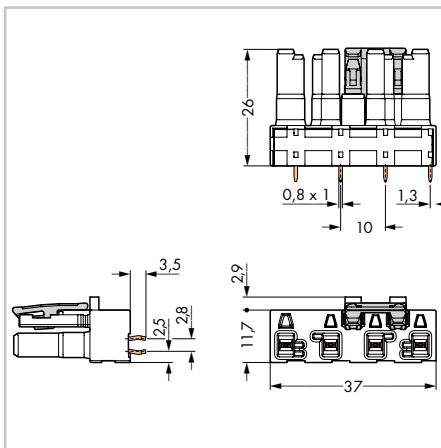
Accessories, 770 Series								
	Locking lever, for "flying leads", manually operated			Locking lever, for "flying leads", tool operated				
		black	770-101	100 (4x25)		black	770-111	100 (4x25)
		white	770-121	100 (4x25)		white	770-131	100 (4x25)

Info	Dimensions
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- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For 3-pole load I<sub>N</sub> = 25 A!  
For 4-pole load I<sub>N</sub> = 20 A!

- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.



400 V/6 kV/3 $I_N$ 25 A ②  ① Approvals	400 V/6 kV/3 $I_N$ 25 A ②  ① Approvals
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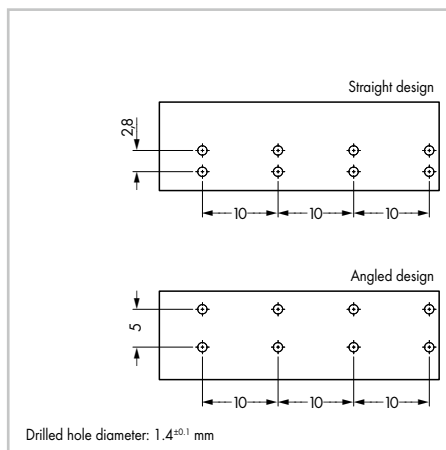
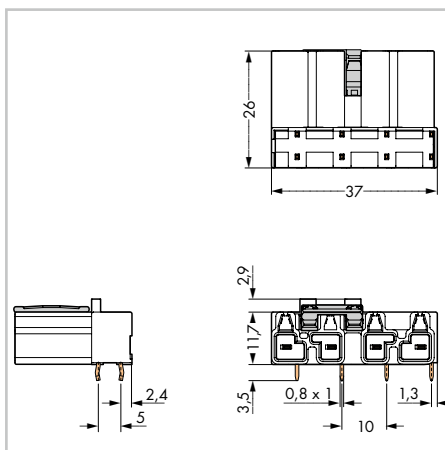
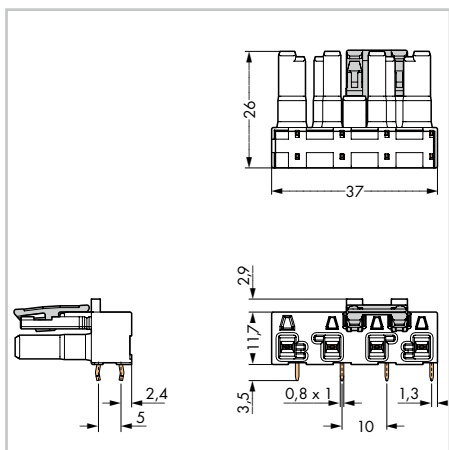
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
gray	770-844/011-000	100	gray	770-854/011-000	100
light green	770-864/011-000	100	light green	770-874/011-000	100
pink	770-884/011-000	100	pink	770-894/011-000	100

Item-Specific Accessories							
<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for plug, separable, 5-pole</b>				
	black	770-201	100		yellow	770-360	100
	white	770-221	100				
<b>Coding pin, for plug (A and B coding)</b>							
	gray	770-401	100				

Accessories, 770 Series							
<b>Locking lever, for "flying leads", manually operated</b>			<b>Locking lever, for "flying leads", tool operated</b>				
	black	770-101	100 (4x25)		black	770-111	100 (4x25)
	white	770-121	100 (4x25)		white	770-131	100 (4x25)

Dimensions	Hole patterns
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Hole patterns
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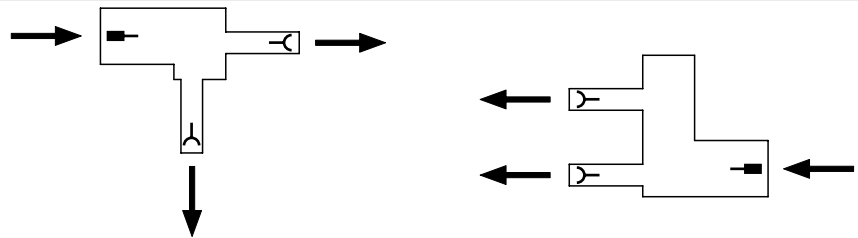
# WINSTA® MIDI special T- and h-Distribution Connectors, 4-Pole

	400 V/6 kV/3 $I_N$ 25 A ④  ① Approvals	400 V/6 kV/3 $I_N$ 25 A ④  ① Approvals
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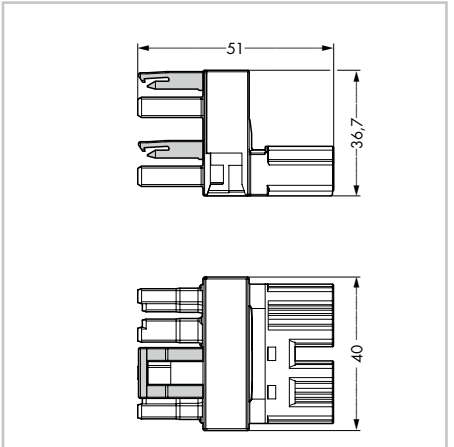
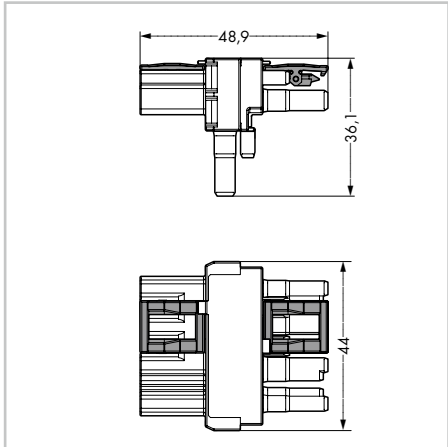


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector, h-distribution connector, 4-pole	T-distribution connector, 1 x plug/2 x socket			h-distribution connector, unidirectional, plug/socket - socket		
	gray	770-1631	50	gray	770-1681	25
	light green	770-1632	50	light green	770-1682	25
	pink	770-1633	50	pink	770-1683	25
	for "flying leads", with 3rd locking lever			for "flying leads", with 3rd locking lever		
	gray	770-1731	50	gray	770-1781	25
	light green	770-1732	50	light green	770-1782	25
	pink	770-1733	50	pink	770-1783	25

Item-Specific Accessories						
	<b>Lockout cap</b> , for socket, separable, 12-pole  black 770-201 100 white 770-221 100			<b>Mounting plate</b> , for distribution connectors  black 770-624 25 white 770-674 25		
	<b>Lockout cap</b> , for plug, separable, 5-pole  yellow 770-360 100			<b>Fixing pin</b> , for mounting plates  ② black 890-601 250 ③ black 770-601 250		
				<b>Lockout cap</b> , for socket, separable, 12-pole  black 770-201 100 white 770-221 100		
<b>Info</b>	<b>Dimensions</b>					



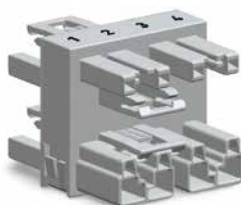
- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness
  - ③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness
  - ④ For 3-pole load  $I_N$  = 25 A!  
For 4-pole load  $I_N$  = 20 A!
- 
- gray Coding B (1 2 3 4)
  - light green Coding B (1 2 3 4)
  - pink Coding B (1 2 3 4)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.







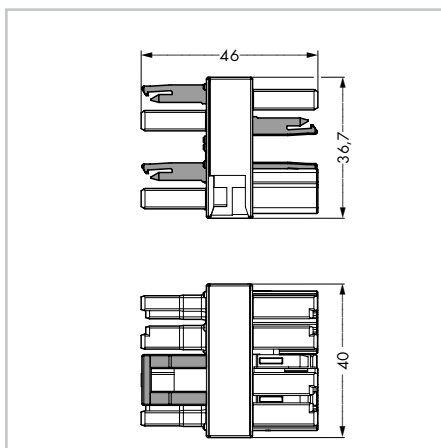
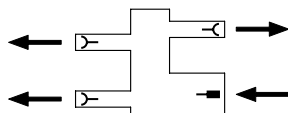


# WINSTA® MIDI special Distribution Connectors, 4-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ④</p> <p>① Approvals</p>	
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Description	Color	Item No.	Pack. Unit
Distribution connector, 4-pole	Distribution connector, 3-way, 1 x plug/3 x socket		
	gray	770-1734	50
	light green	770-1735	50
	pink	770-1736	50
<b>Item-Specific Accessories</b>			
	Mounting plate, for distribution connectors		
		black 770-624	25
		white 770-674	25
	Fixing pin, for mounting plates		
		② black 890-601	250
		③ black 770-601	250
	Lockout cap, for socket, separable, 12-pole		
		black 770-201	100
		white 770-221	100
	Lockout cap, for plug, separable, 5-pole		
		yellow 770-360	100
	<b>Dimensions</b>		



# WINSTA® MIDI special Cable Assemblies 4 x 1 mm<sup>2</sup>

		<b>PVC</b> <b>Control line: 4 x 1, gray</b>  <b>400 V/6 kV/3 I<sub>N</sub> 10 A ②</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>																												
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																									
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-9994/005-103    ● 771-9994/005-105    ● 771-9994/005-107 2 m    ● 771-9994/005-203    ● 771-9994/005-205    ● 771-9994/005-207 3 m    ● 771-9994/005-303    ● 771-9994/005-305    ● 771-9994/005-307 4 m    ● 771-9994/005-403    ● 771-9994/005-405    ● 771-9994/005-407 5 m    ● 771-9994/005-503    ● 771-9994/005-505    ● 771-9994/005-507 6 m    ● 771-9994/005-603    ● 771-9994/005-605    ● 771-9994/005-607 7 m    ● 771-9994/005-703    ● 771-9994/005-705    ● 771-9994/005-707 8 m    ● 771-9994/005-803    ● 771-9994/005-805    ● 771-9994/005-807																												
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																									
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-9994/105-103    ● 771-9994/105-105    ● 771-9994/105-107 2 m    ● 771-9994/105-203    ● 771-9994/105-205    ● 771-9994/105-207 3 m    ● 771-9994/105-303    ● 771-9994/105-305    ● 771-9994/105-307 4 m    ● 771-9994/105-403    ● 771-9994/105-405    ● 771-9994/105-407 5 m    ● 771-9994/105-503    ● 771-9994/105-505    ● 771-9994/105-507 6 m    ● 771-9994/105-603    ● 771-9994/105-605    ● 771-9994/105-607 7 m    ● 771-9994/105-703    ● 771-9994/105-705    ● 771-9994/105-707 8 m    ● 771-9994/105-803    ● 771-9994/105-805    ● 771-9994/105-807																												
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>																									
		<b>Coding B</b> <b>PVC</b> 1 m    ● 771-9994/205-103    ● 771-9994/205-105    ● 771-9994/205-107 2 m    ● 771-9994/205-203    ● 771-9994/205-205    ● 771-9994/205-207 3 m    ● 771-9994/205-303    ● 771-9994/205-305    ● 771-9994/205-307 4 m    ● 771-9994/205-403    ● 771-9994/205-405    ● 771-9994/205-407 5 m    ● 771-9994/205-503    ● 771-9994/205-505    ● 771-9994/205-507 6 m    ● 771-9994/205-603    ● 771-9994/205-605    ● 771-9994/205-607 7 m    ● 771-9994/205-703    ● 771-9994/205-705    ● 771-9994/205-707 8 m    ● 771-9994/205-803    ● 771-9994/205-805    ● 771-9994/205-807																												
<b>Info</b>		<b>Accessories</b>																												
<p>① For "International Certification Organizations" and "Approvals – User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② Full rated current can only be applied to a maximum of 3 poles!</p> <p>For other cables, please contact factory.</p> <p>● gray      Coding B      (1 2 3 4)          ● light green      Coding B      (1 2 3 4)          ● pink      Coding B      (1 2 3 4)</p> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250.          Fire load data available upon request.</p>		<p><b>Locking lever, for "flying leads",</b> manually operated</p> <table border="1"> <tr> <td>black</td> <td>770-101</td> <td>100</td> <td>(4x25)</td> </tr> <tr> <td>white</td> <td>770-121</td> <td>100</td> <td>(4x25)</td> </tr> </table> <p><b>Locking lever, for "flying leads",</b> tool operated</p> <table border="1"> <tr> <td>black</td> <td>770-111</td> <td>100</td> <td>(4x25)</td> </tr> <tr> <td>white</td> <td>770-131</td> <td>100</td> <td>(4x25)</td> </tr> </table> <p><b>Lockout cap, for socket, separable, 12-pole</b></p> <table border="1"> <tr> <td>black</td> <td>770-201</td> <td>100</td> </tr> <tr> <td>white</td> <td>770-221</td> <td>100</td> </tr> </table> <p><b>Lockout cap, for plug, separable, 5-pole</b></p> <table border="1"> <tr> <td>yellow</td> <td>770-360</td> <td>100</td> </tr> </table>				black	770-101	100	(4x25)	white	770-121	100	(4x25)	black	770-111	100	(4x25)	white	770-131	100	(4x25)	black	770-201	100	white	770-221	100	yellow	770-360	100
black	770-101	100	(4x25)																											
white	770-121	100	(4x25)																											
black	770-111	100	(4x25)																											
white	770-131	100	(4x25)																											
black	770-201	100																												
white	770-221	100																												
yellow	770-360	100																												

# WINSTA® MIDI special Cable Assemblies 4 x 1.5 mm<sup>2</sup>

		<b>PVC</b> <b>Control line: 4 x 1.5, gray</b>  <b>400 V/6 kV/3 I<sub>N</sub> 16 A ②</b>  <b>Conductor ends, bonded: 9 mm</b> <b>① Approvals</b>			
<b>Interconnecting cable, socket – plug</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m   ● 771-9994/006-103   ● 771-9994/006-105   ● 771-9994/006-107 2 m   ● 771-9994/006-203   ● 771-9994/006-205   ● 771-9994/006-207 3 m   ● 771-9994/006-303   ● 771-9994/006-305   ● 771-9994/006-307 4 m   ● 771-9994/006-403   ● 771-9994/006-405   ● 771-9994/006-407 5 m   ● 771-9994/006-503   ● 771-9994/006-505   ● 771-9994/006-507 6 m   ● 771-9994/006-603   ● 771-9994/006-605   ● 771-9994/006-607 7 m   ● 771-9994/006-703   ● 771-9994/006-705   ● 771-9994/006-707 8 m   ● 771-9994/006-803   ● 771-9994/006-805   ● 771-9994/006-807			
<b>Connecting cable, socket – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m   ● 771-9994/106-103   ● 771-9994/106-105   ● 771-9994/106-107 2 m   ● 771-9994/106-203   ● 771-9994/106-205   ● 771-9994/106-207 3 m   ● 771-9994/106-303   ● 771-9994/106-305   ● 771-9994/106-307 4 m   ● 771-9994/106-403   ● 771-9994/106-405   ● 771-9994/106-407 5 m   ● 771-9994/106-503   ● 771-9994/106-505   ● 771-9994/106-507 6 m   ● 771-9994/106-603   ● 771-9994/106-605   ● 771-9994/106-607 7 m   ● 771-9994/106-703   ● 771-9994/106-705   ● 771-9994/106-707 8 m   ● 771-9994/106-803   ● 771-9994/106-805   ● 771-9994/106-807			
<b>Connecting cable, plug – free end</b>		<b>Length</b>	<b>Item No.</b>	<b>Item No.</b>	<b>Item No.</b>
		<b>Coding B</b> <b>PVC</b> 1 m   ● 771-9994/206-103   ● 771-9994/206-105   ● 771-9994/206-107 2 m   ● 771-9994/206-203   ● 771-9994/206-205   ● 771-9994/206-207 3 m   ● 771-9994/206-303   ● 771-9994/206-305   ● 771-9994/206-307 4 m   ● 771-9994/206-403   ● 771-9994/206-405   ● 771-9994/206-407 5 m   ● 771-9994/206-503   ● 771-9994/206-505   ● 771-9994/206-507 6 m   ● 771-9994/206-603   ● 771-9994/206-605   ● 771-9994/206-607 7 m   ● 771-9994/206-703   ● 771-9994/206-705   ● 771-9994/206-707 8 m   ● 771-9994/206-803   ● 771-9994/206-805   ● 771-9994/206-807			



**Item numbers overview for other cable lengths**

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	771	-	9	9	9	4	/	0	0	6	-	1	0	3
light green	771	-	9	9	9	4	/	0	0	6	-	1	0	5
pink	771	-	9	9	9	4	/	0	0	6	-	1	0	7

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 4-pole, socket – plug, PVC control line, 4 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-9994/016-107.  
The 10th position defines the cable cross-section. For example, a 4 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-9994/006-105.  
The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 771-9994/006-503.

# WINSTA® MIDI special Sockets and Plugs, 5-Pole

<p>2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A ③</p> <p> 9 mm / 0.35 in. ② Approvals</p>	<p>2 x 20 ... 12 AWG 2 x 0.5 ... 4 mm<sup>2</sup> ① 400 V/6 kV/3 I<sub>N</sub> 25 A ③</p> <p> 9 mm / 0.35 in. ② Approvals</p>
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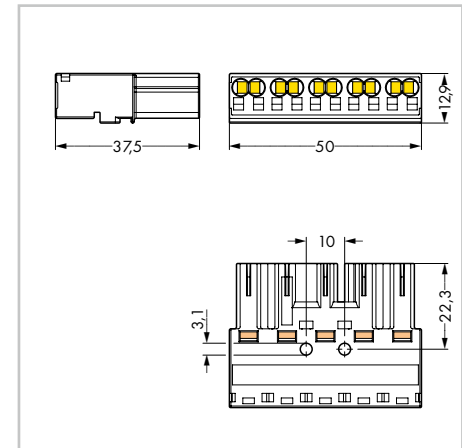
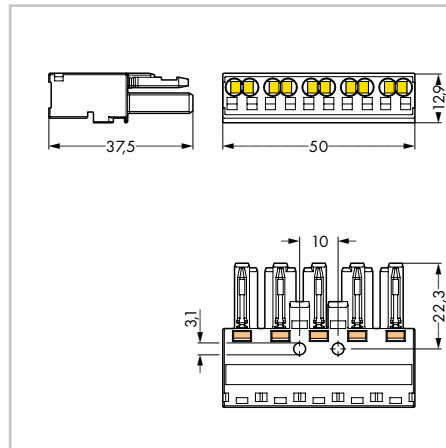


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, 5-pole, with Push-in CAGE CLAMP® connection	Socket without strain relief housing			Plug without strain relief housing		
	gray	770-245	50	gray	770-255	50
	gray	770-245/060-000*	50	gray	770-255/060-000*	50
	gray	770-245/062-000*	50	gray	770-255/062-000*	50
	gray	770-245/064-000*	50	gray	770-255/064-000*	50
	light green	770-265	50	light green	770-275	50
	light green	770-265/073-000*	50	light green	770-275/073-000*	50
	pink	770-285	50	pink	770-295	50
	pink	770-285/080-000*	50	pink	770-295/080-000*	50
	pink	770-285/082-000*	50	pink	770-295/082-000*	50
	* For pole marking, see page 287.			* For pole marking, see page 287.		

Item-Specific Accessories							
		Strain relief housing, for 2 cables, ④				Strain relief housing, for 2 cables, ④	
		5 ... 9 mm diameter				5 ... 9 mm diameter	
		black 770-505/023-000 25				black 770-505/023-000 25	
		white 770-515/023-000 25				white 770-515/023-000 25	
		Strain relief housing, for 2 cables, ④				Strain relief housing, for 2 cables, ④	
		9 ... 13 mm diameter				9 ... 13 mm diameter	
		black 770-505 25				black 770-505 25	
		white 770-515 25				white 770-515 25	

Accessories, 770 Series							
		Locking lever, for "flying leads,"				Locking lever, for "flying leads,"	
		manually operated				tool operated	
		black 770-101 100 (4x25)				black 770-111 100 (4x25)	
		white 770-121 100 (4x25)				white 770-131 100 (4x25)	
Info		Dimensions					

- ① Conductor sizes: 0.5 ... 4 mm<sup>2</sup> "s + f-st"  
0.5 ... 2.5 mm<sup>2</sup> "stranded"
  - ② For "International Certification Organizations" and "Approvals - User Guide," see page 534.
  - ③ For 3-pole load I<sub>N</sub> = 25 A!  
For 4- and 5-pole load I<sub>N</sub> = 20 A!
  - ④ For more strain relief housings, see page 186.
- Standard printing (without suffix number)
- gray Coding B (1 2 3 4 5)
  - light green Coding B (1 2 3 4 5)
  - pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 253.
- For coding information, see page 250.  
Fire load data available upon request.





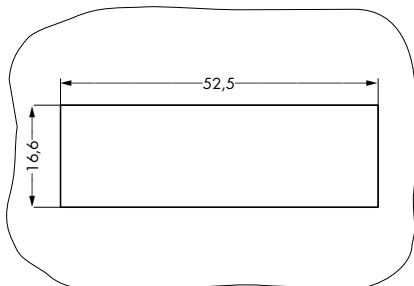
# WINSTA® MIDI special Snap-In Sockets and Plugs, 5-Pole

PUSH-IN CAGE CLAMP®

3

235



Cutout dimensions  Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A ③	2 x 20 ... 12 AWG	2 x 0.5 ... 4 mm <sup>2</sup> ① 400 V/6 kV/3 I <sub>N</sub> 25 A ③	2 x 20 ... 12 AWG
	 9 mm / 0.35 in. ② Approvals		 9 mm / 0.35 in. ② Approvals	





3

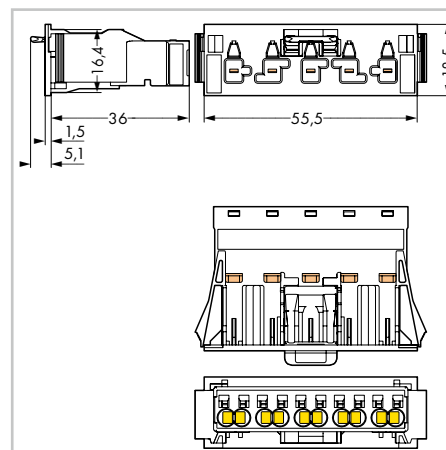
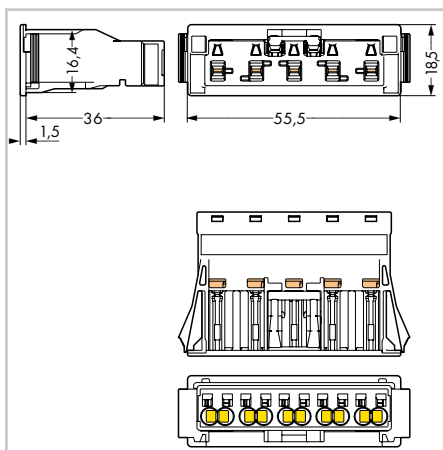
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Connectors, snap-in device connection, 5-pole, with Push-in CAGE CLAMP® connection	Socket			Plug		
	gray	770-745	50	gray	770-755	50
	gray	770-745/060-000*	50	gray	770-755/060-000*	50
	gray	770-745/062-000*	50	gray	770-755/062-000*	50
	gray	770-745/064-000*	50	gray	770-755/064-000*	50
	light green	770-765	50	light green	770-775	50
	light green	770-765/073-000*	50	light green	770-775/073-000*	50
	pink	770-785	50	pink	770-795	50
	pink	770-785/080-000*	50	pink	770-795/080-000*	50
	pink	770-785/082-000*	50	pink	770-795/082-000*	50
	For snap in frame for sockets and plugs, see page 139.			For snap in frame for sockets and plugs, see page 139.		
	*For pole marking, see page 287.			*For pole marking, see page 287.		

## Item-Specific Accessories

	<b>Lockout cap, for socket, separable, 12-pole</b>  black 770-201 100 white 770-221 100	<b>Lockout cap, for plug, separable, 5-pole</b>  yellow 770-360 100
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## Accessories, 770 Series

	<b>Lockout cap, for cutout, 5-pole</b>  black 770-645 100 white 770-695 100	<b>Lockout cap, for cutout, 5-pole</b>  black 770-645 100 white 770-695 100
<b>Dimensions</b>		



# WINSTA® MIDI special PCB Connectors, 5-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ②</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ②</p> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PCB connectors, 2 solder pins per pole	Socket, straight			Plug, straight		
	gray	770-845	100	gray	770-855	100
	light green	770-865	100	light green	770-875	100
	pink	770-885	100	pink	770-895	100

Item-Specific Accessories								
	Lockout cap, for socket, separable, 12-pole			Lockout cap, for plug, separable, 5-pole				
		black	770-201	100		yellow	770-360	100
		white	770-221	100		gray	770-401	100
					Coding pin, for plug (A and B coding)			
					gray	770-401	100	

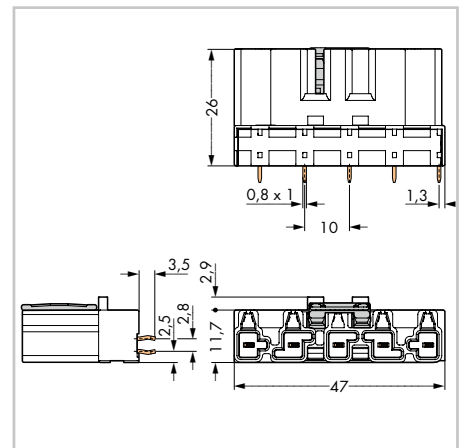
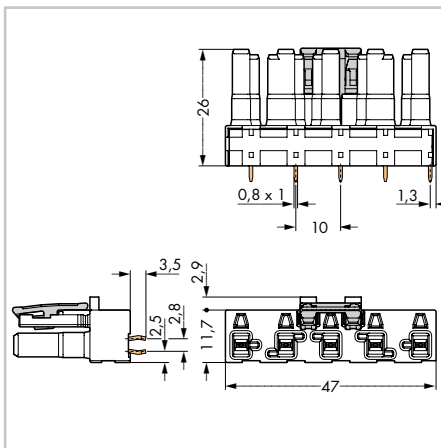
Accessories, 770 Series								
	Locking lever, for "flying leads," manually operated			Locking lever, for "flying leads," tool operated				
		black	770-101	100 (4x25)		black	770-111	100 (4x25)
		white	770-121	100 (4x25)		white	770-131	100 (4x25)

Info	Dimensions
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- ① For "International Certification Organizations" and "Approvals - User Guide," see page 534.
- ② For 3-pole load I<sub>N</sub> = 25 A!  
For 4- and 5-pole load I<sub>N</sub> = 20 A!

- gray Coding B (1 2 3 4 5)
  - light green Coding B (1 2 3 4 5)
  - pink Coding B (1 2 3 4 5)
- For additional pole marking, see page 234.

For coding information, see page 250.  
Fire load data available upon request.



400 V/6 kV/3 $I_N$ 25 A ②  ① Approvals	400 V/6 kV/3 $I_N$ 25 A ②  ① Approvals
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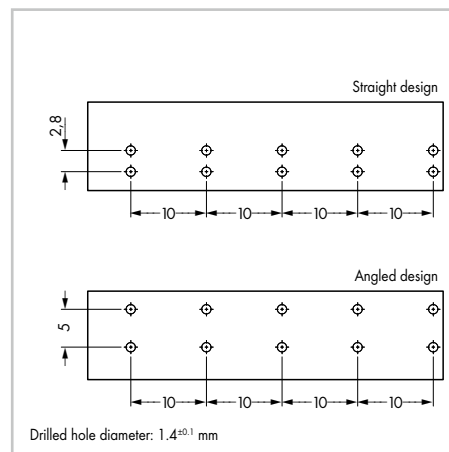
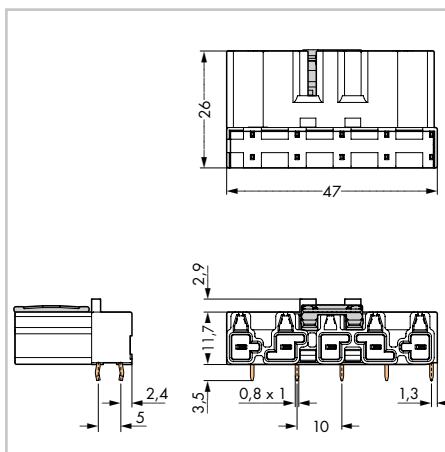
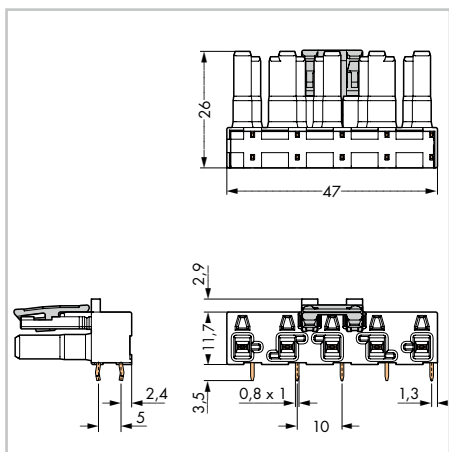


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Socket, angled</b>			<b>Plug, angled</b>		
gray	770-845/011-000	100	gray	770-855/011-000	100
light green	770-865/011-000	100	light green	770-875/011-000	100
pink	770-885/011-000	100	pink	770-895/011-000	100

Item-Specific Accessories							
<b>Lockout cap, for socket, separable, 12-pole</b>			<b>Lockout cap, for plug, separable, 5-pole</b>				
	black	770-201	100		yellow	770-360	100
	white	770-221	100				
<b>Coding pin, for plug (A and B coding)</b>							
	gray	770-401	100				

Accessories, 770 Series							
<b>Locking lever, for "flying leads," manually operated</b>			<b>Locking lever, for "flying leads," tool operated</b>				
	black	770-101	100 (4x25)		black	770-111	100 (4x25)
	white	770-121	100 (4x25)		white	770-131	100 (4x25)

Dimensions	Hole patterns
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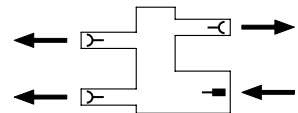
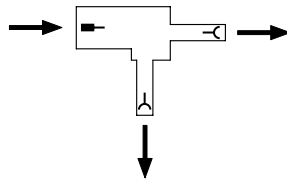
# WINSTA® MIDI special T-Distribution Connectors and Distribution Connectors, 5-Pole

	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ④</p> <p>① Approvals</p>	<p>400 V/6 kV/3 I<sub>N</sub> 25 A ④</p> <p>① Approvals</p>
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Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connectors, distribution connectors, 5-pole	T-distribution connector, 1 x plug/2 x socket			Distribution connector, 3-way, 1 x plug/3 x socket		
	gray	770-1641	50	gray	770-1744	25
	light green	770-1642	50	light green	770-1745	25
	pink	770-1643	50	pink	770-1746	25
	for "flying leads", with 3rd locking lever					
	gray	770-1741	50			
	light green	770-1742	50			
	pink	770-1743	50			

Item-Specific Accessories						
	<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>			<b>Mounting plate, for distribution connectors</b>  <ul style="list-style-type: none"> <li>black 770-625 25</li> <li>white 770-675 25</li> </ul>		
	<b>Lockout cap, for plug, separable, 5-pole</b>  <ul style="list-style-type: none"> <li>yellow 770-360 100</li> </ul>			<b>Fixing pin, for mounting plates</b>  <ul style="list-style-type: none"> <li>② black 890-601 250</li> <li>③ black 770-601 250</li> </ul>		
				<b>Lockout cap, for socket, separable, 12-pole</b>  <ul style="list-style-type: none"> <li>black 770-201 100</li> <li>white 770-221 100</li> </ul>		
<b>Info</b>	<b>Dimensions</b>					



① For "International Certification Organizations" and "Approvals - User Guide," see page 534.

② 5.0 mm Ø, 0.2 ... 1.2 mm plate thickness

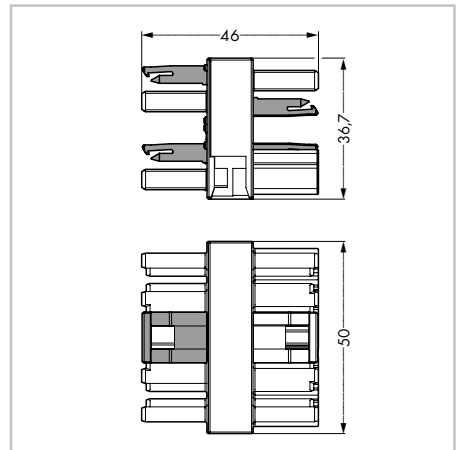
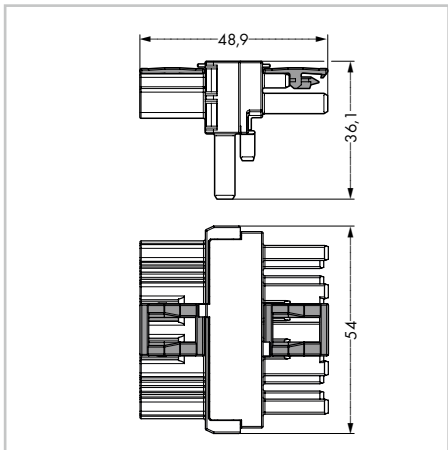
③ 6.0 mm Ø, 1 ... 2.5 mm plate thickness

④ For 3-pole load I<sub>N</sub> = 25 A!  
For 4- and 5-pole load I<sub>N</sub> = 20 A!

● gray Coding B (1 2 3 4 5)  
 ● light green Coding B (1 2 3 4 5)  
 ● pink Coding B (1 2 3 4 5)

For additional pole marking, see page 253.

For coding information, see page 250.  
Fire load data available upon request.







# WINSTA® MIDI special Cable Assemblies 5 x 1 mm<sup>2</sup>

		<p>PVC Control line: 5 x 1, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 10 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																			
<p>Interconnecting cable, socket – plug</p>		Length	Item No.	Item No.	Item No.																																
		<p>Coding B</p> <p>PVC</p> <table border="1"> <tr><td>1 m</td><td>● 771-9995/005-103</td><td>● 771-9995/005-105</td><td>● 771-9995/005-107</td></tr> <tr><td>2 m</td><td>● 771-9995/005-203</td><td>● 771-9995/005-205</td><td>● 771-9995/005-207</td></tr> <tr><td>3 m</td><td>● 771-9995/005-303</td><td>● 771-9995/005-305</td><td>● 771-9995/005-307</td></tr> <tr><td>4 m</td><td>● 771-9995/005-403</td><td>● 771-9995/005-405</td><td>● 771-9995/005-407</td></tr> <tr><td>5 m</td><td>● 771-9995/005-503</td><td>● 771-9995/005-505</td><td>● 771-9995/005-507</td></tr> <tr><td>6 m</td><td>● 771-9995/005-603</td><td>● 771-9995/005-605</td><td>● 771-9995/005-607</td></tr> <tr><td>7 m</td><td>● 771-9995/005-703</td><td>● 771-9995/005-705</td><td>● 771-9995/005-707</td></tr> <tr><td>8 m</td><td>● 771-9995/005-803</td><td>● 771-9995/005-805</td><td>● 771-9995/005-807</td></tr> </table>				1 m	● 771-9995/005-103	● 771-9995/005-105	● 771-9995/005-107	2 m	● 771-9995/005-203	● 771-9995/005-205	● 771-9995/005-207	3 m	● 771-9995/005-303	● 771-9995/005-305	● 771-9995/005-307	4 m	● 771-9995/005-403	● 771-9995/005-405	● 771-9995/005-407	5 m	● 771-9995/005-503	● 771-9995/005-505	● 771-9995/005-507	6 m	● 771-9995/005-603	● 771-9995/005-605	● 771-9995/005-607	7 m	● 771-9995/005-703	● 771-9995/005-705	● 771-9995/005-707	8 m	● 771-9995/005-803	● 771-9995/005-805	● 771-9995/005-807
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<p>Connecting cable, socket – free end</p>		Length	Item No.	Item No.	Item No.																																
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<p>Info</p> <p>① For "International Certification Organizations" and "Approvals - User Guide," see page 534. Marine approvals (GL, LR, NV) relate exclusively to cables approved for marine applications.</p> <p>② Full rated current can only be applied to a maximum of 3 poles!</p> <p>For other cables, please contact factory.</p> <table border="1"> <tr><td>● gray</td><td>Coding B</td><td>(1 2 3 4 5)</td></tr> <tr><td>● light green</td><td>Coding B</td><td>(1 2 3 4 5)</td></tr> <tr><td>● pink</td><td>Coding B</td><td>(1 2 3 4 5)</td></tr> </table> <p>For additional pole marking, see page 253.</p> <p>For coding information, see page 250. Fire load data available upon request.</p>		● gray	Coding B	(1 2 3 4 5)	● light green	Coding B	(1 2 3 4 5)	● pink	Coding B	(1 2 3 4 5)	<p>Accessories</p> <p>Locking lever, for "flying leads," manually operated</p> <table border="1"> <tr><td>black</td><td>770-101</td><td>100 (4x25)</td></tr> <tr><td>white</td><td>770-121</td><td>100 (4x25)</td></tr> </table> <p>Locking lever, for "flying leads," tool operated</p> <table border="1"> <tr><td>black</td><td>770-111</td><td>100 (4x25)</td></tr> <tr><td>white</td><td>770-131</td><td>100 (4x25)</td></tr> </table> <p>Lockout cap, for socket, separable, 12-pole</p> <table border="1"> <tr><td>black</td><td>770-201</td><td>100</td></tr> <tr><td>white</td><td>770-221</td><td>100</td></tr> </table> <p>Lockout cap, for plug, separable, 5-pole</p> <table border="1"> <tr><td>yellow</td><td>770-360</td><td>100</td></tr> </table>				black	770-101	100 (4x25)	white	770-121	100 (4x25)	black	770-111	100 (4x25)	white	770-131	100 (4x25)	black	770-201	100	white	770-221	100	yellow	770-360	100		
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# WINSTA® MIDI special Cable Assemblies 5 x 1.5 mm<sup>2</sup>

		<p>PVC Control line: 5 x 1.5, gray</p> <p>400 V/6 kV/3 I<sub>N</sub> 16 A ②</p> <p>Conductor ends, bonded: 9 mm</p> <p>① Approvals</p>																																			
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### Item numbers overview for other cable lengths

Position	1 - 3	-	4	5	6	7	/	8	9	10	-	11	12	13
gray	771	-	9	9	9	5	/	0	0	6	-	1	0	3
light green	771	-	9	9	9	5	/	0	0	6	-	1	0	5
pink	771	-	9	9	9	5	/	0	0	6	-	1	0	7

The item numbers listed above correspond to the following cable version:  
Interconnecting cable, 5-pole, socket – plug, PVC control line, 5 x 1.5 mm<sup>2</sup>, 1 m long

The 9th position defines whether it is a PVC or halogen-free cable. For example, an halogen-free cable with pink connectors has the following item number: 771-9995/016-107.

The 10th position defines the cable cross-section. For example, a 5 x 1.5 mm<sup>2</sup> cable with light green connectors has the following item number: 771-9995/006-105.

The 11th position defines the cable length. For example, a 5-meter cable with gray connectors has the following item number: 771-9995/006-503.






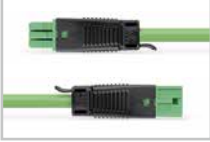
# WINSTA® KNX 893/894 Series, 0.8 mm Ø / 3 A

PUSH WIRE®

3

243

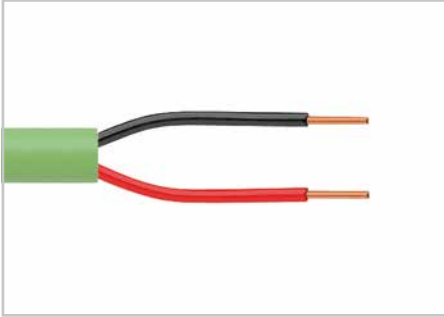
- Notice:**
- Installation connectors are designed for connection and disconnection while not under load.
  - There is no hazard-inducing interchangeability with systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
  - Compliance with the standards (IEC 61535) does not guarantee hazard-preventing, non-interchangeability with installation connector systems from various manufacturers.
  - Installation connector systems are not a substitute for residential connector/socket systems.
  
  - WINSTA® KNX connectors are not intended for installation in open or easily accessible areas.

	Page
	<b>893 Series Connectors, 2-Pole</b> 245
	<b>893 Series Snap-In Device Connectors, 2-Pole</b> 246
	<b>893 Series T-Distribution Connectors</b> 247
	<b>894 Series Cable Assemblies, 2 x 0.8 mm Ø</b> 248

3

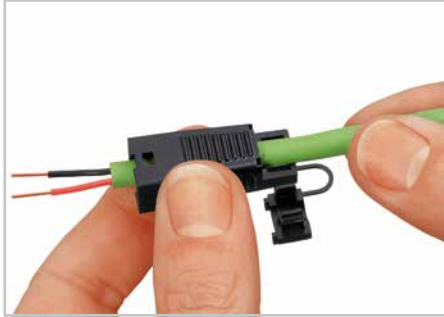
# WINSTA® KNX, 893 Series Handling:

## Preparation

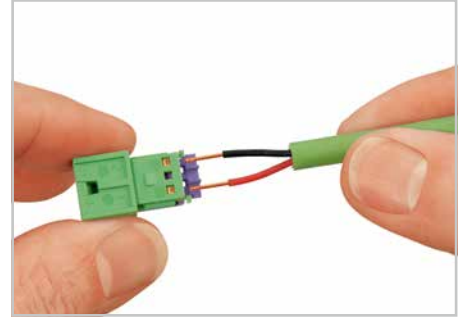


1. Strip length, outer insulation: = 23 mm
2. Strip length = 9 mm

## Conductor termination

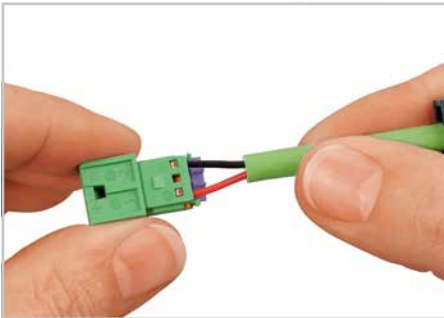


Prior to termination, pull the strain relief housing over the cable.

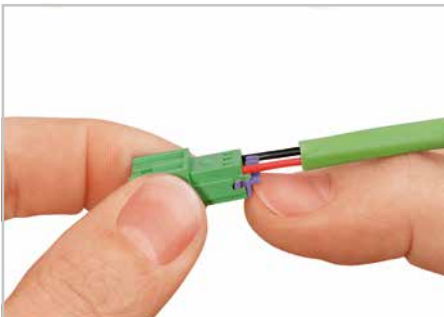


Insert stripped conductor directly into the conductor entry.

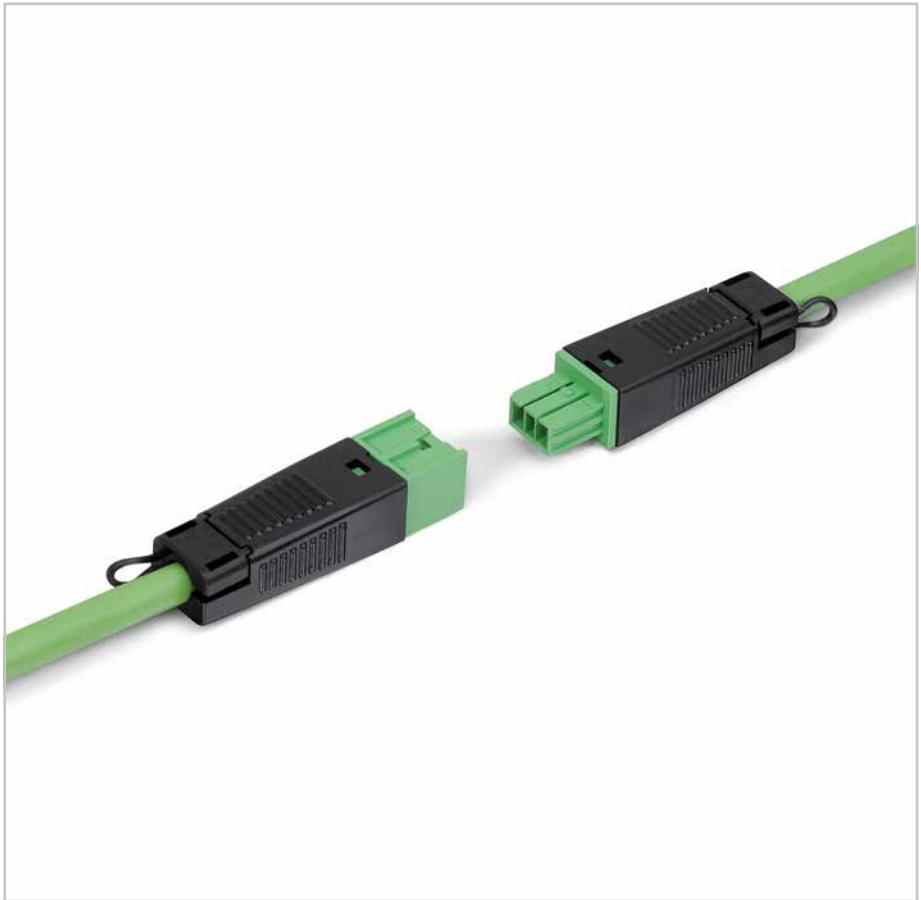
## Conductor termination



Push conductors until they hit backstop.



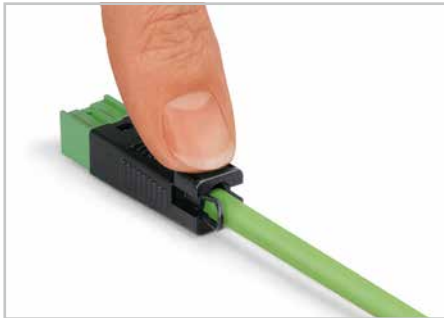
To disconnect, open clamping unit using the actuator and pull out the conductor.



## Strain relief assembly



Snap wired connector into strain relief housing.



Press strain relief firmly on the cable.





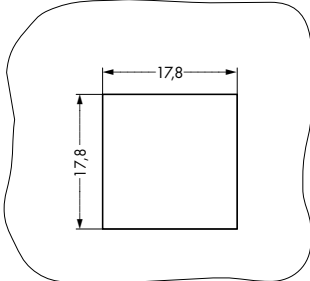
Pre-assembled KNX connector



# WINSTA® KNX Snap-In Sockets and Plugs, 2-Pole

PUSH WIRE®

<p>Cutout dimensions</p> <p>Plate thickness: 0.5 ... 2 mm Cutout tolerance: + 0.1 mm</p>	<p>0.8 mm Ø 50 V/0.8 kV/3 I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in.</p> <p>1 Approvals</p>	<p>0.8 mm Ø 50 V/0.8 kV/3 I<sub>N</sub> 3 A</p> <p> 9 mm / 0.35 in.</p> <p>1 Approvals</p>
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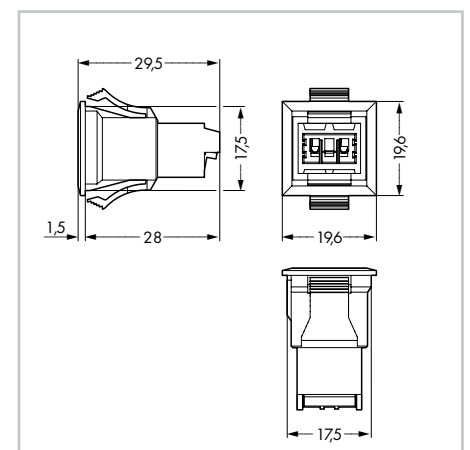
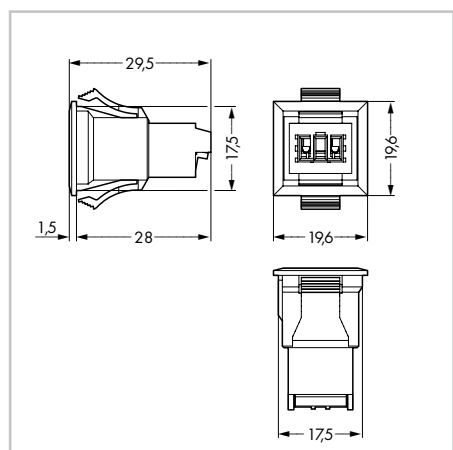


Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Snap-in connectors, 2-pole, with spring clamp connection, T-distribution connectors	Socket, for KNX applications			Plug, for KNX applications		
	● green	893-2002	50	● green	893-2012	50
	With special coding:			With special coding:		
	○ light gray	893-2022	50	○ light gray	893-2032	50
Info	Dimensions					

1 For "International Certification Organizations" and "Approvals - User Guide," see page 534.

● green Coding E (1+ 2-)  
○ light gray Coding F (1+ 2-)

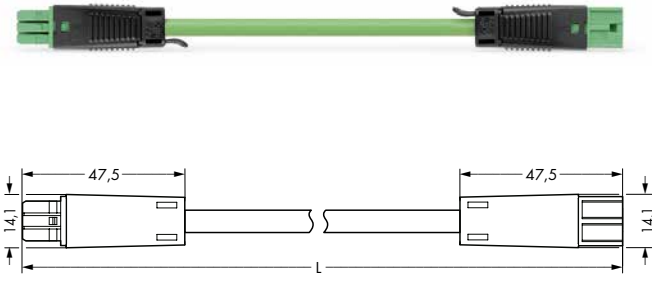
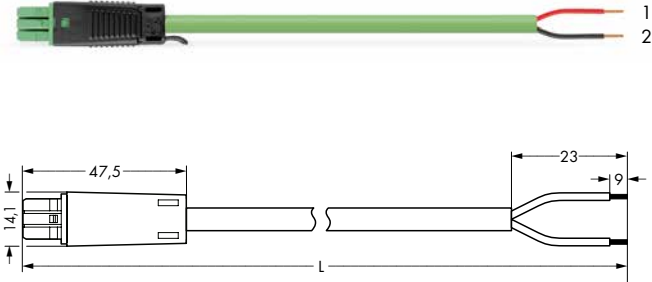
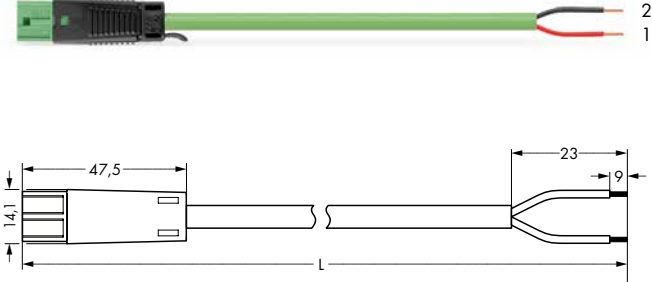
For coding information, see page 250.  
Fire load data available upon request.

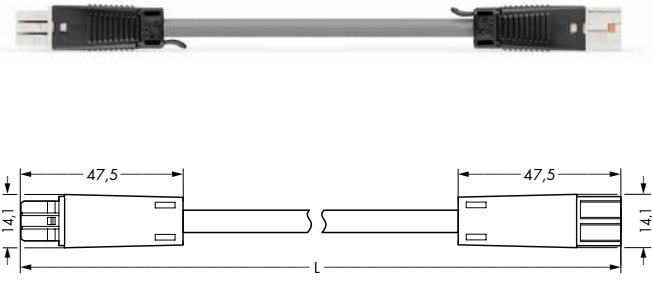
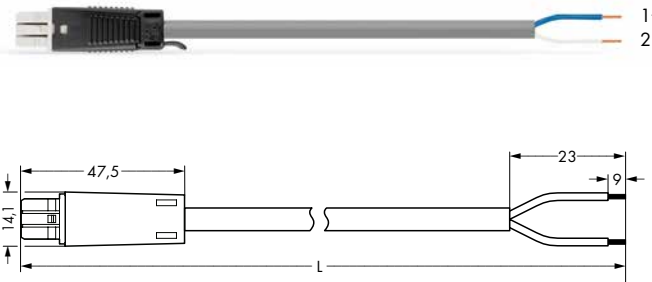
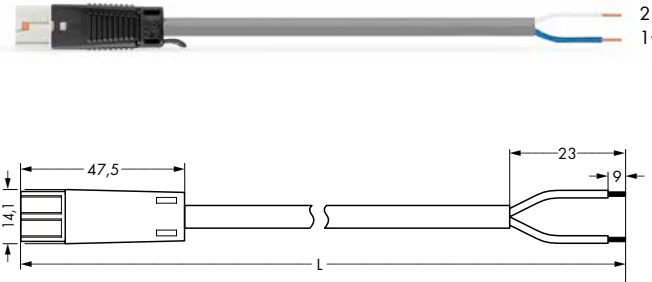







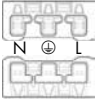
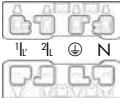
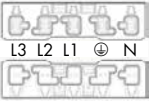

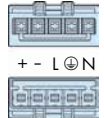
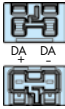


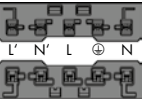





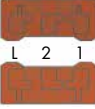


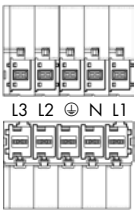

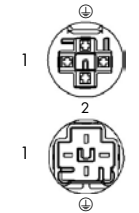
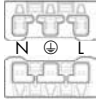
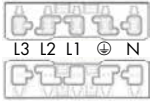
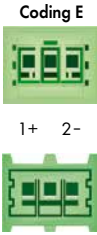
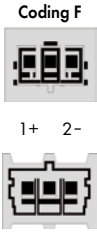


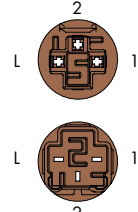


# WINSTA® KNX Cable Assemblies, 2 x 0.8 mm Ø


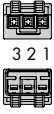


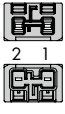
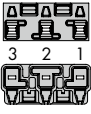
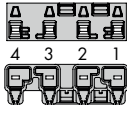
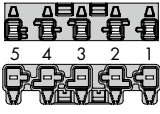




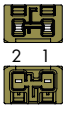
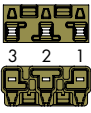
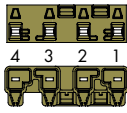
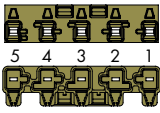




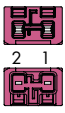
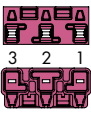
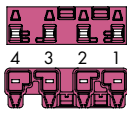
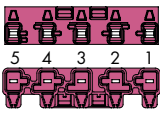
	<p>PVC                    UNITRONIC BUS EIB 2x2x0.8 halogen-free        UNITRONIC BUS EIB 2x2x0.8</p> <p>50 V/0.8 kV/3    I<sub>N</sub> 3 A</p> <p>① Approvals</p>												
<p>Interconnecting cable, socket – plug</p>	<p>Length Item No.</p>												
	<p>● Coding E, for KNX applications</p> <table border="1"> <thead> <tr> <th></th> <th>PVC</th> <th>halogen-free</th> </tr> </thead> <tbody> <tr> <td>1 m</td> <td>894-8992/033-106</td> <td>894-8992/023-106</td> </tr> <tr> <td>3 m</td> <td>894-8992/033-306</td> <td>894-8992/023-306</td> </tr> <tr> <td>5 m</td> <td>894-8992/033-506</td> <td>894-8992/023-506</td> </tr> </tbody> </table>		PVC	halogen-free	1 m	894-8992/033-106	894-8992/023-106	3 m	894-8992/033-306	894-8992/023-306	5 m	894-8992/033-506	894-8992/023-506
	PVC	halogen-free											
1 m	894-8992/033-106	894-8992/023-106											
3 m	894-8992/033-306	894-8992/023-306											
5 m	894-8992/033-506	894-8992/023-506											
<p>Connecting cable, socket – free end</p>	<p>Length Item No.</p>												
	<p>● Coding E, for KNX applications</p> <table border="1"> <thead> <tr> <th></th> <th>PVC</th> <th>halogen-free</th> </tr> </thead> <tbody> <tr> <td>1 m</td> <td>894-8992/133-106</td> <td>894-8992/123-106</td> </tr> <tr> <td>3 m</td> <td>894-8992/133-306</td> <td>894-8992/123-306</td> </tr> <tr> <td>5 m</td> <td>894-8992/133-506</td> <td>894-8992/123-506</td> </tr> </tbody> </table>		PVC	halogen-free	1 m	894-8992/133-106	894-8992/123-106	3 m	894-8992/133-306	894-8992/123-306	5 m	894-8992/133-506	894-8992/123-506
	PVC	halogen-free											
1 m	894-8992/133-106	894-8992/123-106											
3 m	894-8992/133-306	894-8992/123-306											
5 m	894-8992/133-506	894-8992/123-506											
<p>Connecting cable, plug – free end</p>	<p>Length Item No.</p>												
	<p>● Coding E, for KNX applications</p> <table border="1"> <thead> <tr> <th></th> <th>PVC</th> <th>halogen-free</th> </tr> </thead> <tbody> <tr> <td>1 m</td> <td>894-8992/233-106</td> <td>894-8992/223-106</td> </tr> <tr> <td>3 m</td> <td>894-8992/233-306</td> <td>894-8992/223-306</td> </tr> <tr> <td>5 m</td> <td>894-8992/233-506</td> <td>894-8992/223-506</td> </tr> </tbody> </table>		PVC	halogen-free	1 m	894-8992/233-106	894-8992/223-106	3 m	894-8992/233-306	894-8992/223-306	5 m	894-8992/233-506	894-8992/223-506
	PVC	halogen-free											
1 m	894-8992/233-106	894-8992/223-106											
3 m	894-8992/233-306	894-8992/223-306											
5 m	894-8992/233-506	894-8992/223-506											
<p>Info</p>													
<p>① For “International Certification Organizations” and “Approvals – User Guide,” see page 534.</p> <p>② Cable core assignment, coding F: blue        1+ white      2-</p> <p>● green     Coding E     (1+ 2-) ○ light gray Coding F     (1+ 2-)</p> <p>For coding information, see page 250. Fire load data available upon request.</p>													

	<p>PVC J-Y(ST)Y...LG 2x2x0.8</p> <p>50 V/0.8 kV/3 I<sub>N</sub> 3 A</p> <p>① Approvals</p>
<p>Interconnecting cable, socket - plug</p>	<p>Length Item No.</p>
	<p>○ Coding F, ② for standard fieldbus applications <b>halogen-free</b></p> <p>1 m 894-8992/023-107</p> <p>3 m 894-8992/023-307</p> <p>5 m 894-8992/023-507</p>
<p>Connecting cable, socket - free end</p>	<p>Length Item No.</p>
	<p>○ Coding F, ② for standard fieldbus applications <b>halogen-free</b></p> <p>1 m 894-8992/123-107</p> <p>3 m 894-8992/123-307</p> <p>5 m 894-8992/123-507</p>
<p>Connecting cable, plug - free end</p>	<p>Length Item No.</p>
	<p>○ Coding F, ② for standard fieldbus applications <b>halogen-free</b></p> <p>1 m 894-8992/223-107</p> <p>3 m 894-8992/223-307</p> <p>5 m 894-8992/223-507</p>

Description	WINSTA® MINI				WINSTA® MIDI			
	2-Pole	3-Pole	4-Pole	5-Pole	2-Pole	3-Pole	4-Pole	5-Pole
<b>Series</b>	<b>890/891</b>	<b>890/891</b>	<b>890/891</b>	<b>890/891</b>	<b>770/771</b>	<b>770/771</b>	<b>770/771</b>	<b>770/771</b>
<b>Coding A</b> black white  e.g., general applications	 N L	 N ⊕ L	 ⊕ ⊗ ⊕ N	 3 2 1 ⊕ N	 N L	 N ⊕ L	 ⊕ ⊗ ⊕ N	 L3 L2 L1 ⊕ N
<b>Coding E</b> green KNX applications								
<b>Coding F</b> light gray specialty coding								
<b>Coding I</b> blue  e.g., dimming	 - +			 + - L ⊕ N	 DA DA			 DA DA L ⊕ N
<b>Coding L</b> dark gray  e.g., emergency power supply					 N' L'			 L' N' L ⊕ N
<b>Coding P</b> red  e.g., computer applications (UPS)						 N ⊕ L		 L3 L2 L1 ⊕ N
<b>Coding Q</b> green  "Clean Earth" applications							 L PE2 PE1 N	 L PE3 PE2 PE1 N
<b>Coding R</b> orange  e.g. LON® bus						 S LON LON		
<b>Coding S</b> brown  e.g., switching applications						 L 2 1		

Description	WINSTA® MAXI	WINSTA® RD		WINSTA® KNX		WINSTA® IDC	
	5-Pole	3-Pole	4-Pole	2-Pole	2-Pole	3-Pole	5-Pole
<b>Series</b>	<b>831</b>	<b>774</b>	<b>774</b>	<b>893/894</b>	<b>893/894</b>	<b>772</b>	<b>772</b>
<b>Coding A</b> black white  e.g., general applications							
<b>Coding E</b> green KNX applications  <b>Coding F</b> light gray specialty coding							
<b>Coding I</b> blue  e.g., dimming							
<b>Coding L</b> dark gray  e.g., emergency power supply							
<b>Coding P</b> red  e.g., computer applications (UPS)							
<b>Coding Q</b> green  "Clean Earth" applications							
<b>Coding R</b> orange  e.g. LON® bus							
<b>Coding S</b> brown  e.g., switching applications							

**WINSTA® MINI special**  
**WINSTA® MIDI special**  
**Coding B**

Description	WINSTA® MINI special				WINSTA® MIDI special / WINSTA® IDC			
	2-Pole	3-Pole	4-Pole	5-Pole	2-Pole	3-Pole	4-Pole	5-Pole
<b>Series</b>	890/891	890/891	890/891	890/891	770/771	770/771/772	770/771	770/771/772
<b>Coding B</b> gray  Control and general applications (mains applications 110 ... 400 V)	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1
<b>Coding B</b> light green  Control and general applications (low voltages 0 ... 48 V)	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1
<b>Coding B</b> pink  Control and general applications (bus applications)	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1	 2 1	 3 2 1	 4 3 2 1	 5 4 3 2 1



**Important note:**

B-Coded components of both *WINSTA®* MINI special and *WINSTA®* MIDI special series are designed for specialty applications (e.g., measurement, control and regulation technology) and certified per DIN EN 61984. In addition to the gray models for 110 ... 400 V voltages, there is now also a variant in light green for low voltages up to 48 V, as well as a pink one for bus applications.

Each of the three versions is available in 2-, 3-, 4- or 5-pole configurations. Pole marking can be printed at the factory to suit customer requirements. According to IEC 61535, B-coded products are protected against mismatching with all other coding types found in the *WINSTA®* system. Within B coding, all special variants can mate with each other. The variable coding system provides clear circuit identification. Special variants can be clearly differentiated according to color and pole marking. They can be coded on-site or delivered with factory-installed custom coding.

**WINSTA® MINI special**  
**WINSTA® MIDI special**  
**Pole Marking**

Suffix Number	Marking				Application
	2-Pole	3-Pole	4-Pole	5-Pole	
without	1 2	1 2 3	1 2 3 4	1 2 3 4 5	General applications
/060-000	L N	L ⊕ N	N ⊕ <sup>2</sup> L <sup>1</sup> L	N ⊕ L1 L2 L3	Standard network applications 230 V/400 V
/062-000		2 PE 1	3 PE 2 1	N PE 3 2 1	Fan Step switching
/064-000			2L ⊕ 1L L	N ⊕ L 2L 1L	230 V + switched
without	1 2	1 2 3	1 2 3 4	1 2 3 4 5	General applications
/071-000		U+ X/Y U-	U- S U+ X/Y		AI / AO 0 ... 10V
/072-000			U- U+ DI AI		Presence detector incl. light sensor
/073-000		1 ⊕ 2	1 ⊕ 2 3	1 ⊕ 2 3 4	Control signal incl. ground
without	1 2	1 2 3	1 2 3 4	1 2 3 4 5	General applications
/080-000	I+ I-			N ⊕ L I- I+	SMI bus
/081-000		1 2 5	1 2 5 3		MP-Bus
/082-000	+ -	+ S -		N ⊕ L - +	Standard fieldbus applications

Distribution connectors and cable assemblies with above-mentioned pole marking are available upon request.






Item number example:

WINSTA® MIDI special, plug, 4-pole, light green, with U- U+ DI AI pole marking

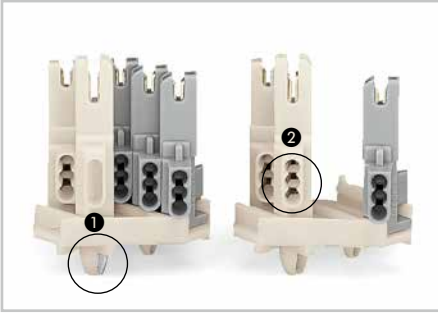
770-274/072-000



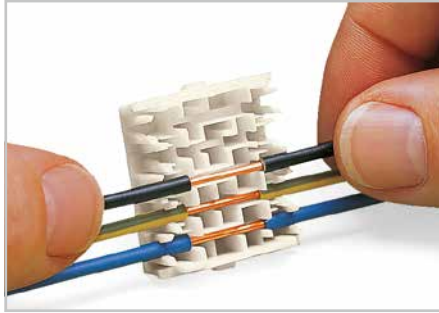


	Page
	<b>Connector System with Phase Selection for Fluorescent Lighting Fixtures, Conductor Supports</b> 267 Series 258
	<b>Connectors for In-Line Mounting of Fluorescent Lighting Fixtures</b> 267 Series 265
	<b>Connection System with Phase Selection for Fluorescent Lighting Fixtures</b> 277 Series 268
	<b>Fully Polarized Connectors for Lighting Fixtures in Dropped Ceilings</b> 272 Series 272
	<b>Luminaire Disconnect Connectors (US Version Only)</b> 873 Series 276

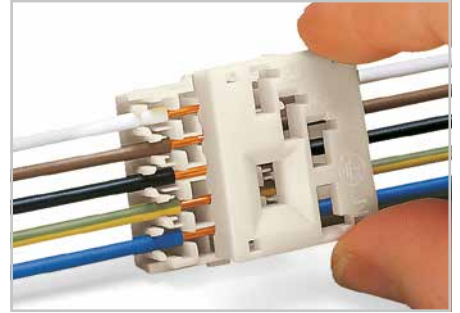
# Description and Handling 267 Series for Partially Stripped Conductors



- 1 Female connector with direct ground contact to lighting fixture panel.
- 2 Base female connector with PUSH WIRE® connection for ground conductors.

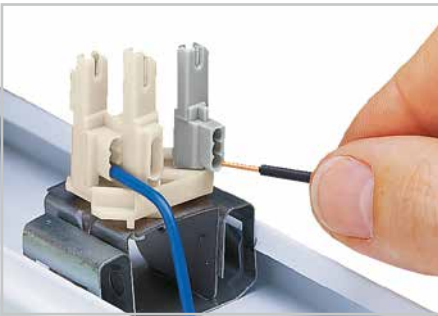


Snapping partially stripped conductor into base of conductor support. Conductor supports replace standard female connectors.

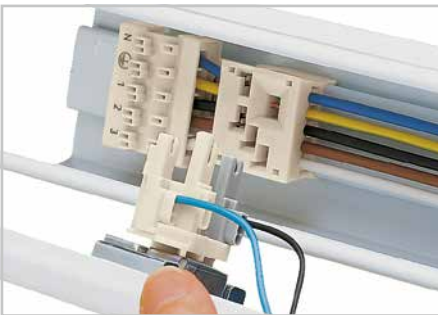


Latching conductor support cover.

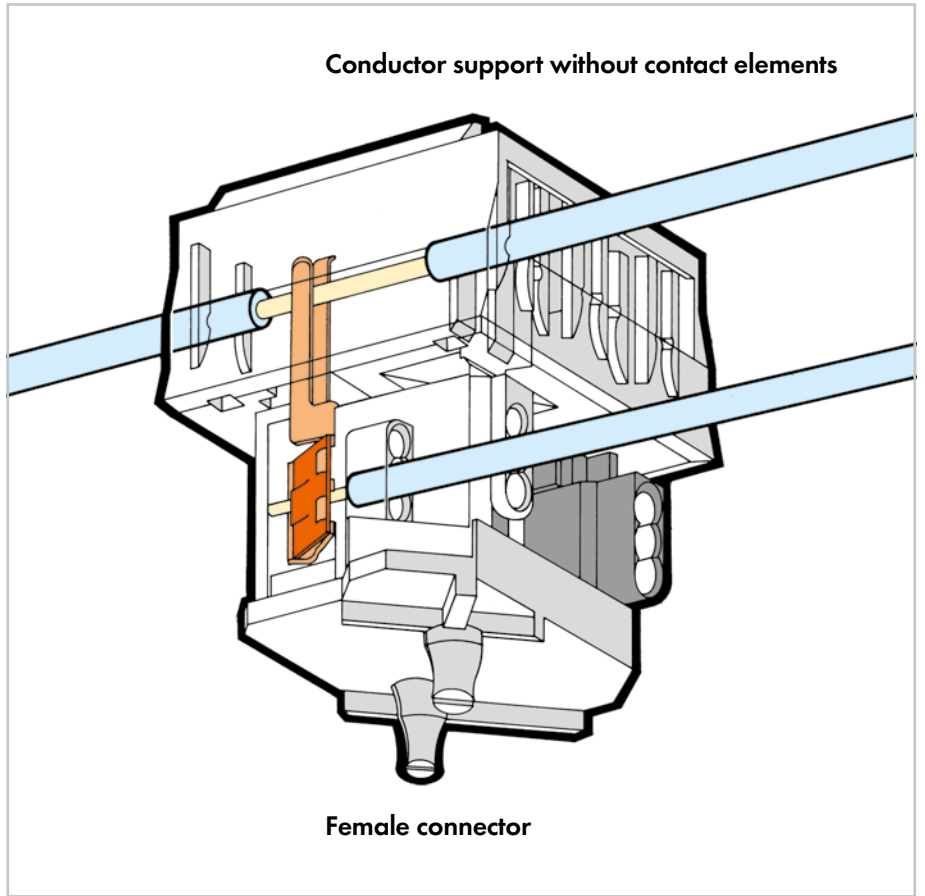
## 267 Series



Inserting stripped conductor until it hits backstop.



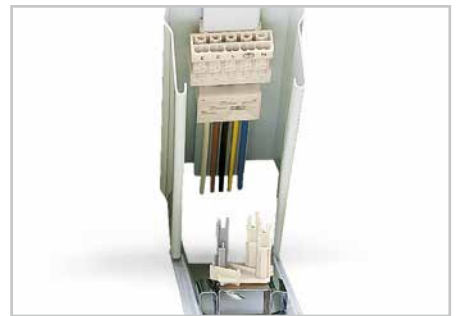
Inserting female connector into conductor support.



Power supply connector with direct ground contact to lighting fixture panel.



Connector with snap-on foot for rail mounting.



Fluorescent lighting fixture with female and power supply connectors.



**PUSH WIRE®** clamps the following copper conductors:

solid

# System Description and Handling

## 267 Series with Insulation Displacement Connection (IDC)

PUSH WIRE®

4

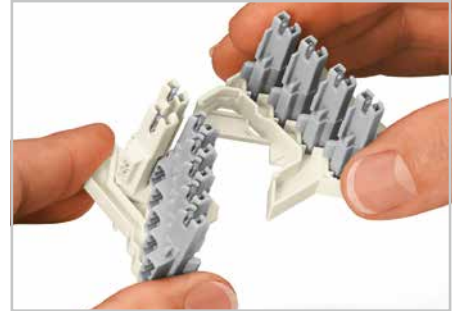
257



Base female connector with PUSH WIRE® connection for ground conductors.



Snap-on type female connector, 2- to 4-pole.

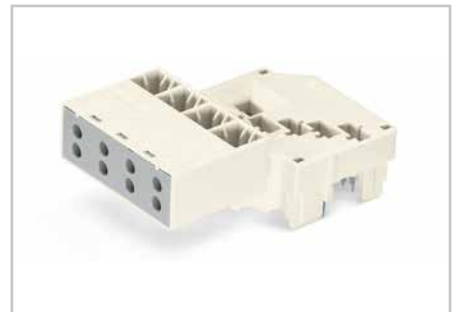


Securing base and snap-on type female connectors together (system expansion: 7 + 4 poles).

### 267 Series



System expansion assembly: female connector and conductor support.



System expansion assembly: conductor support.



Conductor support cover with dovetail mount for snap-on type conductor support.

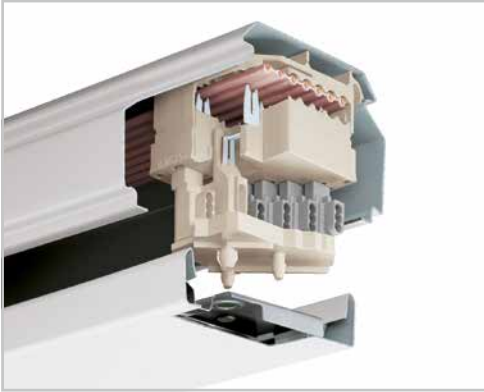


Snap-on type conductor support, 4-pole.



Securing the snap-on type conductor support to the cover (system expansion: 7 + 4 poles).

4



### 267 Series for Partially Stripped Conductors

- Contact-free conductor support
- Compact design

### 267 Series with Insulation Displacement Connection (IDC)

- Flexible, modular 5- to 11-pole connector system
- IDC connection for through-wiring applications
- Scalable – future system expansions also possible

#### Technical data:

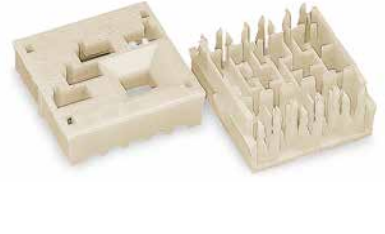
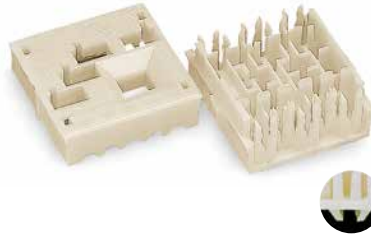
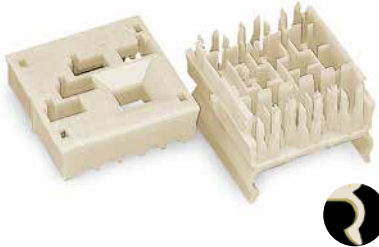
	PUSH WIRE® connection	PUSH WIRE® connection	IDC connection
	Connector for in-line mounting of fluorescent lighting fixtures and snap-on type conductor support	Female connector	Conductor support
Rating per	<b>IEC/EN 61984</b>	<b>IEC/EN 61984</b>	<b>IEC/EN 61984</b>
Overvoltage category	II	II	II
Pollution degree	2	2	2
Rated voltage	500 V	500 V	500 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	16 A	6 A	6 A
Approvals per	<b>UL 1977</b>	<b>UL 1977</b>	<b>UL 1977</b>
Rated voltage	600 V	600 V	600 V
Nominal current UL	15 A	6 A	6 A

#### Material data:

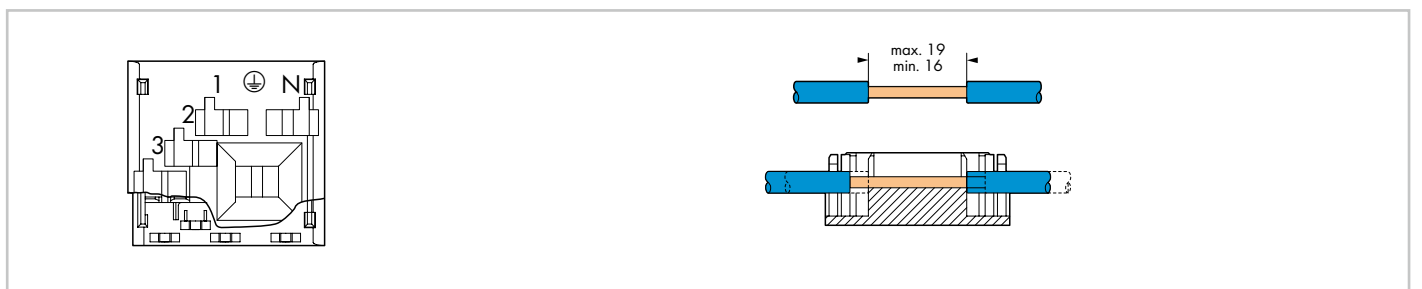
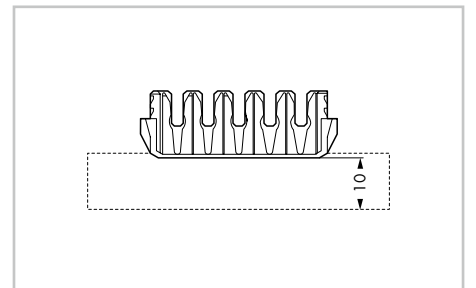
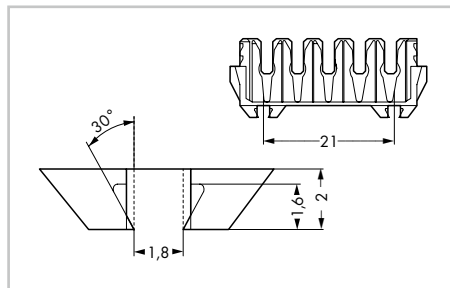
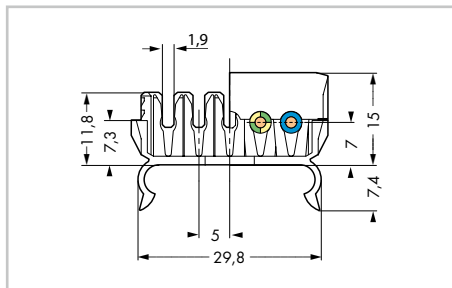
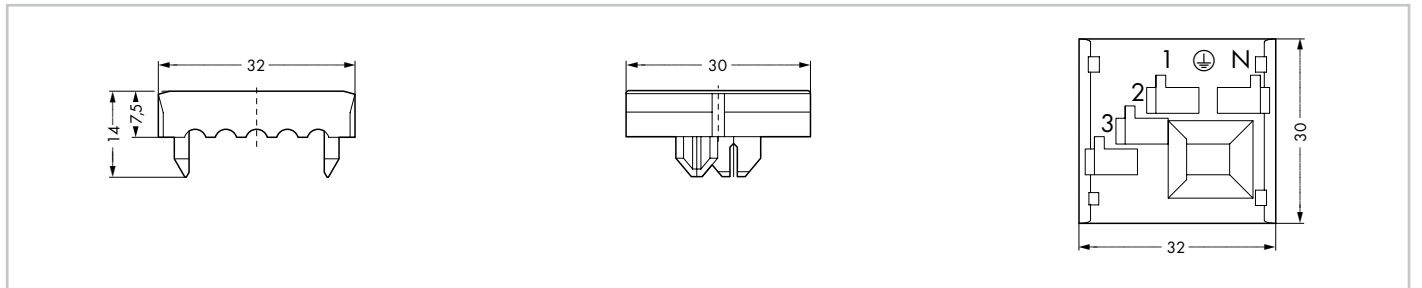
Material group	I
Insulating material	Polyamide 6.6 (PA 6.6)
Temperature stability	105 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

# Connection System with Phase Selection for Fluorescent Lighting Fixtures Conductor Supports – Partially Stripped Conductors

With snap-on foot		With dovetail		With custom foot	
5 x 1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 - 14 "sol."	5 x 1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 - 14 "sol."	5 x 1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 - 14 "sol."
500 V/4 kV/2 6 A	600 V/6 A	500 V/4 kV/2 6 A	600 V/6 A	500 V/4 kV/2 6 A	600 V/6 A



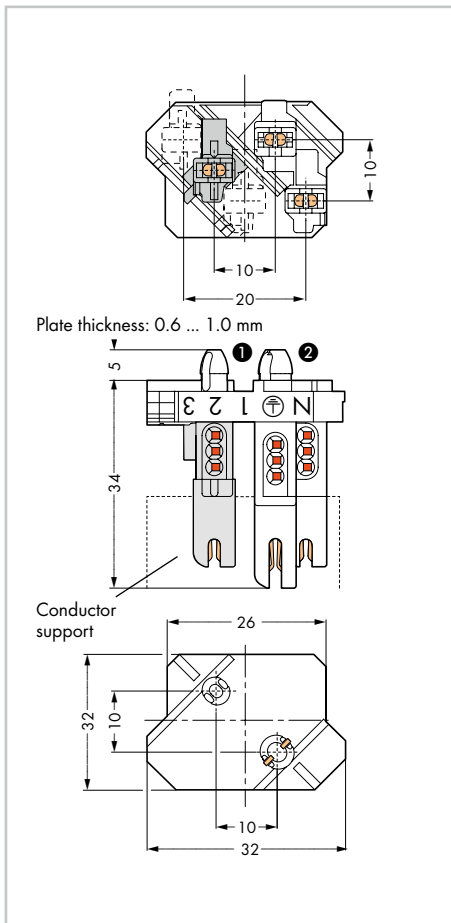
Pole No.	Pole Marking	Item No.	Pack. Unit	Pole No.	Pole Marking	Item No.	Pack. Unit	Pole No.	Pole Marking	Item No.	Pack. Unit
<b>Conductor support with snap-on foot,</b> consisting of base and cover, with molded pole marking on cover, white				<b>Conductor support with dovetail,</b> consisting of base and cover, with molded pole marking on cover, white				<b>Conductor support with custom foot,</b> consisting of base and cover, with molded pole marking on cover, white			
<b>Cover</b>				<b>Cover</b>				<b>Cover</b>			
5	N ⊕ 1 2 3	267-140	500	5	N ⊕ 1 2 3	267-140	500	5	N ⊕ 1 2 3	267-140	500
<b>Base</b>				<b>Base</b>				<b>Base</b>			
5		267-141	500	5		267-143	500	5		267-... ①	500
① acc. to customer specifications											



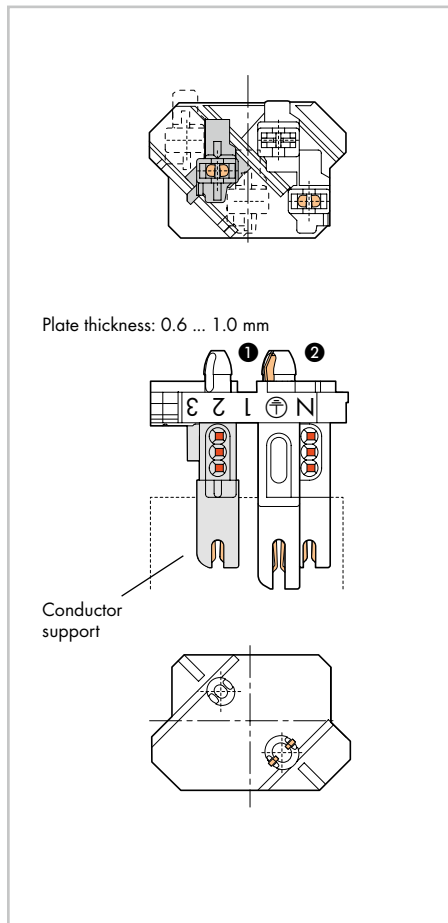
With PUSH WIRE® connection for ground conductors		With direct ground contact	
0.5 ... 1 mm <sup>2</sup> "sol."	AWG 22 ... 18 "sol."	0.5 ... 1 mm <sup>2</sup> "sol."	AWG 22 ... 18 "sol."
500 V/4 kV/2 6 A	600 V/6 A	500 V/4 kV/2 6 A	600 V/6 A
8 mm / 0.31 in.		8 mm / 0.31 in.	



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector with snap-in mounting feet and PUSH WIRE® connection for ground conductors, white /gray, with molded pole marking, gray female connector for phase selection to 1 - 2 - 3 (not possible with 5-pole female connectors)			Female connector with snap-in mounting feet and direct ground contact, white /gray, with molded pole marking, gray female connector for phase selection to 1 - 2 - 3 (not possible with 5-pole female connectors)		
3	267-113	500	3	267-123	500
4	267-114	500	4	267-124	500
5	267-115	500	5	267-125	500



- ① Diameter of drilled hole: 4.2 mm
- ② Diameter of drilled hole: 5.2 mm



- ① Diameter of drilled hole: 4.2 mm
  - ② Diameter of drilled hole: 5.2 mm
- Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.

# Connector System with Phase Selection for Fluorescent Lighting Fixtures, Conductor Supports with Power Supply Connections

PUSH WIRE®

4

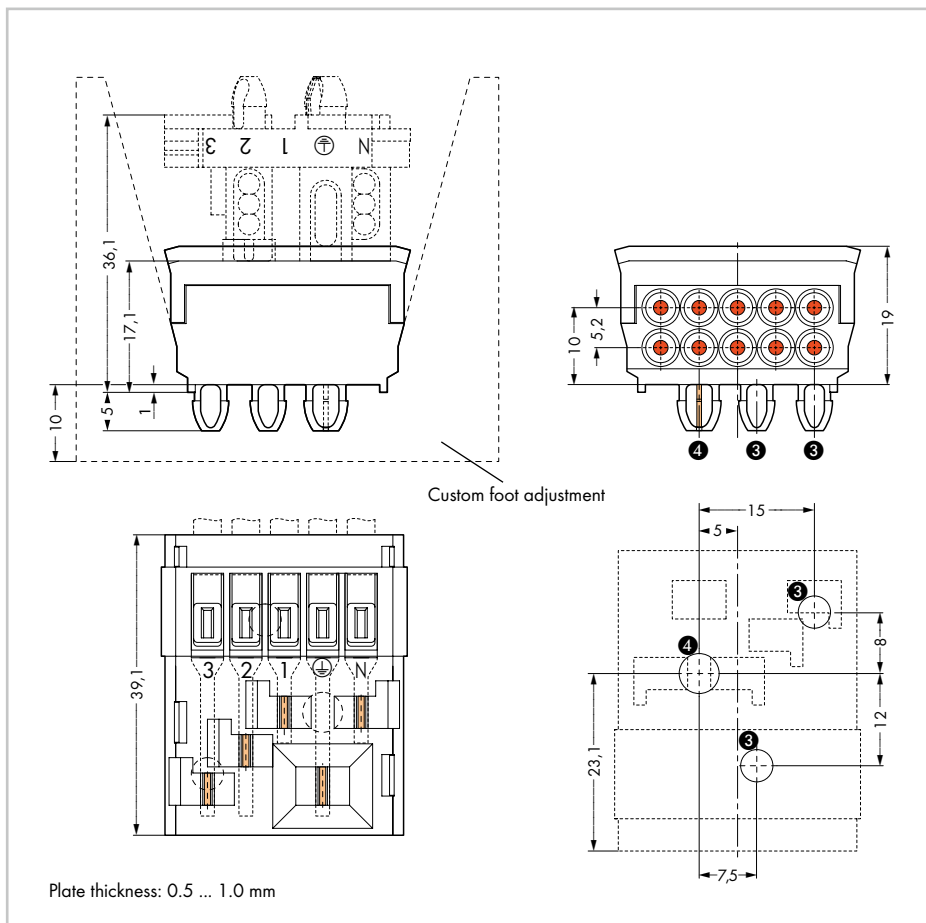
261

		With direct ground contact	
5 x 2/1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 ... 14 "sol."	5 x 2/1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 ... 14 "sol."
500 V/4 kV/2 6 A	600 V/6 A	500 V/4 kV/2 6 A	600 V/6 A



Pole No.	Pole Marking	Item No.	Pack. Unit	Pole No.	Pole Marking	Item No.	Pack. Unit
Conductor support with power supply connection and snap-in mounting feet, white				Conductor support with power supply connection and snap-in mounting feet, with direct ground contact, white			
3	N PE 1	267-313	50	3	N PE 1	267-303	50
4	N PE 1 2	267-314	50	4	N PE 1 2	267-304	50
3	N PE 1 2 3	267-315	50	3	N PE 1 2 3	267-305	50

4



③ Diameter of drilled hole: 4.2 mm

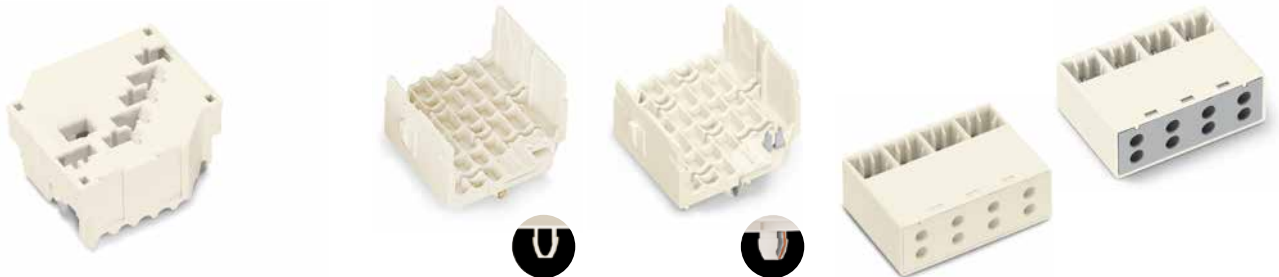
④ Diameter of drilled hole: 5.2 mm

Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.

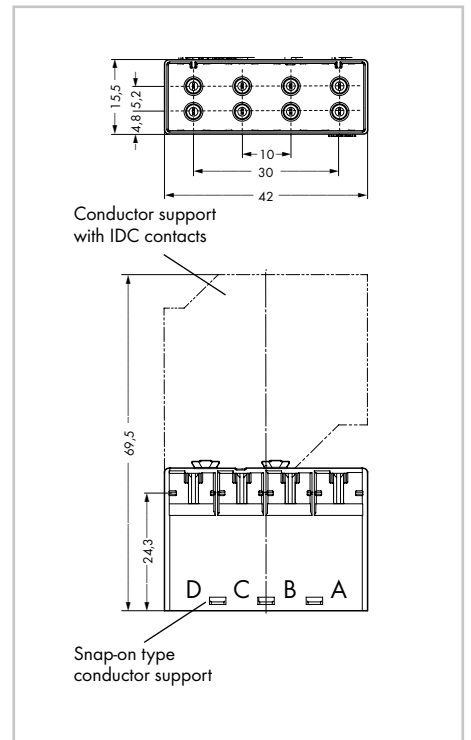
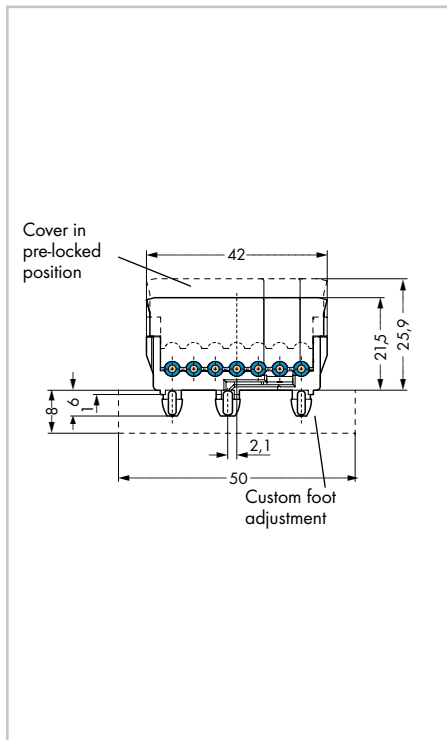
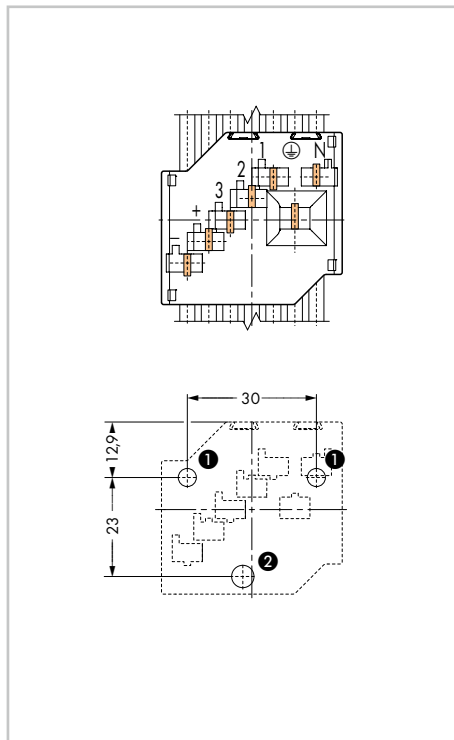
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Conductor Supports with Insulation Displacement Connection (IDC)



With dovetail guide and IDC contacts		With direct ground contact		Snap-on type conductor support	
1.5 ... 2.5 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."	1.5 ... 2.5 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."	500 V/4 kV/2 16 A	600 V/15 A
500 V/4 kV/2 6 A	600 V/6 A	500 V/4 kV/2 6 A	600 V/6 A	11 ... 12 mm / 0.45 in.	



Pole No.	Pole Marking	Item No.	Pack. Unit	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Conductor support cover, with dovetail guide and IDC contacts, with molded pole marking, white				Conductor support base with snap-in mounting feet, white		Snap-on type conductor support, 4-pole		
				without snap-in ground contact		0.75 ... 1.5 mm <sup>2</sup>		
5	N ⊕ 1 2 3	267-435	50	267-412	250	○ Cover, white	267-324	500
7	N ⊕ 1 2 3 + -	267-437	50			1.5 ... 2.5 mm <sup>2</sup>		
				with snap-in ground contact		● Cover, gray		
				267-422	500	267-328 500		






- ① Diameter of drilled hole: 4.2 mm
- ② Diameter of drilled hole: 5.2 mm



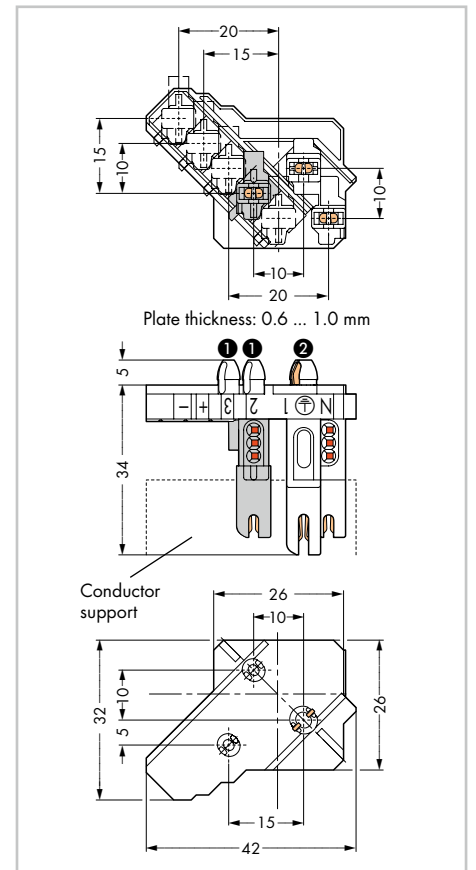
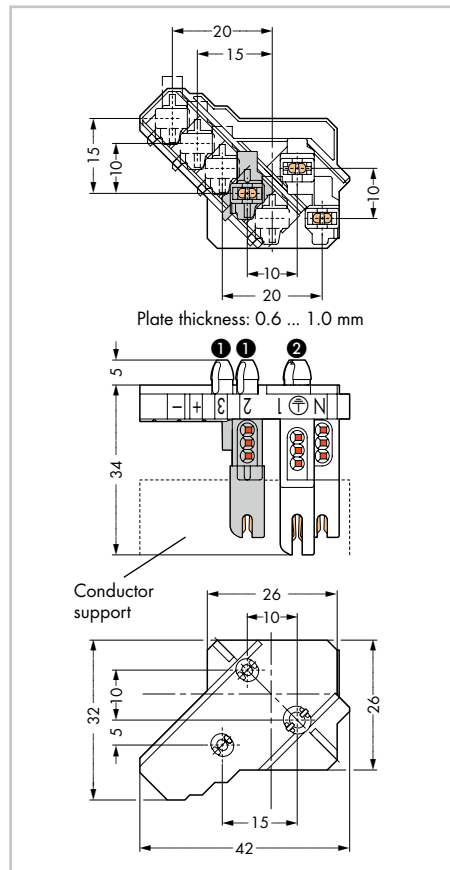
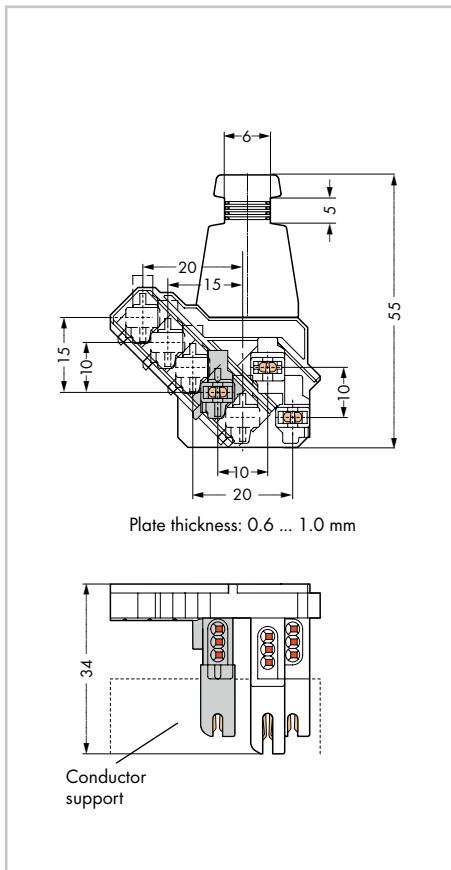
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Female Connectors for Conductor Supports with Insulation Displacement Connection (IDC)

PUSH WIRE®

<p>with PUSH WIRE® connection for ground conductors and strain relief plate</p> <p>0.5 ... 1 mm<sup>2</sup> "sol."   AWG 22 ... 18 "sol."</p> <p>500 V/4 kV/2 6 A   600 V/6 A</p> <p> 8 mm / 0.31 in.</p>	<p>With PUSH WIRE® connection for ground conductors</p> <p>0.5 ... 1 mm<sup>2</sup> "sol."   AWG 22 ... 18 "sol."</p> <p>500 V/4 kV/2 6 A   600 V/6 A</p> <p> 8 mm / 0.31 in.</p>	<p>With direct ground contact</p> <p>0.5 ... 1 mm<sup>2</sup> "sol."   AWG 22 ... 18 "sol."</p> <p>500 V/4 kV/2 6 A   600 V/6 A</p> <p> 8 mm / 0.31 in.</p>
--	--	--



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female connector with PUSH WIRE® connection for ground conductors and strain relief plate, white/gray</b>			<b>Female connector with snap-in mounting feet and PUSH WIRE® connection for ground conductors, white /gray, with molded pole marking, gray female connector for phase selection to 1, 2, 3, +, - (not possible with 7-pole female connectors)</b>			<b>Female connector with snap-in mounting feet and direct ground contact, white /gray, with molded pole marking, gray female connector for phase selection to 1, 2, 3, +, - (not possible with 7-pole female connectors)</b>		
3	267-223	500	3	267-163	500	3	267-173	500
4	267-224	500	4	267-164	500	4	267-174	500
5	267-225	500	5	267-165	500	5	267-175	500
6	267-226	500	6	267-166	500	6	267-176	500
7	267-227	500	7	267-167	500	7	267-177	500



- ① Diameter of drilled hole: 4.2 mm
- ② Diameter of drilled hole: 5.2 mm

- ① Diameter of drilled hole: 4.2 mm
  - ② Diameter of drilled hole: 5.2 mm
- Drilled hole for direct ground contact must be free of varnish and oxide films. Equipped with varnished metal plates upon request.

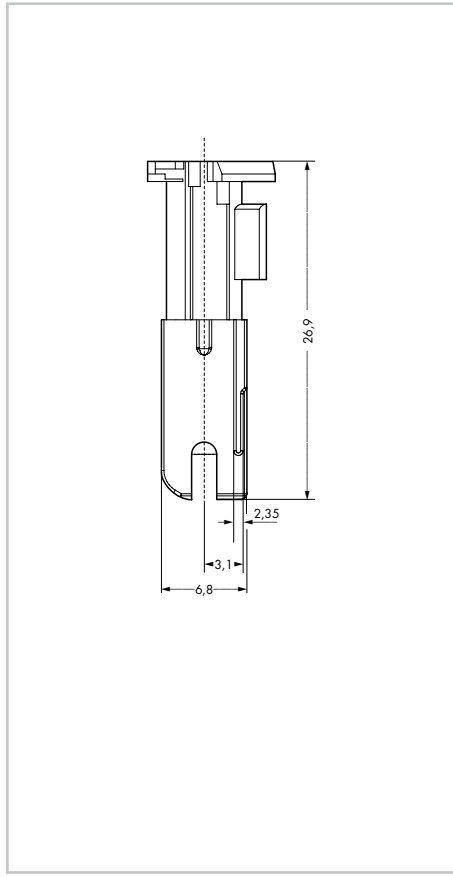
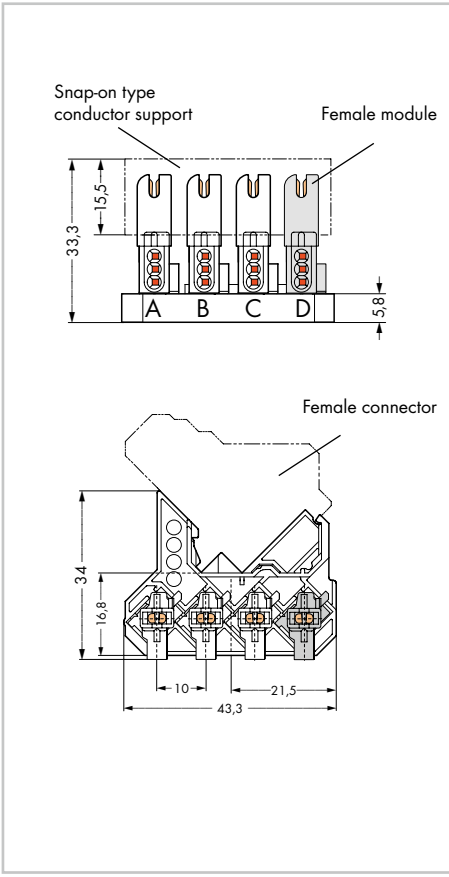
# 4 Connection System with Phase Selection for Fluorescent Lighting Fixtures, Female Connectors/Female Modules for Conductor Supports with Insulation Displacement Connection (IDC)



Snap-on type female connector		Female module	
0.5 ... 1 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."	3 x 0.5 ... 1 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."
500 V/4 kV/2 16 A	600 V/6 A	500 V/4 kV/2 16 A	600 V/6 A
8 mm / 0.31 in.		8 mm / 0.31 in.	



Pole No.	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Snap-on type female connector			Female module, 1-pole		
2	267-232	500	● black	267-109	500
3	267-233	500	● gray	267-101	500
4	267-234	500	● red	267-120	500
			● yellow	267-110	500
			● purple	267-119	500

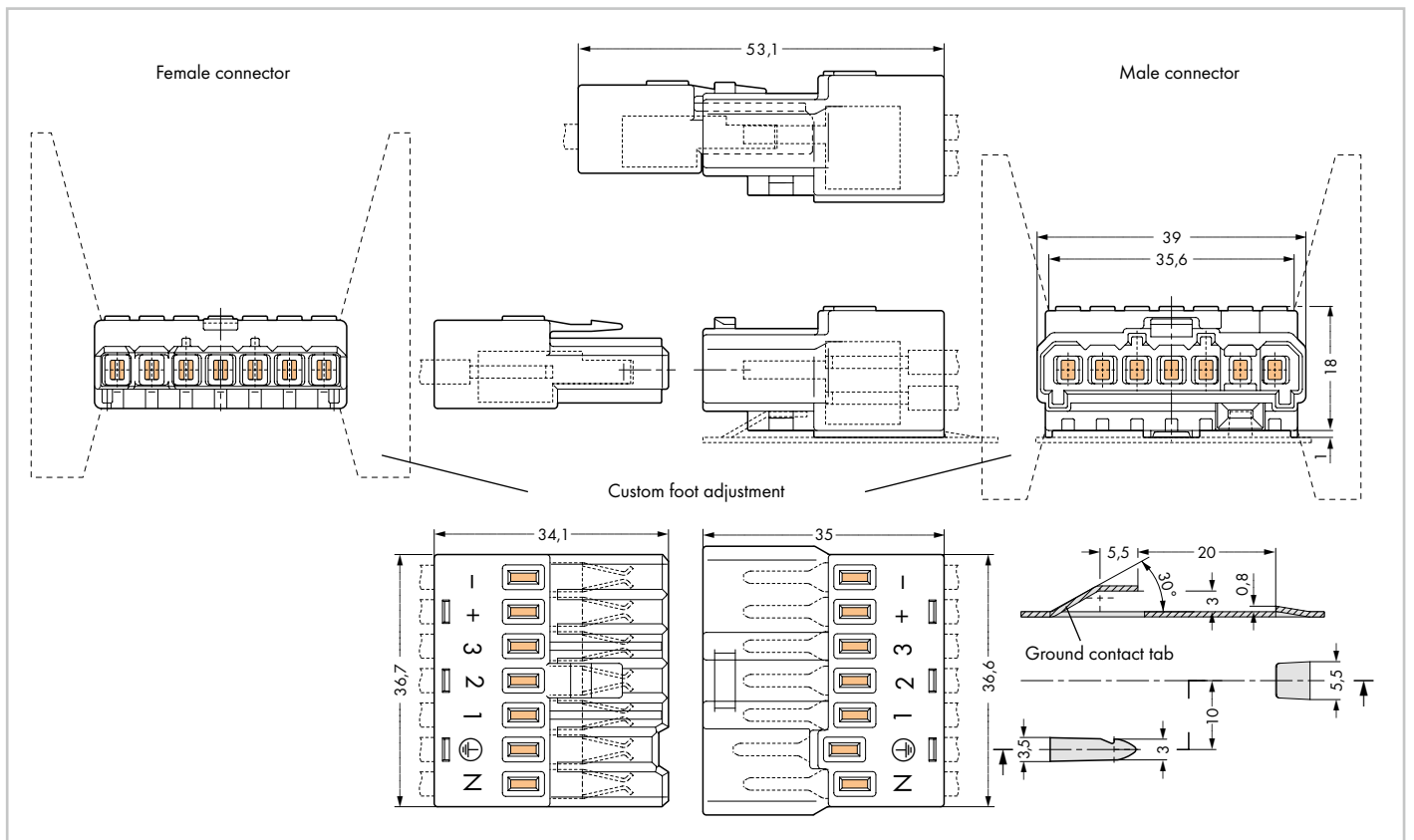


Without ground contact tab		With ground contact tab		With ground contact tab	
1.5 ... 2.5 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."	2 x 1.5 ... 2.5 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."	1.5 ... 2.5 mm <sup>2</sup> "sol."	AWG 16 ... 14 "sol."
500 V/4 kV/2 16 A	600 V/15 A	500 V/4 kV/2 16 A	600 V/15 A	0.75 ... 1.5 mm <sup>2</sup> "sol."	AWG 18 ... 16 "sol."
11 ... 12 mm / 0.45 in.		11 ... 12 mm / 0.45 in.		11 ... 12 mm / 0.45 in.	



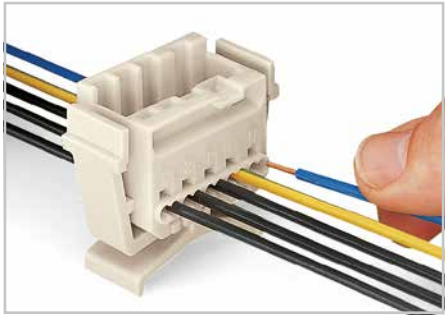
Pole No.	Pole Marking	Item No.	Pack. Unit	Pole No.	Pole Marking	Item No.	Pack. Unit	Pole No.	Pole Marking	Item No.	Pack. Unit
<b>Female connector, white</b>				<b>Male connector with connection for ground contact tab, white</b>				<b>Male connector with connection for ground contact tab, white</b>			
7	N ⊕ 1 2 3 + -	267-501	50	7	N ⊕ 1 2 3 + -	267-510	50	7	N ⊕ 1 2 3 + -	267-521	50
5	N ⊕ 1 2 3 + -	267-502	50	7	N ⊕ 1 2 3 + -	267-516*	50				
				5	N ⊕ 1 2 3 + -	267-519	50				
<b>Female connector, gray</b>				<b>Male connector, gray</b>							
4	A B C D	267-506	50	4	A B C D	267-518*	50				
<b>Female connector, yellow</b>				<b>Male connector, yellow</b>							
4	A B C D	267-507	50	4	A B C D	267-520*	50				

If the power for the 3-phase circuit is supplied via the male connector's termination side, current may only be supplied within one individual lighting fixture, or one continuous row of luminaires.

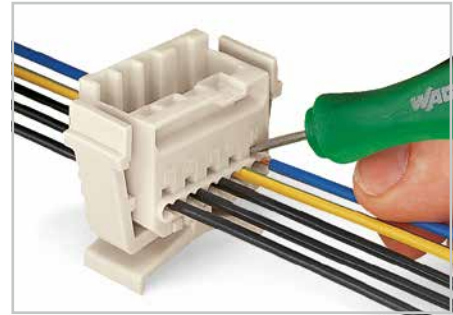


# 4 Description and Handling Connection System with Phase Selection for Fluorescent Lighting Fixtures, 277 Series

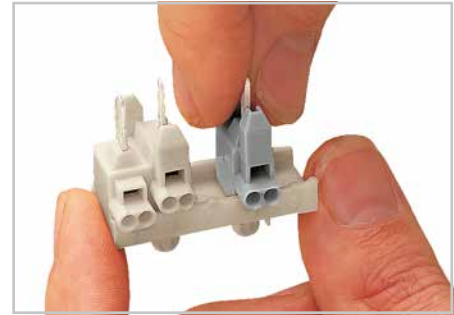
PUSH WIRE®



Inserting solid conductor via push-in termination.

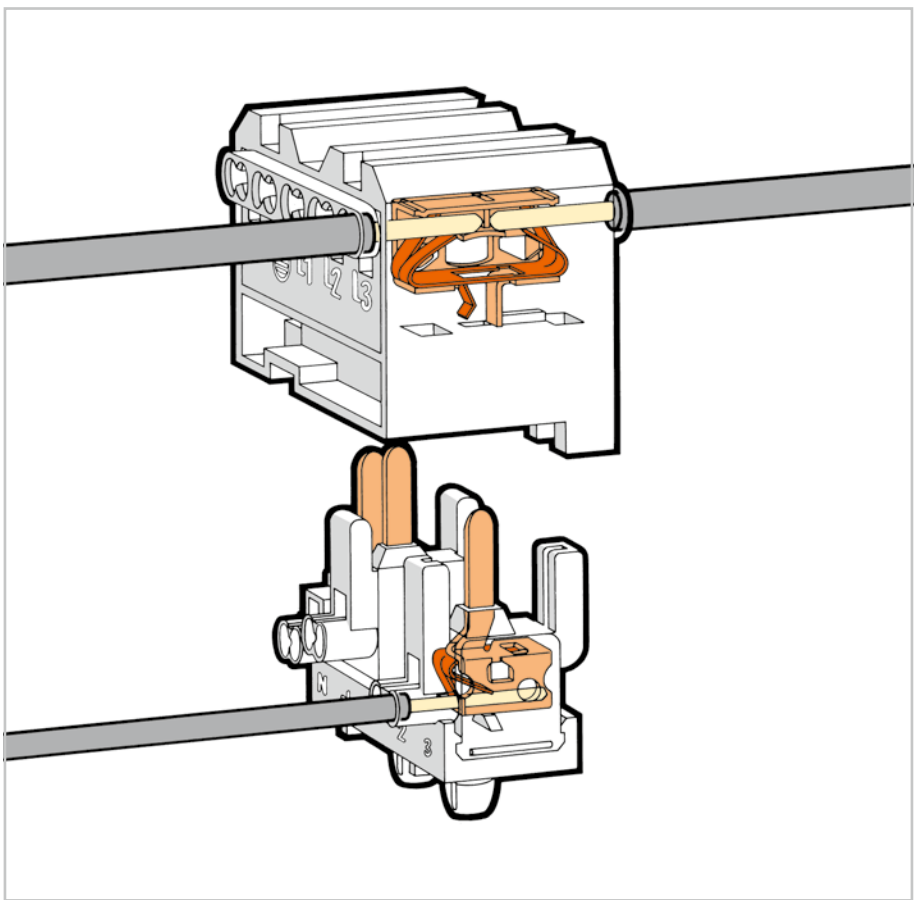


Removing conductor.

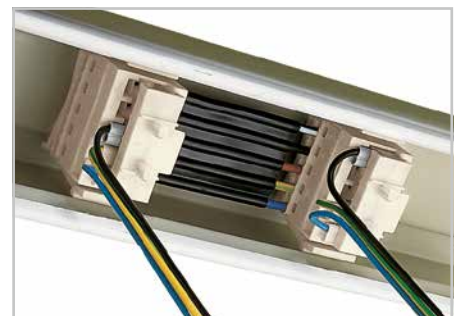


Selecting a phase via movable phase contacts.

## 277 Series

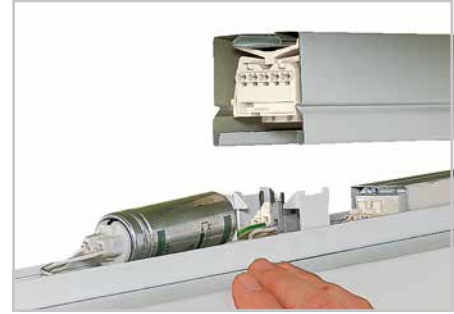


## Phase selection



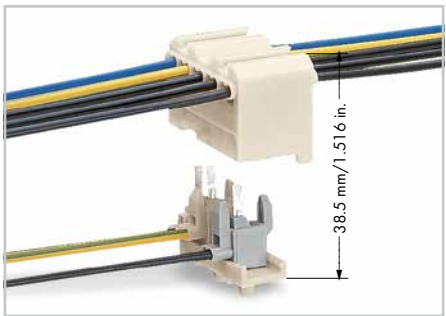
Equal load on each phase via phase selection.

## Connecting a lighting fixture

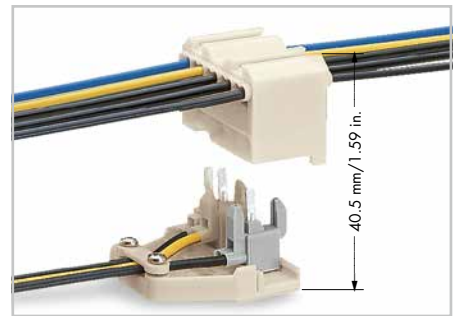


Connecting a lighting fixture equipped with a fixed female connector.

## Dimensions refer to a mated assembly

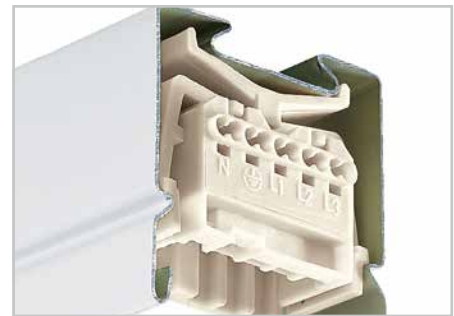


Female connector without mounting adapter.  
Male connector with snap-in mounting feet.



Female connector without mounting adapter.  
Male connector with strain relief.

## Marking

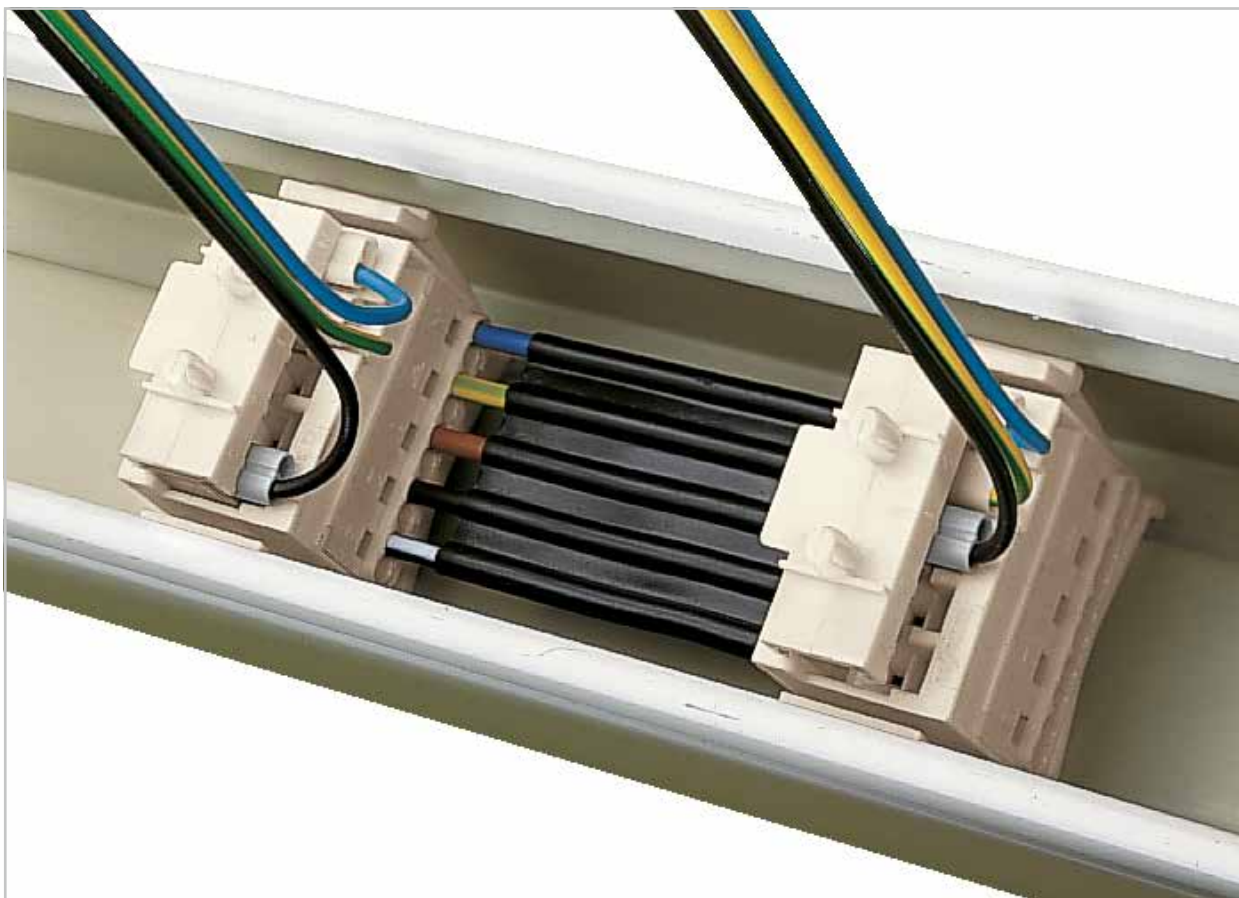


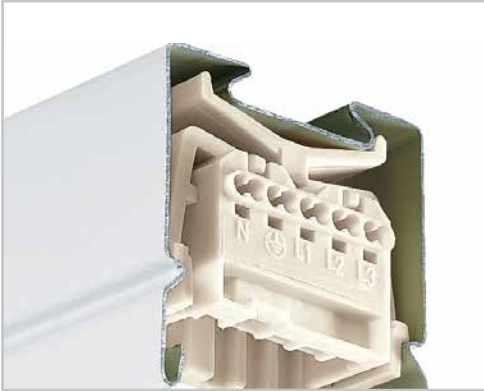
Molded pole marking.



PUSH WIRE® clamps the following copper conductors:

solid





- Flexible connection system equipped with PUSH WIRE® connection
- Phase selection

#### Technical data:

	Female connector	Male connector	
Rating per	<b>IEC/EN 61984</b>	<b>IEC/EN 61984</b>	
Overvoltage category	II	II	
Pollution degree	2	2	
Rated voltage	400 V	400 V	
Rated surge voltage	4 kV	4 kV	
Nominal current	16 A	10 A	
Approvals per	<b>UL 1977</b>	<b>UL 1977</b>	
Rated voltage	600 V	600 V	
Nominal current UL	7 A	7 A	

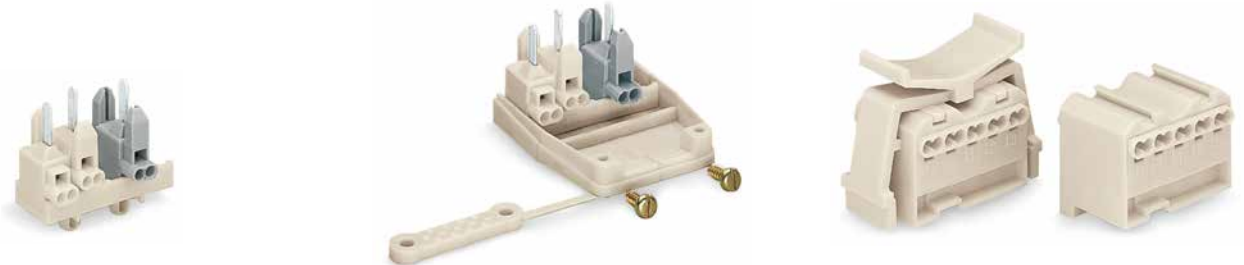
#### Material data:

Material group	I
Insulating material	Polyamide 6.6 (PA 6.6)
Temperature stability	105 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

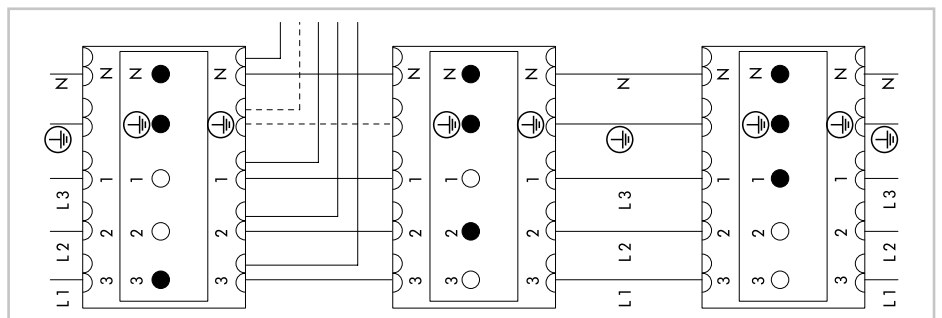
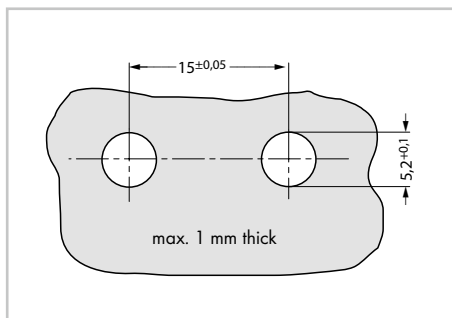
# Connection System with Phase Selection for Fluorescent Lighting Fixtures, Male and Female Connectors

PUSH WIRE®

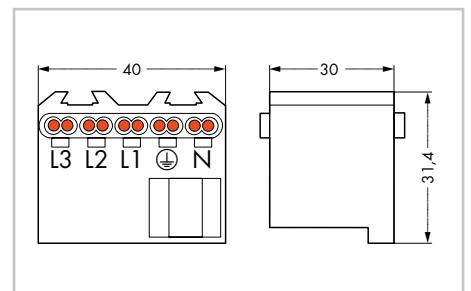
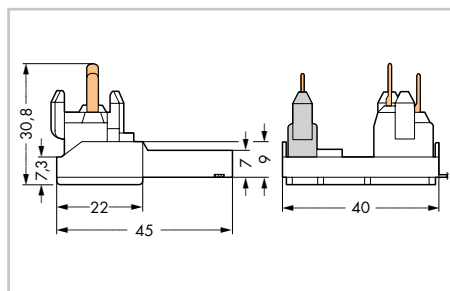
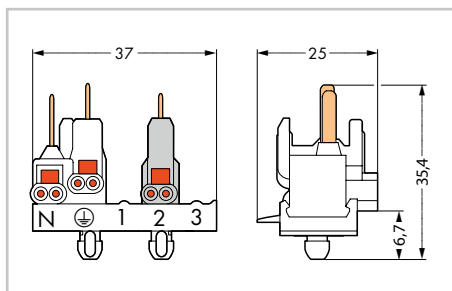
Male connectors with snap-in mounting feet		Male connectors with strain relief		Female connectors with/without mounting adapter	
0.5 x 1.0 mm <sup>2</sup> "sol."	AWG 20 ... 18 "sol."	0.5 x 1.0 mm <sup>2</sup> "sol."	AWG 20 ... 18 "sol."	5 x 1.5 ... 2.5 mm <sup>2</sup> "sol."	5 x AWG 16 - 14 "sol."
400 V/4 kV/2 10 A	600 V/7 A	400 V/4 kV/2 10 A	600 V/7 A	400 V/4 kV/2 16 A	600 V/7 A
10 ... 11 mm / 0.41 in.		10 ... 11 mm / 0.41 in.		11 ... 12 mm / 0.45 in.	



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male connector with snap-in mounting feet, white/gray, with molded pole marking, gray, movable phase selection contacts (not for 5-pole male connector)</b>			<b>Male connector with strain relief, white/gray, with molded pole marking, gray, movable phase selection contacts (not for 5-pole male connector)</b>			<b>Female connector, white, with molded pole marking</b>		
3	277-123	500	3	277-126	250	<b>without mounting adapter</b>		
4	277-124	500	4	277-127	250	5	277-121	250
5	277-125	500	5	277-128	250	<b>with mounting adapter</b>		
						5	277-131	250

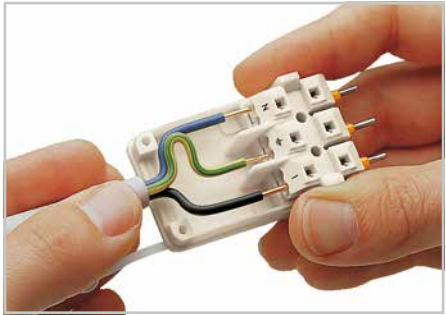


Wiring example: Equal load on each phase via phase selection on male connector, without altering existing wiring.

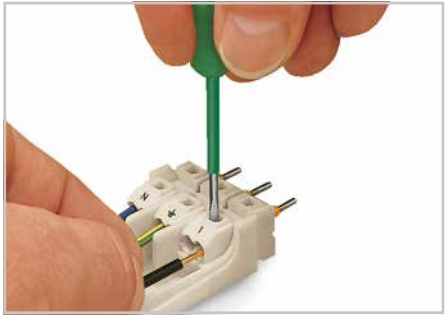


# Description and Handling Fully Polarized Connectors for Lighting Fixtures with Push-Wire Connection

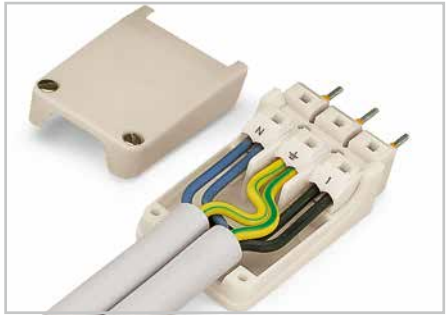
## Push-wire connection



Connection of conductors:  
Push conductor in FIRMLY until FULLY inserted!

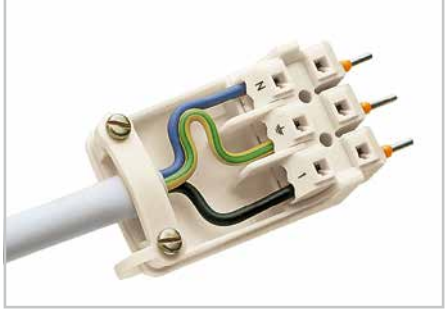


Removal of conductor



Clamping of 2 conductors, each conductor is clamped independently

### Strain relief



Strain relief with cable clamp

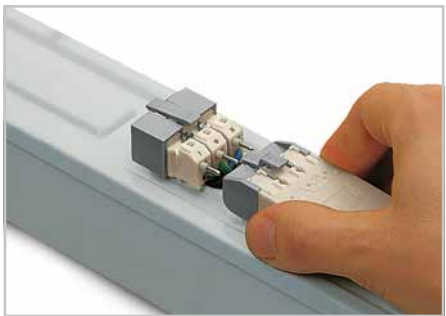


### Application



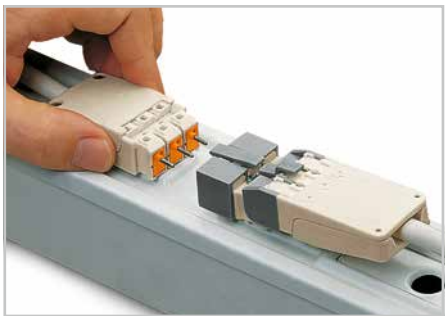
Lighting fixture ready for connection with center receptacles (internal wiring complete with WAGO terminal blocks)

### Supply



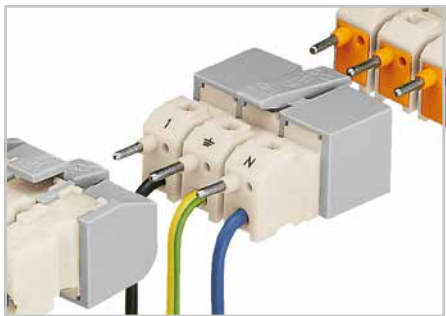
Supply of lighting fixture by pushing the female connector onto the center receptacle

### Plugging



Plugging in the female connector with connecting lead to the next lighting fixture

### Marking



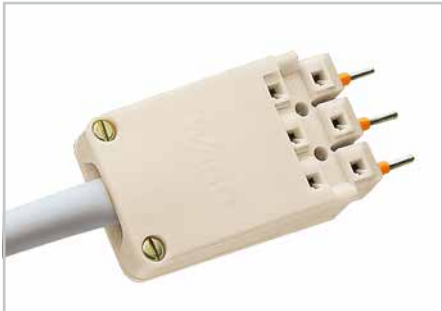
Series marking of poles



**PUSH WIRE®** clamps the following copper conductors:  
solid

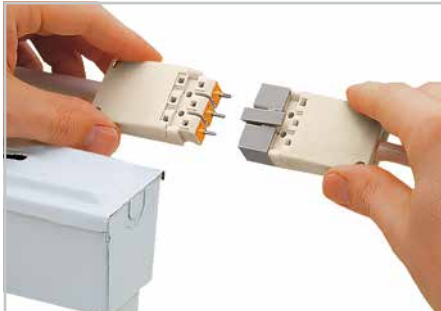


Strain relief



Male connector with complete strain relief device

Connection of 2 lighting fixtures

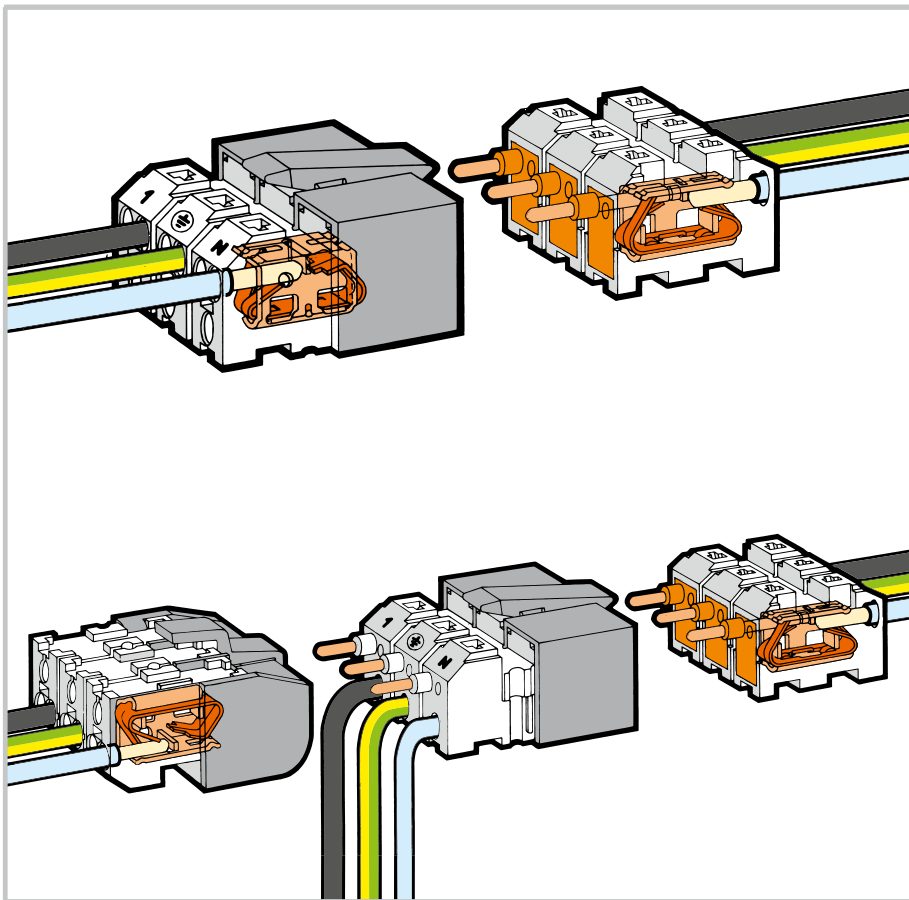


Mating of connecting cables of two lighting fixtures

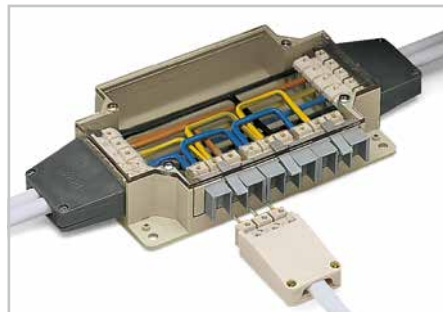
Application



Lighting fixture ready for connection

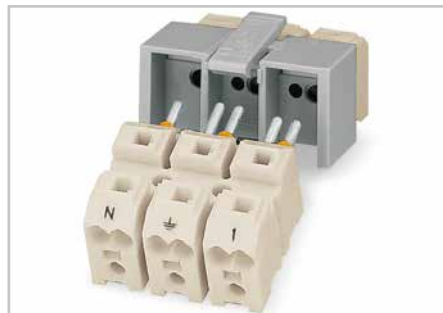


Application

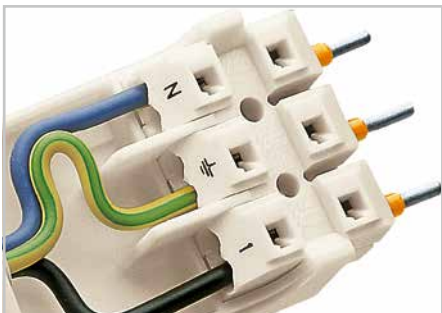


Ceiling or flushmount distribution

Coding



Connector with additional coding pins/holes



Series marking of poles

# 4 Fully Polarized Connectors for Lighting Fixtures in Dropped Ceilings

272

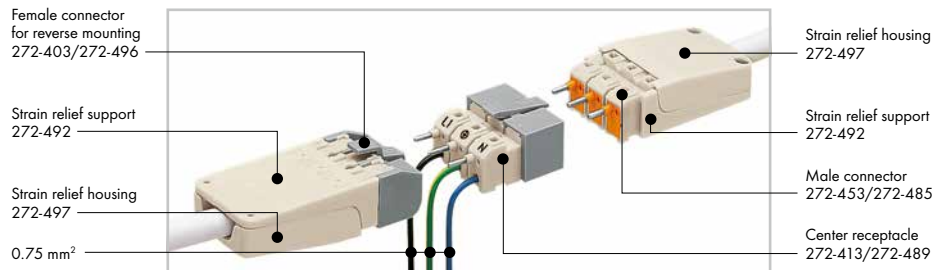
<p>2 x 0.5 ... 2.5 mm<sup>2</sup> "s"   2 x AWG 20 ... 14 sol.                  200 V/4 kV/3 ①                  400 V/4 kV/2 ①                  16 A</p> <p>8 ... 9 mm / 0.33 in.</p>	<p>1 x 0.5/0.75 mm<sup>2</sup> "s"   1 x AWG 20 ... 18 sol.                  200 V/4 kV/3 ①                  400 V/4 kV/2 ①                  16 A (through connection),                  6 A (connection to the lighting fixture)</p> <p>8 ... 9 mm / 0.33 in.</p>
---	--

- ① In grounded (earthed) supply systems  
 200/400 V = rated voltage  
 4 kV = rated surge voltage  
 2/3 = pollution degree  
 (see also section 10)
- ② Suitable for assembly without tool
- ③ or of a cable NYM 3 x 2.5 mm<sup>2</sup>/5 x 2.5 mm<sup>2</sup>  
 (AWG 14)



Description	No. of Poles	Item No.	Pack. Unit	No. of Poles	Item No.	Pack. Unit
<b>Fully polarized connectors for lighting fixtures in dropped ceilings</b> , for screw or screwless fixing (WAGO pins), with standard printing, push-in type strain relief devices, coding mask of center receptacle and female connectors with integrated locking device.	<b>Male connector</b> , with preceding earth contact, white			<b>Center receptacle</b> , with coding mask, white/grey		
	3	<b>272-453/272-485</b>	500	3	<b>272-413/272-489</b>	500
	<b>Diitto</b> , with additional coding pins (poles ⊕ and 1), white			<b>Diitto</b> , with additional coding pins and holes (poles ⊕ and 1), white/grey		
	3	<b>272-453/272-469</b>	500	3	<b>272-413/272-419</b>	500
	5	<b>272-455/272-485</b>	250	5	<b>272-415/272-491</b>	250
<b>Accessories</b>						
	<b>Strain relief support</b> , 3-pole with clamp for 2 cables	3 x 1.5 mm <sup>2</sup> ③	<b>272-492</b>	500		
	NYM max. 5-pole	5 x 1.5 mm <sup>2</sup> ③	<b>272-493</b>	250		
	<b>Strain relief housing</b> , 3-pole for 2 cables NYM max. 5-pole	3 x 1.5 mm <sup>2</sup> ③	<b>272-497</b>	500		
		5 x 1.5 mm <sup>2</sup> ③	<b>272-498</b>	250		
	<b>Pins</b> , for plate thickness				1 mm/0.039 in. <b>271-702</b>	1000
					1 mm/0.039 in. <b>271-711</b> ②	1000
					1.5 mm/0.059 in. <b>271-712</b> ②	1000
	<b>Pin terminals</b> , insulated	0.5/0.75 mm <sup>2</sup> I <sub>N</sub> 6/8 A, green	<b>209-151</b>	100		
		1/1.5 mm <sup>2</sup> I <sub>N</sub> 10/16 A, beige	<b>209-164</b>	100		
		2.5 mm <sup>2</sup> I <sub>N</sub> 20 A, blue	<b>209-157</b>	100		
	<b>Crimping tool</b> , for pin terminals, crimping range 0.5-2.5 mm <sup>2</sup> /AWG 20 - 14		<b>210-176</b>	1		

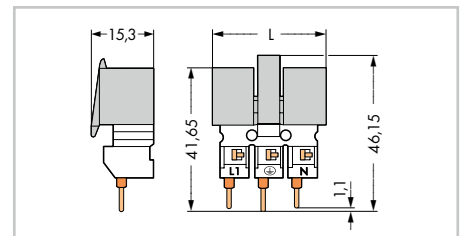
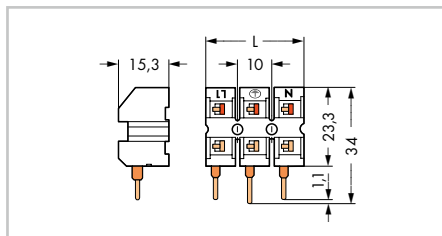
A fully polarized 3-pole connector for lighting fixtures in dropped ceilings is consisting of the following element:



## Dimensions (in mm)

No. of Poles	Male connector	Center receptacle	Female connector
3	28.5	33	33
5	48.5	53	53



Overall length of the connectors in mated condition: 142 mm/5.591 in. (incl. strain relief device)



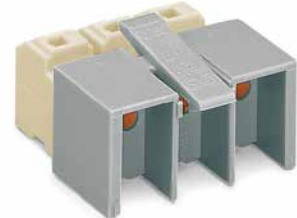
\* For further approvals with corresponding ratings see page 534.



# 4 Fully Polarized Connectors for Lighting Fixtures







$2 \times 0.5 \dots 2.5 \text{ mm}^2$ "s" 200 V/4 kV/3 ① 400 V/4 kV/2 ① 16 A	$2 \times \text{AWG } 20 \dots 14 \text{ sol.}$ 300 V, 10 A ② 300 V, 10 A ③	$2 \times 0.5 \dots 2.5 \text{ mm}^2$ "s" 200 V/4 kV/3 ① 400 V/4 kV/2 ① 16 A	$2 \times \text{AWG } 20 \dots 14 \text{ sol.}$ 300 V, 10 A ② 300 V, 10 A ③
 8 ... 9 mm / 0.33 in.		 8 ... 9 mm / 0.33 in.	

- ① In grounded (earthed) supply systems  
 200/400 V = rated voltage  
 4 kV = rated surge voltage  
 2/3 = pollution degree  
 (see also section 10)
- ② If 2 cables NYM are connected at the same time  
 only up to  $0.75 \text{ mm}^2$  "s"/AWG 18 "solid"!
- ③ Suitable for mounting without tool

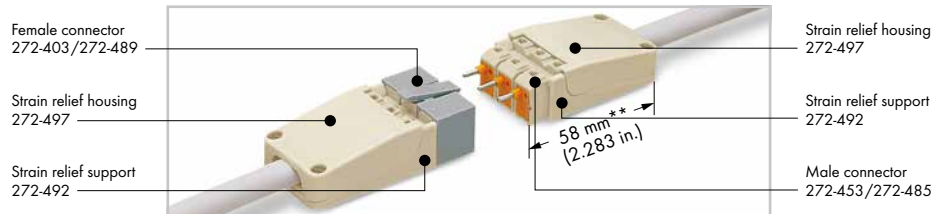


Description	No. of Poles	Item No.	Pack. Unit	No. of Poles	Item No.	Pack. Unit
Fully polarized connectors for lighting fixtures, for screw or screwless fixing (WAGO pins), with standard printing, push-in type strain relief devices, coding mask of female connectors with integrated locking device.	Male connector, white			Female connector, with coding mask, white/gray		
	2	272-452	500	2	272-402/272-488	500
	Male connector, with preceding earth contact, white			3	272-403/272-489	500
	3	272-453/272-485	500	4	272-404/272-490	250
	4	272-454/272-485	250	Same, with additional coding holes		
	5 with coding pins	272-455/272-485	250	5	272-405/272-491	250

### Accessories

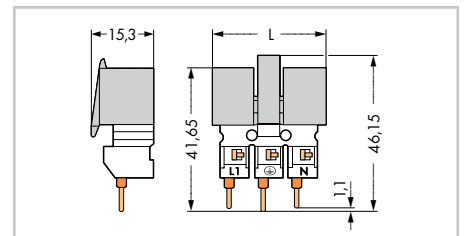
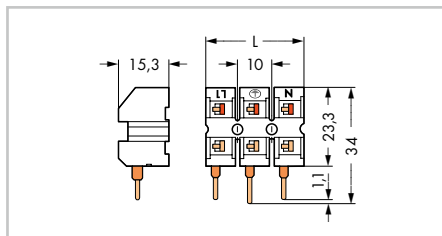
	Strain relief support, 2-pole	$2 \times 1.5 \text{ mm}^2$ ②	272-536	500	$2 \times 1.5 \text{ mm}^2$ ②	272-536	500	
	with clamp for 2 cables 3-pole	$3 \times 1.5 \text{ mm}^2$	272-492	500	$3 \times 1.5 \text{ mm}^2$	272-492	500	
	NYM max. 4-pole	$4 \times 1.5 \text{ mm}^2$	272-516	250	$4 \times 1.5 \text{ mm}^2$	272-516	250	
		5-pole	$5 \times 1.5 \text{ mm}^2$	272-493	250	$5 \times 1.5 \text{ mm}^2$	272-493	250
		Strain relief housing, 2-pole	$2 \times 1.5 \text{ mm}^2$ ②	272-537	500	$2 \times 1.5 \text{ mm}^2$ ②	272-537	500
for 2 cables NYM max. 3-pole		$3 \times 1.5 \text{ mm}^2$	272-497	500	$3 \times 1.5 \text{ mm}^2$	272-497	500	
		4-pole	$4 \times 1.5 \text{ mm}^2$	272-517	250	$4 \times 1.5 \text{ mm}^2$	272-517	250
		5-pole	$5 \times 1.5 \text{ mm}^2$	272-498	250	$5 \times 1.5 \text{ mm}^2$	272-498	250
	Strain relief housing, 3-pole	up to $6 \times 2.5 \text{ mm}^2$	272-494	500	up to $6 \times 2.5 \text{ mm}^2$	272-494	500	
	for single insulated conductors 5-pole	up to $10 \times 2.5 \text{ mm}^2$	272-495	250	up to $10 \times 2.5 \text{ mm}^2$	272-495	250	
	Pins, 1 mm/0.039 in.		271-702	1000	1 mm/0.039 in.	271-702	1000	
	for plate thickness 1 mm/0.039 in.		271-711	③ 1000	1 mm/0.039 in.	271-711	③ 1000	
		1.5 mm/0.059 in.		271-712	③ 1000	1.5 mm/0.059 in.	271-712	③ 1000
	Pin 0.5/0.75 mm <sup>2</sup>	I <sub>N</sub> 6/8 A, green	209-151	100	I <sub>N</sub> 6/8 A, green	209-151	100	
	terminals, 1/1.5 mm <sup>2</sup>	I <sub>N</sub> 10/16 A, beige	209-164	100	I <sub>N</sub> 10/16 A, beige	209-164	100	
	insulated 2.5 mm <sup>2</sup>	I <sub>N</sub> 20 A, blue	209-157	100	I <sub>N</sub> 20 A, blue	209-157	100	
	Crimping tool, for pin terminals, crimping range 0.5-2.5 mm <sup>2</sup> /AWG 20 - 14		210-176	1		210-176	1	

A fully polarized 3-pole connector is consisting of the following elements:



### Dimensions (in mm)

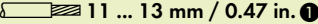
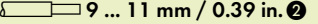
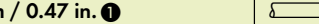
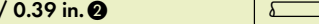
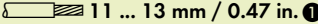
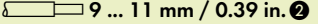


No. of Poles	Dimension L (mm) Male connector	Dimension L (mm) Female connector
2	18.5	23
3	28.5	33
4	38.5	43
5	48.5	53



\*\* Overall length of the connectors in mated condition: 117 mm / 4.606 in. (incl. strain relief devices)

\* For further approvals with corresponding ratings see pages 534.



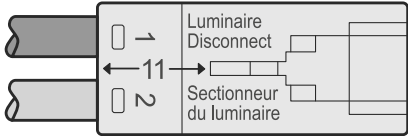
<b>2-conductor plug ①</b> AWG 18 ... 12 „s“ AWG 16 ... 12 „st“  11 ... 13 mm / 0.47 in. ①  9 ... 11 mm / 0.39 in. ②	<b>1-conductor socket ②</b> AWG 18 „s“ 600 V, 6 AⓈ  11 ... 13 mm / 0.47 in. ①  9 ... 11 mm / 0.39 in. ②	<b>2-conductor plug ①</b> AWG 18 ... 12 „s“ AWG 16 ... 12 „st“  11 ... 13 mm / 0.47 in. ①  9 ... 11 mm / 0.39 in. ②	<b>1-conductor socket ②</b> AWG 18 „s“ 600 V, 6 AⓈ  11 ... 13 mm / 0.47 in. ①  9 ... 11 mm / 0.39 in. ②
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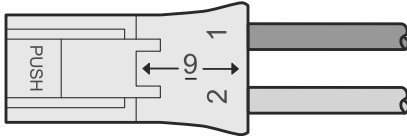
- ① 2-conductor plug
- ② 1-conductor socket

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Luminaire disconnect connector</b>			<b>Luminaire disconnect connector</b>		
2	873-902	40	3	873-903	20


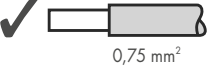


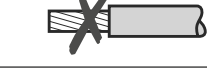


Touchproof connectors are required for ballast supply cables in the USA and Canada.  
 When exchanging a ballast:  
 1. The touchproof plug-in connection is disconnected first  
 2. The ballast is replaced  
 3. Network connection is restored by plugging the connection.  
 This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.  
 The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.

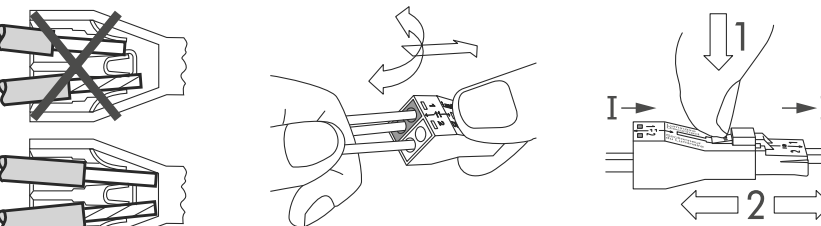


Luminaire Disconnect  
Sectionneur du luminaire



PUSH

 18-12 AWG CU, SOL, UL/CSA 0,75-4 mm <sup>2</sup>	 18 AWG CU, SOL, UL/CSA 0,75 mm <sup>2</sup>
 16-12 AWG (≤ 19 str.) CU, UL 14-12 AWG (≤ 19 str.) CU, CSA 1,5-4 mm <sup>2</sup> One-time use only - Do not reuse N'utiliser qu'une seule fois	 <del>16-12 AWG (≤ 19 str.) CU, UL</del>  <del>14-12 AWG (≤ 19 str.) CU, CSA</del>
 0.45 inch / 11 - 13 mm	 0.35 inch / 9 - 11 mm



**Correct method of solid wire removal**  
 Hold wire to be removed in one hand, the connector in the other - twist slightly while pulling the connector.

**Déconnexion correcte du conducteur rigide**  
 Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur - Opérer une légère torsion du conducteur tout en tirant sur le connecteur.

The 873 Series is also approved to EN 60998 and EN 61984 as follows:

**EN 60998**  
 0.75 mm<sup>2</sup> solid, 6A for female part  
 1.5 mm<sup>2</sup> ... 4 mm<sup>2</sup> solid, 32A for male part  
 400 V/4 kV/2

**EN 61984**  
 0.75 mm<sup>2</sup> solid, 6A for female part  
 0.75 mm<sup>2</sup> ... 4 mm<sup>2</sup> solid, 32A for male part  
 400 V/4 kV/2

# Luminaire Disconnect Connectors (US Version) 873 Series

<b>2-conductor plug ①</b> AWG 18 ... 12 „s“ AWG 16 ... 12 „st“ 11 ... 13 mm / 0.47 in. ① 9 ... 11 mm / 0.39 in. ②	<b>1-conductor socket ②</b> AWG 18 „s“
---	---



- ① 2-conductor plug
- ② 1-conductor socket

Pole No.	Item No.	Pack. Unit
<b>Luminaire disconnect connector,</b>		
preceding ground contact in center position		
3	<b>873-953</b>	500

Touchproof connectors are required for ballast supply cables in the USA and Canada.  
When exchanging a ballast:  
**1.** The touchproof plug-in connection is disconnected first  
**2.** The ballast is replaced  
**3.** Network connection is restored by plugging the connection.  
 This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.  
 The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.

<p>18-12 AWG CU, SOL, UL/CSA 0,75-4 mm<sup>2</sup></p>	<p>18 AWG CU, SOL, UL/CSA 0,75 mm<sup>2</sup></p>
<p>16-12 AWG (≤ 19 str.) CU, UL 14-12 AWG (≤ 19 str.) CU, CSA 1,5-4 mm<sup>2</sup> One-time use only - Do not reuse N'utiliser qu'une seule fois</p>	
<p>0.45 inch / 11 - 13 mm</p>	<p>0.35 inch / 9 - 11 mm</p>

**Correct method of solid wire removal**  
Hold wire to be removed in one hand, the connector in the other - twist slightly while pulling the connector.

**Déconnexion correcte du conducteur rigide**  
Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur - Opérer une légère torsion du conducteur tout en tirant sur le connecteur.

The 873 Series is also approved to EN 60998 and EN 61984 as follows:

**EN 60998**  
0.75 mm<sup>2</sup> solid, 6A for female part  
1.5 mm<sup>2</sup> ... 4 mm<sup>2</sup> solid, 32A for male part  
400 V/4 kV/2

**EN 61984**  
0.75 mm<sup>2</sup> solid, 6A for female part  
0.75 mm<sup>2</sup> ... 4 mm<sup>2</sup> solid, 32A for male part  
400 V/4 kV/2







**MCS – MICRO**  
Pin Spacing 2.5 mm / 0.098 in.

282



**MCS – MINI**  
Pin Spacing 3.5 mm / 0.138 in.  
Pin Spacing 3.81 mm / 0.15 in.

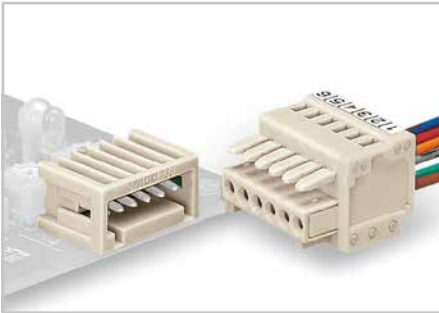
298



**MCS – MIDI**  
Pin Spacing 5 mm / 0.197 in.

338

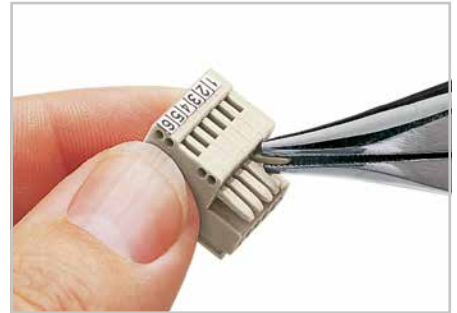
# Description and Handling MCS MICRO



Male header and female connector - 100% protected against mismatching. Only mating halves with the same pole number can be connected together.



Coding a male header - fitting coding key(s).



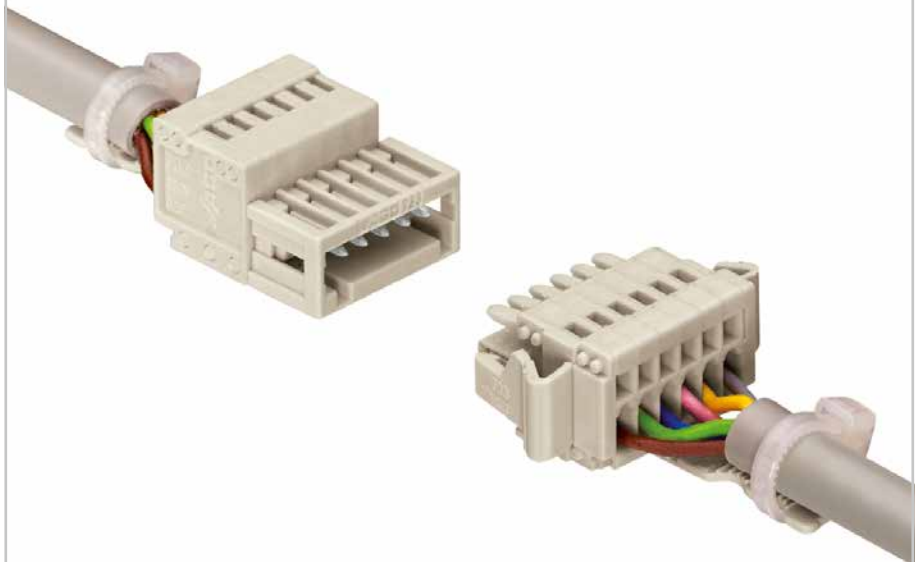
Coding a female connector - removing coding finger(s).

## 733 Series



"Wire-to-wire" connection of single conductors.

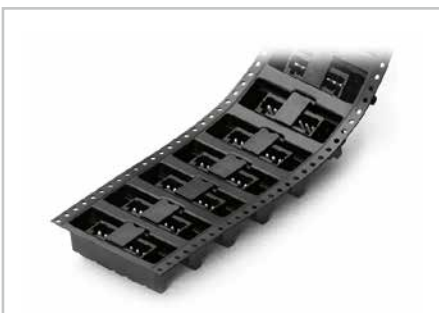
**100% protected against mismatching**



"Wire-to-wire" connection of multi-core cables  
Plug-in connection using strain relief plates and locking levers



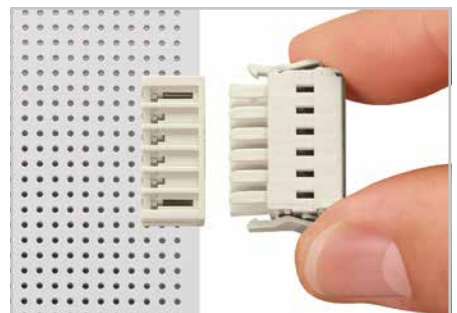
THR male headers for reflow soldering in SMT applications.



Tape-and-reel packaging for THR male headers.



Locking levers prevent accidental disconnection.



**CAGE CLAMP®**  
terminates the following  
copper conductors:\*

solid

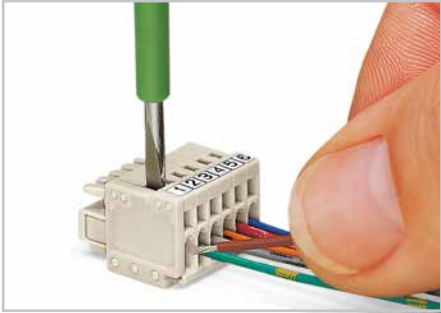


stranded

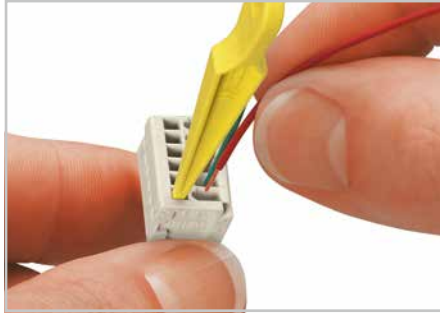


fine-stranded,  
also with tinned  
single strands

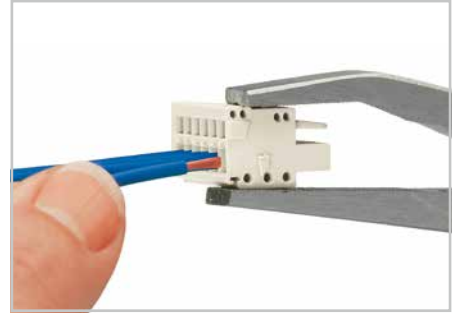
\* For aluminum conductors, see page 511.



Inserting conductor via (2.5 x 0.4) mm screwdriver.  
Operation perpendicular to conductor entry



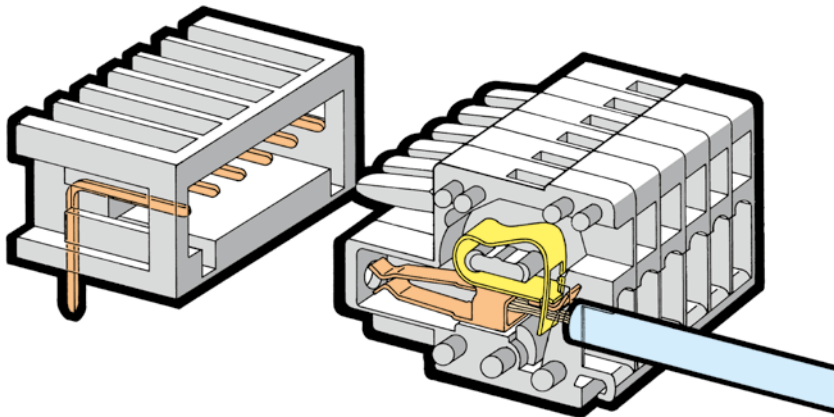
Inserting conductor via 233-331 operating tool.  
Operation parallel to conductor entry.



Inserting conductor via 210-251 operating tool.

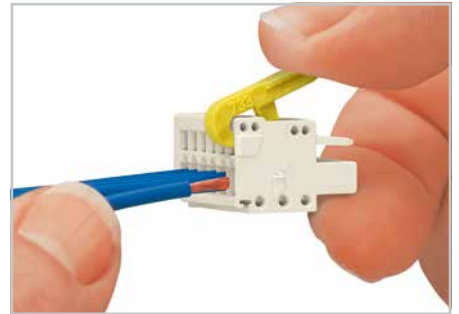
733 Series

100% protected against mismatching



MCS MICRO

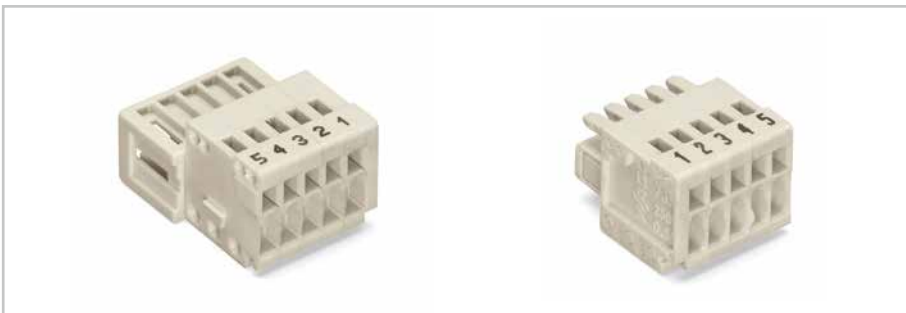
Pin Spacing: 2.5 mm/0.098 in.



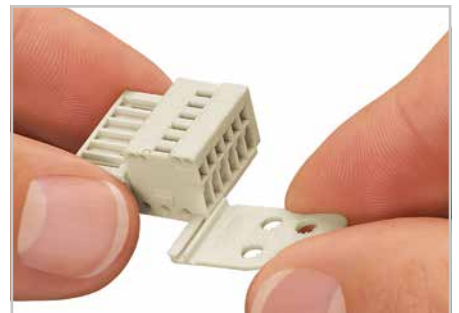
Inserting conductor via 733-191 operating lever.



Testing with 1 mm Ø test pin (item no. 735-500),  
touch contact with current bar.



Marking via self-adhesive strips or factory direct printing.



Strain relief plates for factory or in-the-field assembly.



fine-stranded,  
tip-bonded



fine-stranded,  
with ferrules  
(gastight crimped)

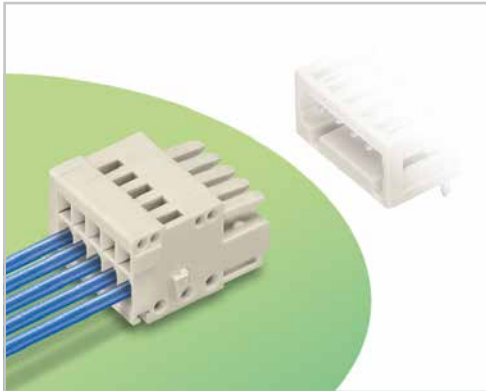


fine-stranded,  
with pin terminal  
(gastight crimped)

# Female Connectors

## Pin Spacing: 2.5 mm

### MCS MICRO



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates for factory and in-the-field assembly
- 100% protected against mismatching
- Coding pins available

**Technical data:**

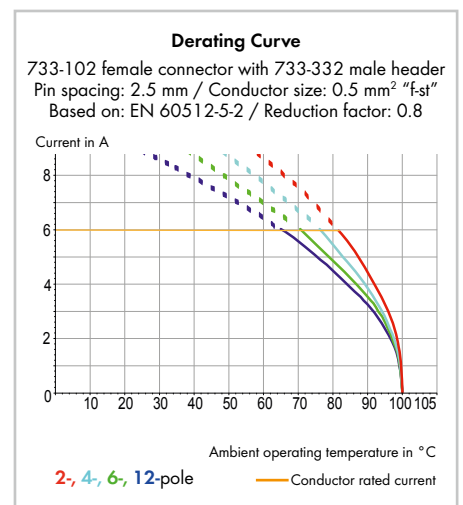
Pin Spacing	2.5 mm 0.098 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	100 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	6 A	6 A	6 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	150 V	-	-
Nominal current UL	4 A	-	-
Nominal current CSA	4 A	-	-

**Conductor data:**

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 0.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 0.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 20
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MICRO accessories:**

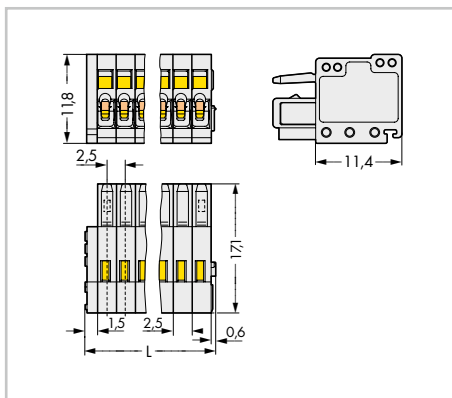
**Page:**

Marking accessories	512
Operating tools	292
Direct marking	295
Test pin	510
Strain relief plates	294

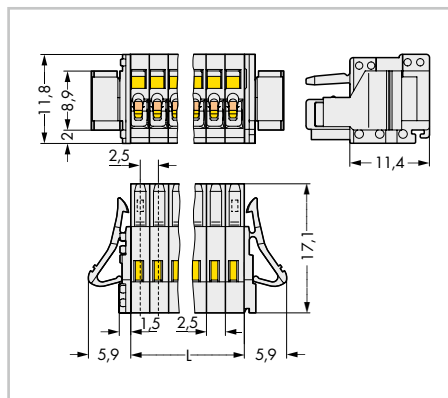
The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these pins connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Female Connectors MCS MICRO

Pin spacing: 2.5 mm / 0.098 in.		With locking levers Pin spacing: 2.5 mm / 0.098 in.	
0.08 ... 0.5 mm <sup>2</sup>	28 ... 20 AWG	0.08 ... 0.5 mm <sup>2</sup>	28 ... 20 AWG
160 V/2.5 kV/2 6 A	150 V/4 A	160 V/2.5 kV/2 6 A	150 V/4 A



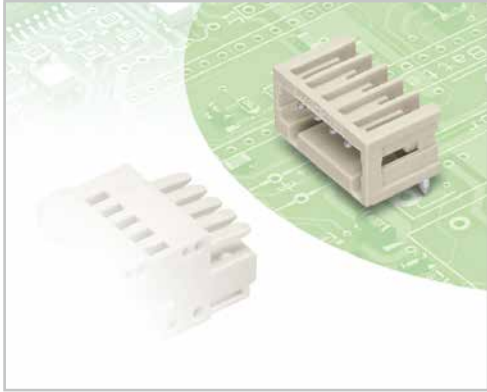
L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female connector, light gray</b>			<b>Female connector with locking levers, light gray</b>		
2	733-102	200	2	733-102/037-000	100
3	733-103	200	3	733-103/037-000	100
4	733-104	200	4	733-104/037-000	100
5	733-105	100	5	733-105/037-000	100
6	733-106	100	6	733-106/037-000	100
7	733-107	100	7	733-107/037-000	50
8	733-108	100	8	733-108/037-000	50
9	733-109	100	9	733-109/037-000	50
10	733-110	100	10	733-110/037-000	50
12	733-112	50	12	733-112/037-000	50

# Male Headers with Solder and Press-In Pins, Pin Spacing: 2.5 mm MCS MICRO



- Horizontal or vertical PCB mounting via straight and angled solder pins
- Also available with press-in pins for solder-free connection to the PCB
- 100% protected against mismatching; only mating halves with the same pole number can be connected together
- Coding pins available

**Technical data:**

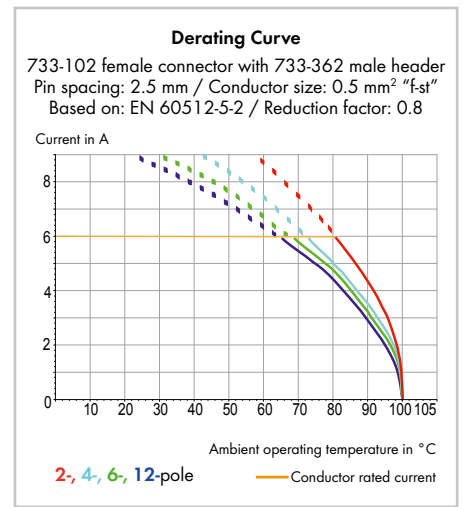
Pin Spacing	2.5 mm / 0.098 in.			Press-In Technology 2.5 mm / 0.098 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	80 V	160 V	320 V	80 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	6 A	6 A	6 A	4 A	4 A	4 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	150 V	-	-	150 V	-	-
Nominal current UL	4 A	-	-	4 A	-	-
Nominal current CSA	4 A	-	-	4 A	-	-

**Solder and press-in pin data:**

Solder pin: length/width	4.6 mm / 0.8 x 0.8 mm (straight)
Solder pin: length/width	3.7 mm / 0.8 x 0.8 mm (angled)
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm
Press-in pin: length/width	3.2 mm / 0.6 x 1.2 mm
Press-in pin: drilled hole diameter	1.15 <sup>+0.025</sup> mm
Press-in pin: metal-plated hole	1.0 <sup>+0.09</sup> / <sub>-0.08</sub> mm (HAL Sn)
Press-in pin: metal-plated hole	1.0 <sup>+0.09</sup> / <sub>-0.08</sub> mm (Chem. Sn)

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C / Press-in pin: -40 °C / +85 °C
Contact material	Electrolytic copper (E <sub>C</sub> ) / Copper alloy for press-in technology
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MICRO accessory**

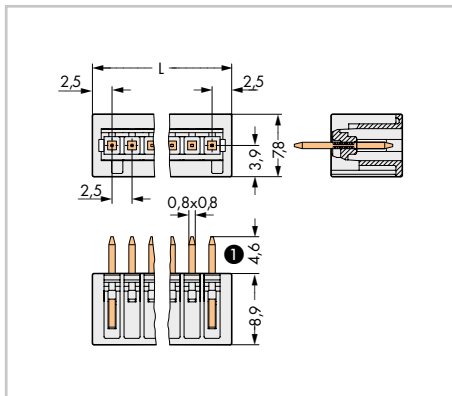
**Page:**

Coding keys	293

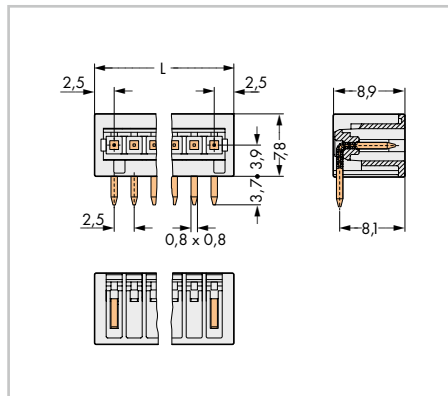
The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Male Headers with Solder and Press-In Pins MCS MICRO

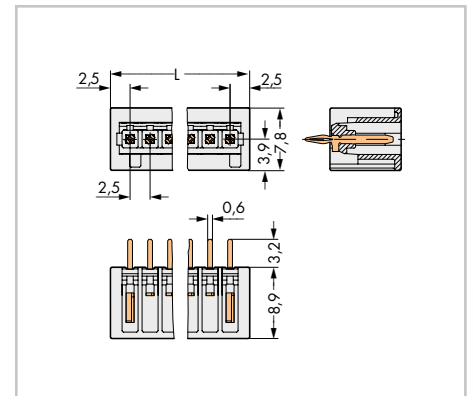
With straight solder pins Pin spacing: 2.5 mm / 0.098 in.		With angled solder pins Pin spacing: 2.5 mm / 0.098 in.		With press-in pins* Pin spacing: 2.5 mm / 0.098 in.	
160 V/2.5 kV/2 6 A	150 V/4 A	160 V/2.5 kV/2 6 A	150 V/4 A	160 V/2.5 kV/2 4 A	150 V/4 A



L = (pole no. + 1) x pin spacing



L = (pole no. + 1) x pin spacing



L = (pole no. + 1) x pin spacing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Male header with straight solder pins, light gray			Male header with angled solder pins, light gray			Male header for press-in technology*, with straight press-in pins, light gray		
2	733-332	200	2	733-362	200	2	733-332/100-000	200
3	733-333	200	3	733-363	200	3	733-333/100-000	200
4	733-334	200	4	733-364	200	4	733-334/100-000	200
5	733-335	200	5	733-365	200	5	733-335/100-000	200
6	733-336	200	6	733-366	200	6	733-336/100-000	200
7	733-337	200	7	733-367	200	7	733-337/100-000	200
8	733-338	200	8	733-368	200	8	733-338/100-000	200
9	733-339	200	9	733-369	200	9	733-339/100-000	200
10	733-340	200	10	733-370	200	10	733-340/100-000	200
12	733-342	100	12	733-372	100	12	733-342/100-000	100
						For information on press-in tool design, please contact factory.		

❶ MCS MICRO male headers with straight solder pins are also available with 3.8 mm pin projection upon request.  
Item no. suffix: .../046-000

**\*Unique features of WAGO press-in technology:**

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.02</sup> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.02</sup> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm – no unnecessary projection on underside of PCB
- low press-in force required – reduces wear and tear on PCB and components
- High retention force within the PCB – doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole – reduces wear and tear on PCB and contact points

For other lengths, please contact factory.

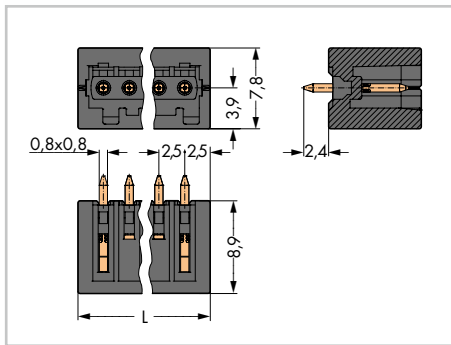
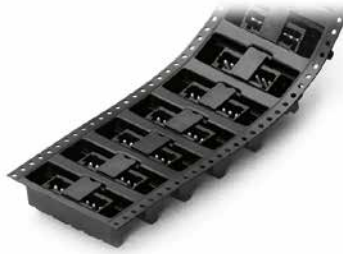




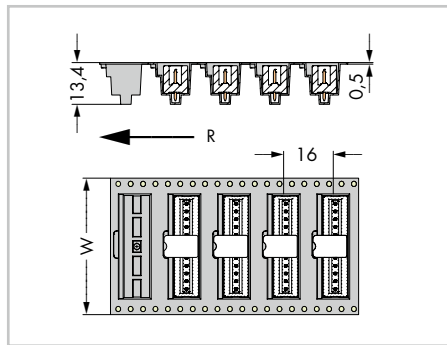


# Male Headers with Solder Pins, THR MCS MICRO

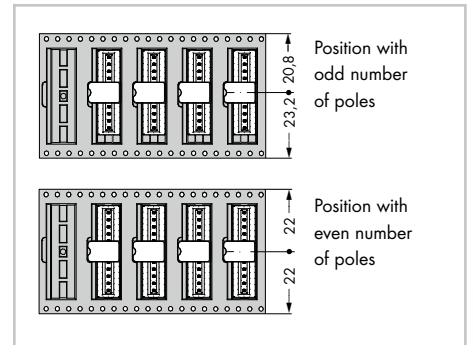
<p><b>With straight solder pins</b> Pin spacing: 2.5 mm / 0.098 in.</p> <p>160 V/2.5 kV/2 6 A</p>	<p><b>Male headers in tape-and-reel packaging</b> Pin spacing: 2.5 mm / 0.098 in.</p> <p>160 V/2.5 kV/2 6 A</p>
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L = (pole no. + 1) x pin spacing



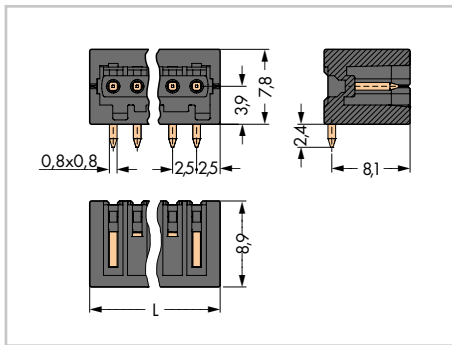
W = Tape width  
R = Feed direction



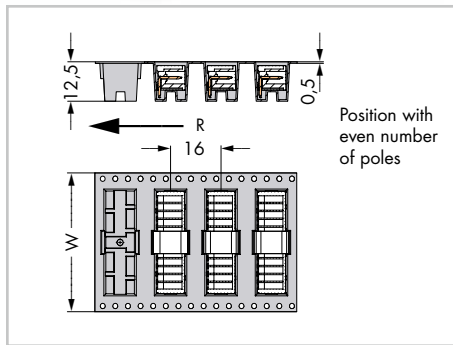
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
Male header with straight solder pins, black			Male header with straight solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black		
(mm)					
2	733-332/105-604	200	2	733-332/105-604/997-446	44
3	733-333/105-604	200	3	733-333/105-604/997-446	44
4	733-334/105-604	200	4	733-334/105-604/997-446	44
5	733-335/105-604	200	5	733-335/105-604/997-446	44
6	733-336/105-604	200	6	733-336/105-604/997-446	44
7	733-337/105-604	200	7	733-337/105-604/997-446	44
8	733-338/105-604	200	8	733-338/105-604/997-446	44
9	733-339/105-604	200	9	733-339/105-604/997-446	44
10	733-340/105-604	200	10	733-340/105-604/997-446	44
12	733-342/105-604	100	12	733-342/105-604/997-446	44
Reel diameter: 330 mm, 290 pieces per reel					

# Male Headers with Solder Pins, THR MCS MICRO

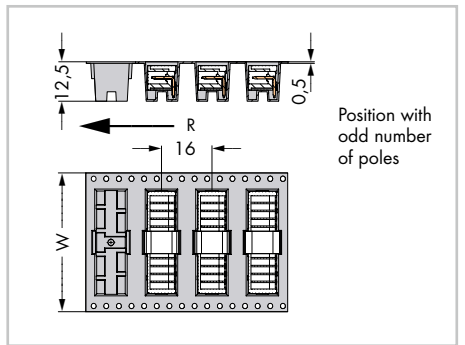
<p><b>With angled solder pins</b> Pin spacing: 2.5 mm / 0.098 in.</p> <p>160 V/2.5 kV/2 6 A</p>	<p><b>Male headers in tape-and-reel packaging</b> Pin spacing: 2.5 mm / 0.098 in.</p> <p>160 V/2.5 kV/2 6 A</p>
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L = (pole no. + 1) x pin spacing



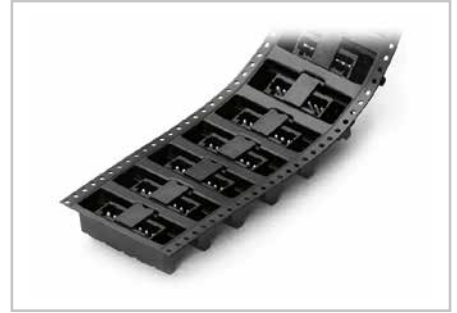
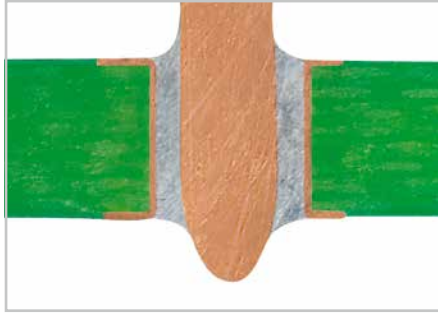
W = Tape width  
R = Feed direction



W = Tape width  
R = Feed direction

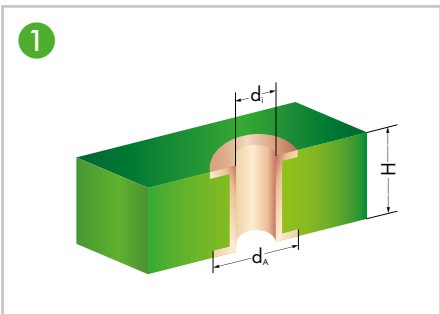
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
Male header with angled solder pins, black			Male header with angled solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black		
(mm)					
2	733-362/105-604	200	2	733-362/105-604/997-406	44
3	733-363/105-604	200	3	733-363/105-604/997-406	44
4	733-364/105-604	200	4	733-364/105-604/997-406	44
5	733-365/105-604	200	5	733-365/105-604/997-406	44
6	733-366/105-604	200	6	733-366/105-604/997-406	44
7	733-367/105-604	200	7	733-366/105-604/997-406	44
8	733-368/105-604	200	8	733-368/105-604/997-406	44
9	733-369/105-604	200	9	733-368/105-604/997-406	44
10	733-370/105-604	200	10	733-370/105-604/997-406	44
12	733-372/105-604	100	12	733-372/105-604/997-406	44
Reel diameter: 330 mm, 300 pieces per reel					

# THR (Through-Hole Reflow) Soldering Process

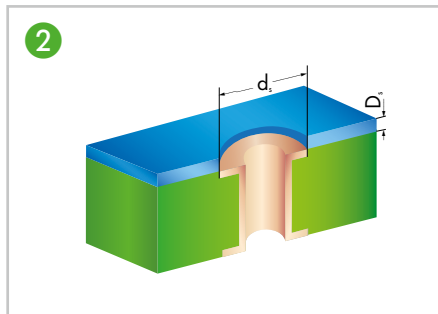


By using high-temperature-resistant plastic and a streamlined pin design, the WAGO Through-Hole Reflow headers and PCB terminal blocks meet requirements for SMT process capability while maintaining the necessary stability. THR male headers and THR PCB terminal blocks are simply pushed into the solder paste-filled PCB holes and then soldered along with the SMT components via reflow soldering. The previous wave soldering process is no longer necessary. The result is a perfect connection – both mechanically and electrically.

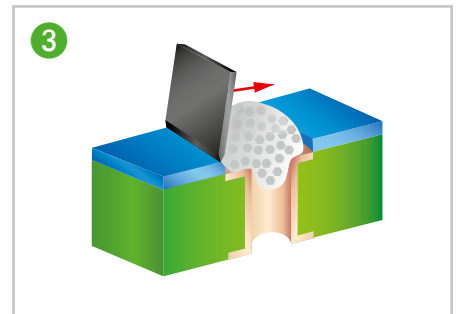
PCB terminal strips with additional suction pad in tape-and-reel packaging acc. to IEC 60286-3,



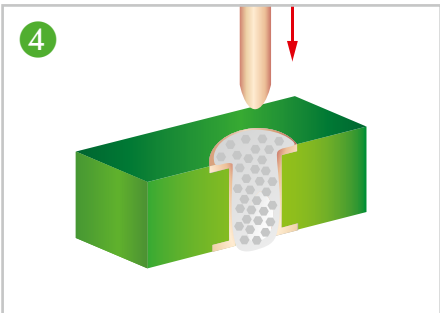
1 Metal-plated PCB bore hole



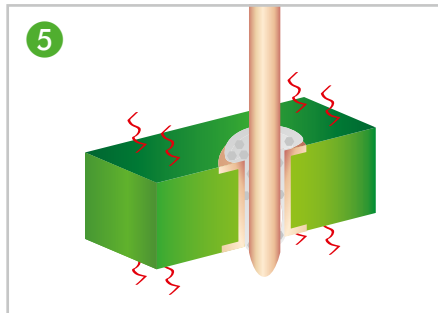
2 SMD positioning pattern



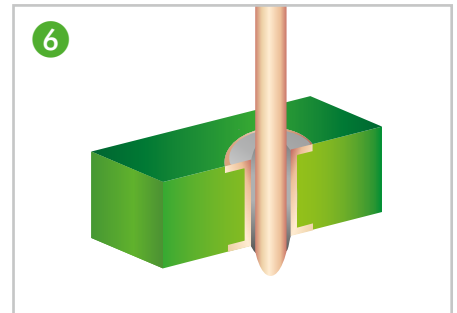
3 Solder paste application



4 Component assembly, automatic/by hand



5 Reflow soldering process



6 THR soldering joint

Series	d <sub>i</sub> (mm)	d <sub>A</sub> (mm)	H(mm)	d <sub>s</sub> (mm)	D <sub>s</sub> (μm)	d(mm)	L(mm)
231 (1 x 1 mm)	1.4 <sup>+0.1</sup>	2.5	< 2	2.4	150	1.2	2.4
231 (1.2 x 1.2 mm)	1.7 <sup>+0.1</sup>	2.8	< 2	2.7	150	1.5	2.4
713	1.2 <sup>+0.1</sup>	1.9	< 2	1.8	150	1.0	2.4
733	1.2 <sup>+0.1</sup>	1.9	< 2	1.8	150	1.0	2.4
734	1.4 <sup>+0.1</sup>	2.5	< 2	2.4	150	1.2	2.4

WAGO recommends both a temperature profile that adheres to EN 61760-1 and the use of forced convection ovens for processing THR components.

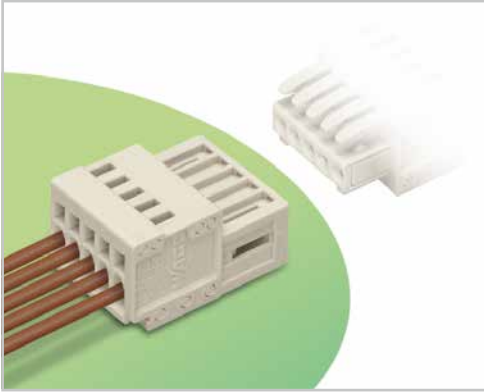
- d: Inner diameter of metal-plated PCB bore hole
- d<sub>A</sub>: Outer diameter of metal-plated PCB hole\*
- H: PCB thickness
- d<sub>s</sub>: Pattern hole diameter
- D<sub>s</sub>: Pattern thickness
- D: Pin diagonal
- L: Pin length

\*When laying out the metal-plated bore holes, the clearance and creepage distance requirements – as specified in the equipment standards – must be considered.

# Male Connectors

## Pin Spacing: 2.5 mm

### MCS MICRO



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” connections
- 100% protected against mismatching
- Coding pins available

**Technical data:**

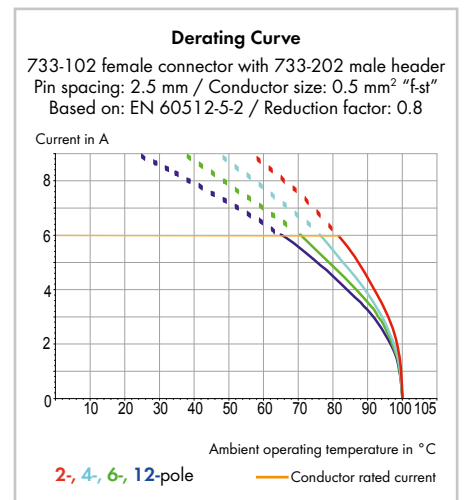
Pin Spacing	2.5 mm 0.098 in.		
	IEC/EN 60664-1		
Ratings per	III	III	II
Overtoltage category	3	2	2
Pollution degree	3	2	2
Rated voltage	100 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	6 A	6 A	6 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	150 V	-	-
Nominal current UL	4 A	-	-
Nominal current CSA	4 A	-	-

**Conductor data:**

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 0.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 0.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 20
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	



**MCS MICRO accessories:**

**Page:**

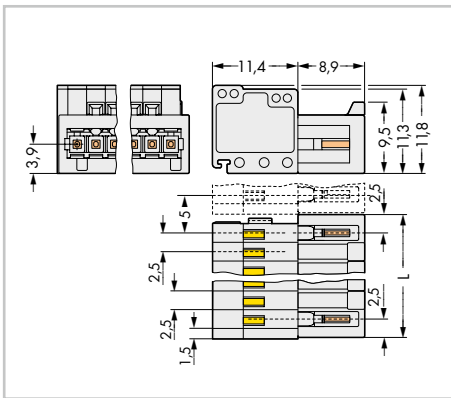
Marking accessories	512
Operating tools	292
Direct marking	295
Coding keys	293
Test pin	510
Strain relief plates	294

The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these pins connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Male Connectors MCS MICRO

Pin spacing: 2.5 mm / 0.098 in.

0.08 ... 0.5 mm <sup>2</sup>	28 ... 20 AWG
160 V/2.5 kV/2 6 A	150 V/4 A



$L = (\text{pole no.} + 1) \times \text{pin spacing}$

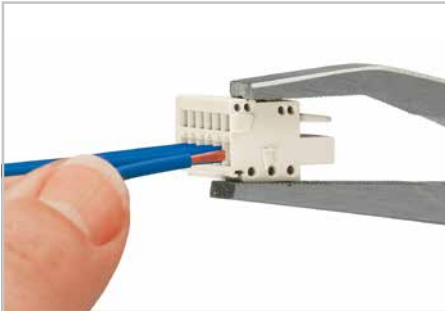
Pole No.	Item No.	Pack. Unit
<b>Male connector,</b> light gray		
2	733-202	200
3	733-203	200
4	733-204	200
5	733-205	100
6	733-206	100
7	733-207	100
8	733-208	100
9	733-209	100
10	733-210	100
12	733-212	50

# Accessories Operating Tools MCS MICRO

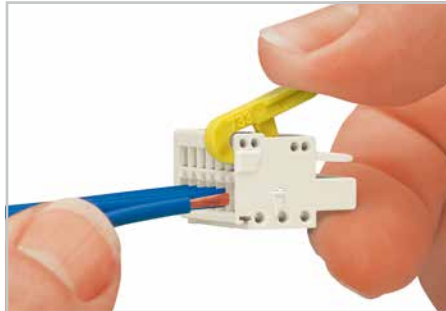
<b>Operating tool</b>  for male and female connectors equipped with CAGE CLAMP®	<b>Operating levers</b>  for male and female connectors equipped with CAGE CLAMP®	<b>Operating tools</b>  for male and female connectors equipped with CAGE CLAMP®
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Operating tool, 2.5 mm, 3.5 mm and 3.81 mm pin spacing			Operating lever, 2.5 mm pin spacing			Operating tool, 2.5 mm pin spacing		
yellow	210-251	1	white	733-130	100 (4 x 25)	white	233-332	25
			yellow	733-191	100 (4 x 25)	yellow	233-331	25



Inserting conductor via operating tool.



Conductor connected using push-button.



Inserting conductor via 233-331 operating tool.  
Operation parallel to conductor entry.

# Accessories

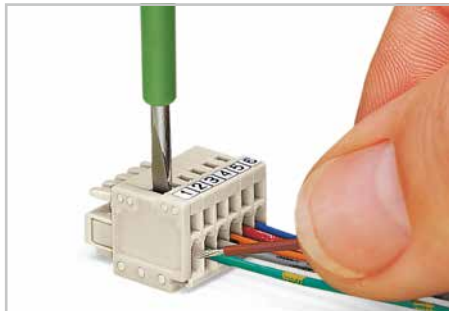
## Operating Tools and Coding Keys

### MCS MICRO

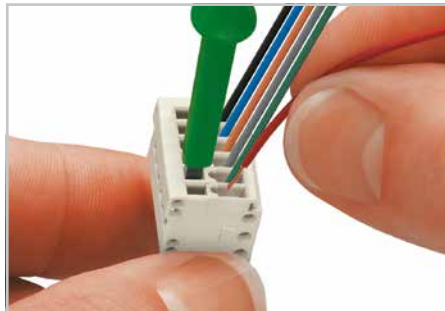
<b>Operating tool</b> with partially insulated shaft Type 1	<b>Operating tool</b> for male and female connectors equipped with CAGE CLAMP®	<b>Coding keys</b> for male headers
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Item No.	Pack. Unit	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Operating tool</b> with partially insulated shaft, type 1, (2.5 x 0.4) mm blade		<b>Operating tool</b> with partially insulated shaft		<b>Coding key</b>		
210-719	1	233-335	1	white	733-330	100
				black (suitable for THR soldering)	733-331	100



Inserting conductor via (2.5 x 0.4) mm screwdriver. Actuation perpendicular to conductor termination.



Inserting conductor via 233-335 operating tool. Operation parallel to conductor entry.



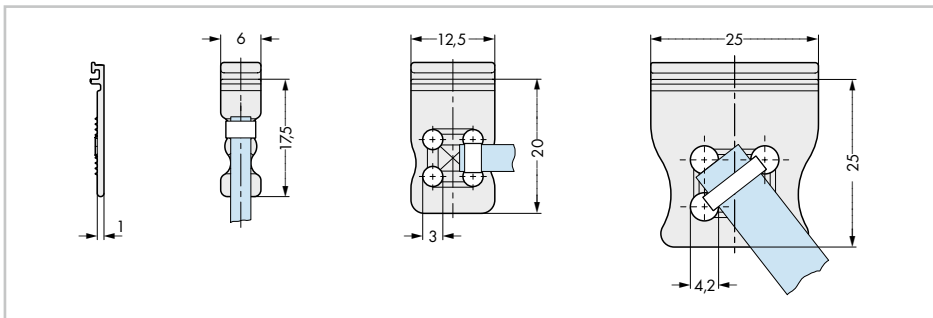
Snap-on coding key for headers.

# Accessories Strain Relief Plates MCS MICRO

<p><b>Strain relief plates for insertion</b></p> <p>for male and female connectors equipped with CAGE CLAMP®</p>	<p><b>Strain relief plates factory-assembled</b></p> <p>for male and female connectors equipped with CAGE CLAMP®</p>
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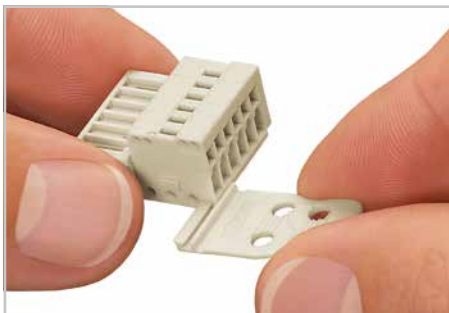


Width	Pole No.	Item No.	Pack. Unit	Width	Pole No.	Item no. suffix	Pack. Unit
<b>Strain relief plate light gray</b>				<b>Strain relief plate, pre-assembled</b>			
6 mm	2 ... 4	<b>734-127</b>	100 (4 x 25)	6 mm	2 ... 4	... / <b>032-000</b>	
12.5 mm	5 ... 9	<b>734-128</b>	100 (4 x 25)	12.5 mm	5 ... 9	... / <b>033-000</b>	
25 mm	10 ... 12	<b>734-129</b>	100 (4 x 25)	25 mm	10 ... 12	... / <b>034-000</b>	
<p><b>Ordering example:</b> Female connector with strain relief plate, 2.5 mm pin spacing, 2-pole, light gray: <b>733-102/032-000</b></p> <p>An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of male or female connector.</p>							



The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

Cable ties and cable binding tools are not included in the WAGO scope of supply. Refer to the Hellemann company, for example, for these items.



734-128 strain relief plate, for in-the-field assembly.



Strain relief plate, for factory assembly, female connector, 2.5 mm pin spacing, light gray, 2-pole, with 733-102/032-000 strain relief plate.



Strain relief plate, for factory assembly, female connector, 2.5 mm pin spacing, light gray, 12-pole, with 733-112/034-000 strain relief plate.

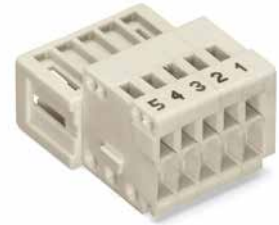
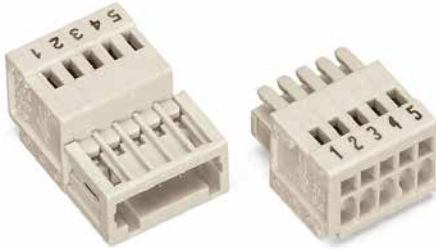


# Accessories

## Direct Marking

### MCS MICRO

<p><b>Direct marking</b></p> <p>of male and female connectors for conductor termination</p>	<p><b>Direct marking</b> <b>1 - pole no.</b></p> <p>for female connectors for connection of conductors</p>	<p><b>Direct marking</b> <b>Pole no. - 1</b></p> <p>of headers for connection of conductors</p>
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**MCS-MICRO inkjet marking:**

Male and female connectors for conductor connection can be provided with direct marking of poles from 1 - number of poles at the factory.

Two standard marking orientations are available:

1. Marking perpendicular to conductor entry
2. Marking parallel to conductor entry

Other custom marking options are available upon request.

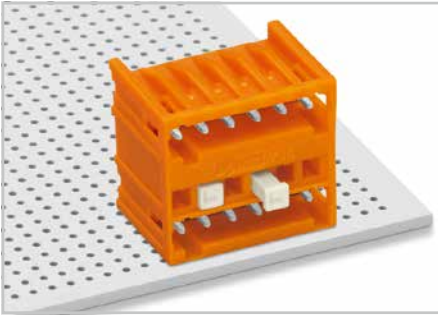
Direct marking of MCS headers with solder pins is not possible. WAGO recommends pole marking on the PCB for these headers.

Marking Perpendicular to Conductor Entry Item No. Suffix: /... - 047	Marking Perpendicular to Conductor Entry Item No. Suffix: /... - 044
<b>Ordering examples:</b>	<b>Ordering examples:</b>
<p><b>Female connector,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/000-047</b></p>	<p><b>Male connector,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-205/000-044</b></p>
<p><b>Female connector with locking levers,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/037-047</b></p>	<p><b>Male connector with strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-205/033-044</b></p>
<p><b>Female connector with strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/033-047</b></p>	
<p><b>Female connector with locking levers and strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/037-047/033-000</b></p>	

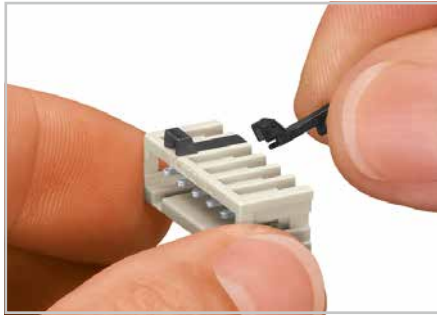


Marking Parallel to Conductor Entry Item No. Suffix: /... - 9037	Marking Parallel to Conductor Entry Item No. Suffix: /... - 9034
<b>Ordering examples:</b>	<b>Ordering examples:</b>
<p><b>Female connector,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/000-9037</b></p>	<p><b>Male connector,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-205/000-9034</b></p>
<p><b>Female connector with locking levers,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/037-9037</b></p>	<p><b>Male connector with strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-205/033-9034</b></p>
<p><b>Female connector with strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/033-9037</b></p>	
<p><b>Female connector with locking levers and strain relief plate,</b> 2.5 mm pin spacing, 5-pole, light gray <b>733-105/037-9037/033-000</b></p>	

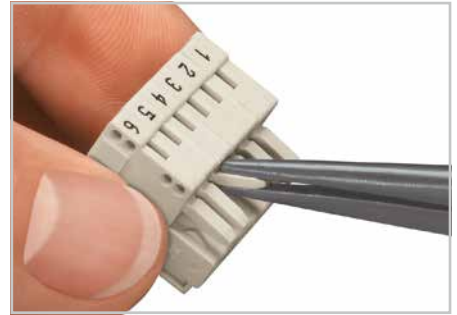
# Description and Handling MCS MINI



Coding a double-deck male header with solder pins - lower level.

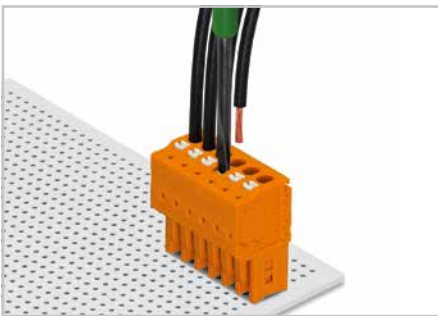


Coding a male header - fitting coding key(s).

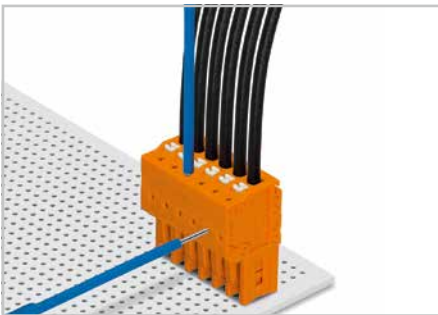


Coding a female connector - removing coding finger(s).

## 2734 Series Female Connectors with Push-Buttons and Push-in CAGE CLAMP®



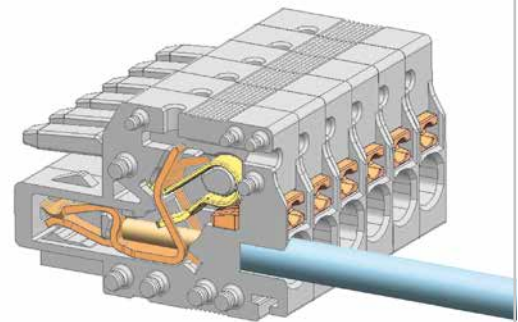
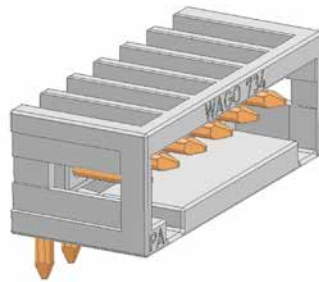
Inserting fine-stranded conductor into Push-in CAGE CLAMP® unit via push-button; solid conductors can be simply pushed in.



Testing with 1 mm Ø test pin (735-500) - Push-in CAGE CLAMP® connection - insertion parallel to conductor entry.

100% protected against mismatching

**PUSH-IN CAGE CLAMP®**

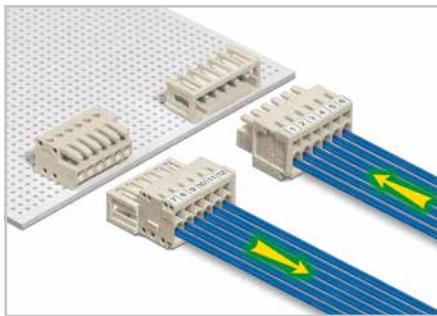


**MCS MINI**

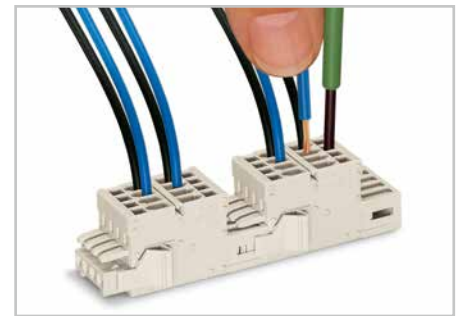
Pin Spacing: 3.5 mm and 3.81 mm



THR headers in "Tape-and-reel" packages for the SMT process.



Easy-to-identify PCB inputs and outputs.



2-conductor Combi strips with locking levers for multiplying potentials.



Push-in CAGE CLAMP® and CAGE CLAMP® terminate the following copper conductors:\*  
solid

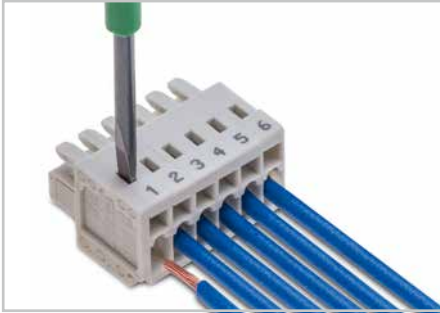


stranded

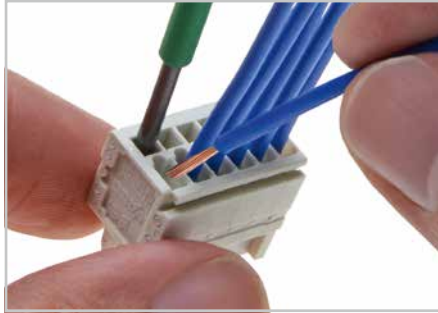


fine-stranded, also with tinned single strands

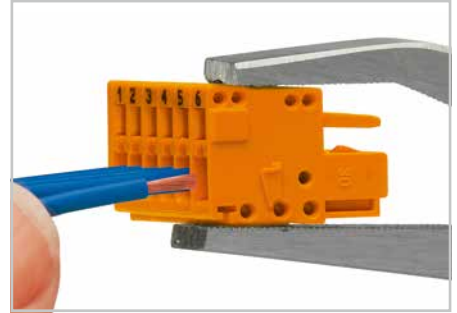
\* For aluminum conductors, see page 511.



Inserting conductor via (2.5 x 0.4) mm screwdriver - CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting conductor via (2.5 x 0.4) mm screwdriver - CAGE CLAMP® actuation parallel to conductor entry.

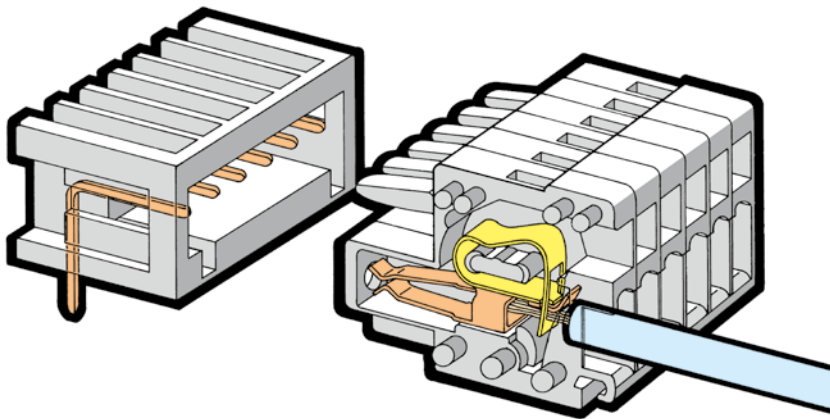


Inserting conductor into CAGE CLAMP® unit via 210-251 or 210-250 operating tool.

734 Series Female Connectors with CAGE CLAMP®

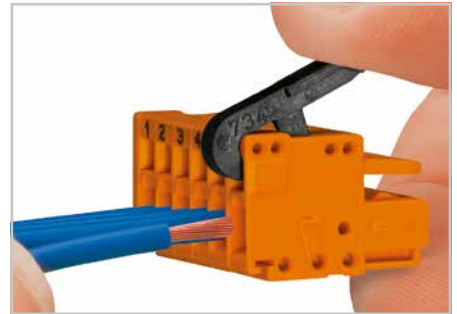
100% protected against mismatching

CAGE CLAMP®

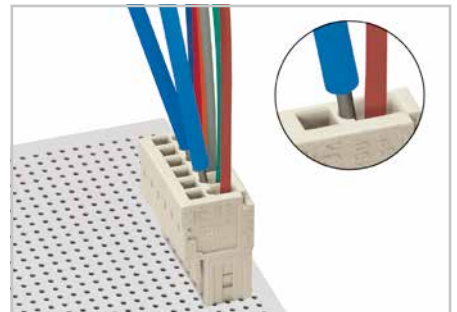


MCS MINI

Pin Spacing: 3.5 mm and 3.81 mm



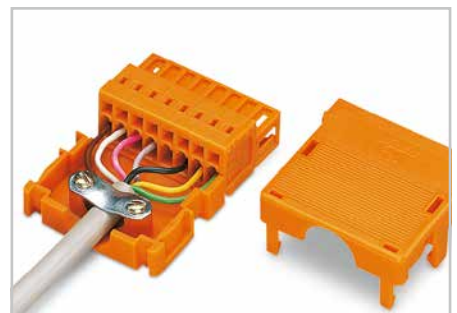
Inserting conductor into CAGE CLAMP® unit via 734-191 operating lever.



Testing with 1 mm Ø test pin (735-500), - CAGE CLAMP® connection - touch contact with current bar.



Marking via self-adhesive strips or factory direct printing.



Strain relief housing for 734 Series male and female connectors with CAGE CLAMP®; strain relief plates for 734 and 2734 Series.



fine-stranded, tip-bonded



fine-stranded, with ferrules (gastight crimped)

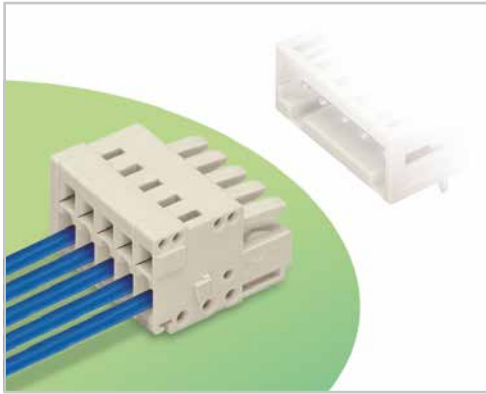


fine-stranded, with pin terminal (gastight crimped)

# Female Connectors

## Pin Spacing: 3.5 mm, 3.81 mm

### MCS MINI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates and housings for in-the-field assembly
- 100% protected against mismatching
- with coding elements

**Technical data:**

Pin Spacing	3.5 mm 0.138 in.			3.81 mm 0.15 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

**Conductor data:**

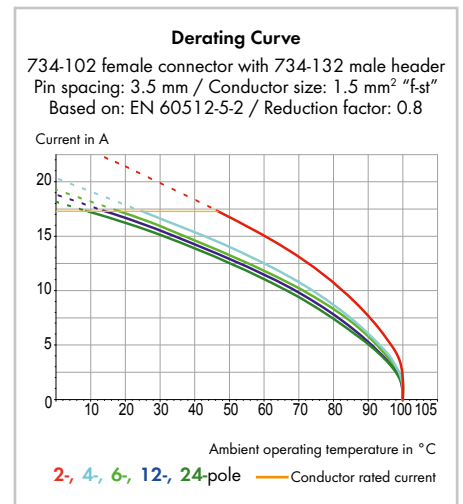
Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule) *	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	28 ... 14	14: THHN, THWN
Strip length	6 ... 7 mm / 0.24 ... 0.28 in.	

\* Only every other clamping unit can be terminated using 1.5 mm<sup>2</sup> connectors with insulated ferrules.

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	

The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these pins connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.



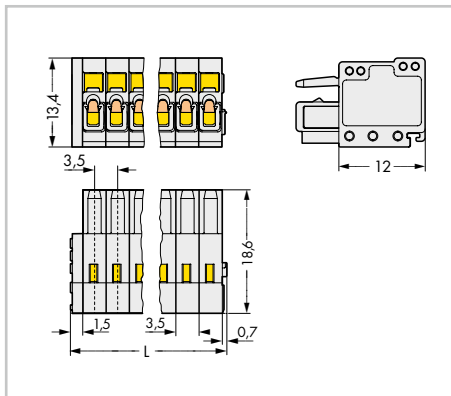
**MCS MINI accessories:**

**Page:**

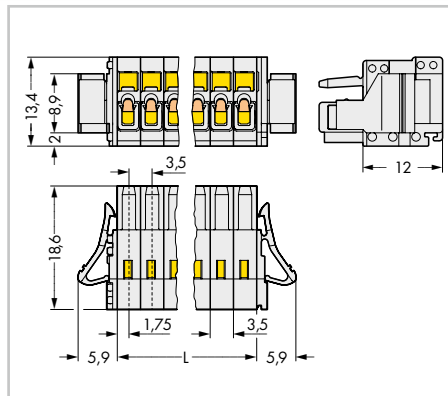
Marking accessories	512
Operating tools	328
Direct marking	332
Mounting adapter	375
Test pin	510
Strain relief housings	330
Strain relief plates	331

# Female Connectors MCS MINI

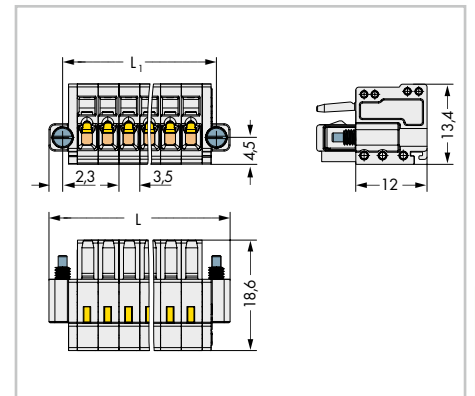
Pin spacing: 3.5 mm / 0.138 in.		With locking levers Pin spacing: 3.5 mm / 0.138 in.		With screw flanges Pin spacing: 3.5 mm / 0.138 in.	
0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = (pole no. x pin spacing) + 2.2 mm



L = pole no. x pin spacing

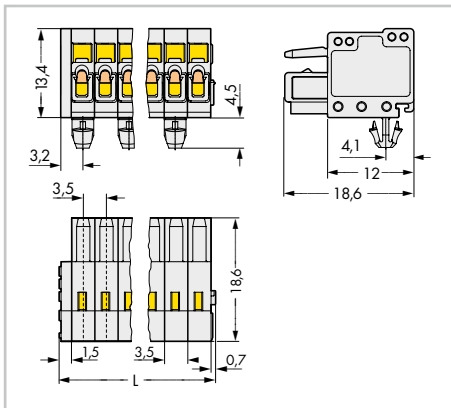


L = (pole no. x pin spacing) + 9.5 mm  
L<sub>1</sub> = (pole no. x pin spacing) + 4.9 mm

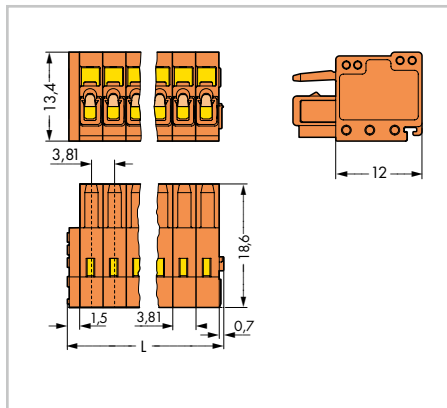
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector, light gray			Female connector with locking levers, light gray			Female connector with screw flanges, light gray		
2	734-102	200	2	734-102/037-000	100	2	734-102/107-000	100
3	734-103	200	3	734-103/037-000	100	3	734-103/107-000	100
4	734-104	100	4	734-104/037-000	100	4	734-104/107-000	100
5	734-105	100	5	734-105/037-000	50	5	734-105/107-000	50
6	734-106	100	6	734-106/037-000	50	6	734-106/107-000	50
7	734-107	100	7	734-107/037-000	50	7	734-107/107-000	50
8	734-108	50	8	734-108/037-000	50	8	734-108/107-000	50
9	734-109	50	9	734-109/037-000	50	9	734-109/107-000	50
10	734-110	50	10	734-110/037-000	50	10	734-110/107-000	50
11	734-111	50	11	734-111/037-000	50	11	734-111/107-000	50
12	734-112	50	12	734-112/037-000	50	12	734-112/107-000	50
13	734-113	50	13	734-113/037-000	25	13	734-113/107-000	25
14	734-114	50	14	734-114/037-000	25	14	734-114/107-000	25
16	734-116	25	16	734-116/037-000	25	16	734-116/107-000	25
18	734-118	25	18	734-118/037-000	25	18	734-118/107-000	25
20	734-120	25	20	734-120/037-000	25	20	734-120/107-000	25
24	734-124	25	24	734-124/037-000	10	24	734-124/107-000	10

# Female Connectors MCS MINI

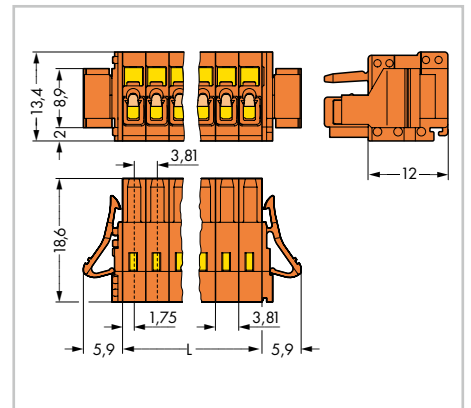
<b>With snap-in mounting feet</b> Pin spacing: 3.5 mm / 0.138 in.		<b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>With locking levers</b> Pin spacing: 3.81 mm / 0.15 in.	
0.08 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	28 ... 14 AWG 300 V/10 A	0.08 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	28 ... 14 AWG 300 V/10 A	0.08 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	28 ... 14 AWG 300 V/10 A



L = (pole no. x pin spacing) + 2.2 mm



L = (pole no. x pin spacing) + 2.2 mm



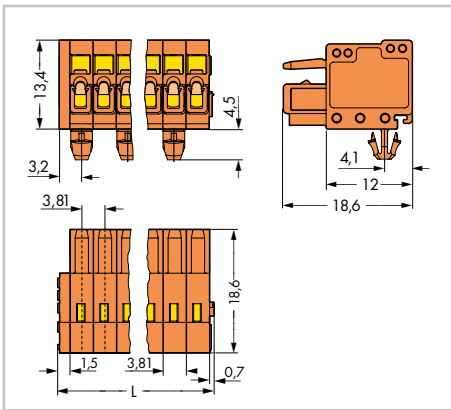
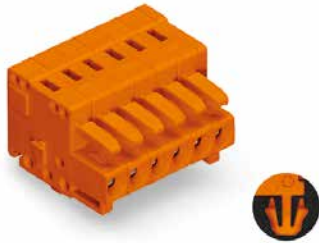
L = pole no. x pin spacing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female connector with snap-in mounting feet,</b> for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, light gray			<b>Female connector,</b> orange			<b>Female connector with locking levers,</b> orange		
2	734-102/008-000	200	2	734-202	200	2	734-202/037-000	100
3	734-103/008-000	200	3	734-203	200	3	734-203/037-000	100
4	734-104/008-000	100	4	734-204	100	4	734-204/037-000	100
5	734-105/008-000	100	5	734-205	100	5	734-205/037-000	50
6	734-106/008-000	100	6	734-206	100	6	734-206/037-000	50
7	734-107/008-000	100	8	734-208	50	8	734-208/037-000	50
8	734-108/008-000	50	9	734-209	50	9	734-209/037-000	50
9	734-109/008-000	50	10	734-210	50	10	734-210/037-000	50
10	734-110/008-000	50	12	734-212	25	12	734-212/037-000	25
11	734-111/008-000	50	14	734-214	25	14	734-214/037-000	25
12	734-112/008-000	50	16	734-216	25	16	734-216/037-000	25
13	734-113/008-000	50	18	734-218	25	18	734-218/037-000	25
14	734-114/008-000	50	19	734-219	25	19	734-219/037-000	25
16	734-116/008-000	25	20	734-220	25	20	734-220/037-000	25
18	734-118/008-000	25						
20	734-120/008-000	25						
24	734-124/008-000	25						
Three or more pole female connectors have a snap-in mounting foot at every other pole (2-pole female connectors/two snap-in mounting feet)								

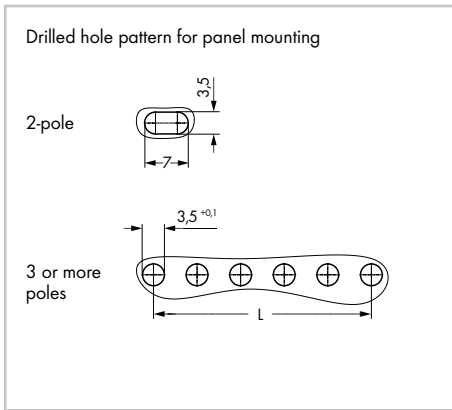
Accessory	Page
Mounting adapter for DIN 35 rail, 3 or more poles (209-137)	375

# Female Connectors MCS MINI

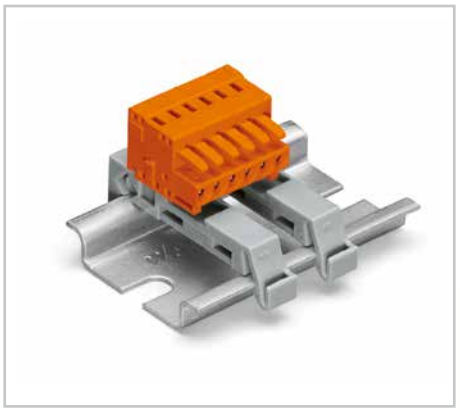
<b>With snap-in mounting feet</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>Female connectors with snap-in mounting feet</b>  <b>Drilled hole pattern for panel mounting</b>
0.08 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	28 ... 14 AWG 300 V/10 A	



L = pole no. x pin spacing



Even pole number : L = (pole no. - 2) x pin spacing  
 Odd pole number : L = (pole no. - 1) x pin spacing



Using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.

Pole No.	Item No.	Pack. Unit
<b>Female connector with snap-in mounting feet,</b>		
for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, orange		
2	734-202/008-000	100
3	734-203/008-000	100
4	734-204/008-000	100
5	734-205/008-000	50
6	734-206/008-000	50
8	734-208/008-000	50
9	734-209/008-000	50
10	734-210/008-000	50
12	734-212/008-000	50
14	734-214/008-000	25
16	734-216/008-000	25
18	734-218/008-000	25
19	734-219/008-000	25
20	734-220/008-000	25
Three or more pole female connectors have a snap-in mounting foot at every other pole (2-pole female connectors/two snap-in mounting feet)		
<b>Accessory</b>		<b>Page</b>
Mounting adapter for DIN 35 rail, 3 or more poles (209-187)		375

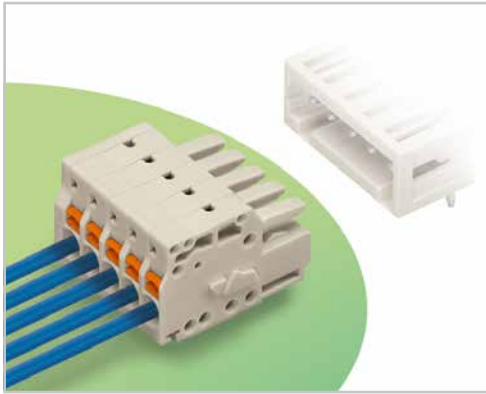
For other lengths, please contact factory.

# 5 Female Connectors with Push-Buttons

## Pin Spacing: 3.5 mm, 3.81 mm

### MCS MINI

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- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Simple, push-in terminations of solid and ferruled conductors
- Integrated test ports for testing parallel to conductor entry
- 100% protected against mismatching
- Coding pins available

#### Technical data:

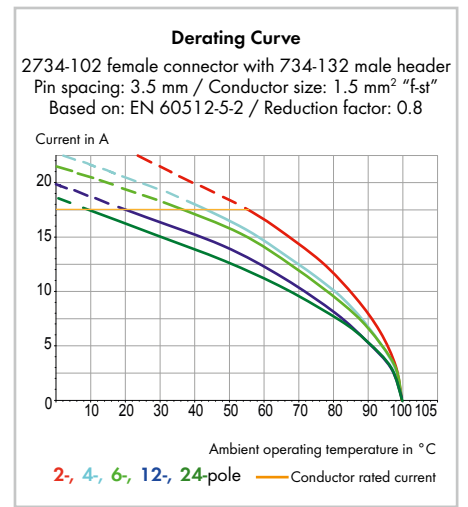
Pin Spacing	3.5 mm 0.138 in.			3.81 mm 0.15 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

#### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.75 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



#### MCS MINI accessories:

Page:

Marking accessories	512
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Test pin	510
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Strain relief plates	331

The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these pins connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.



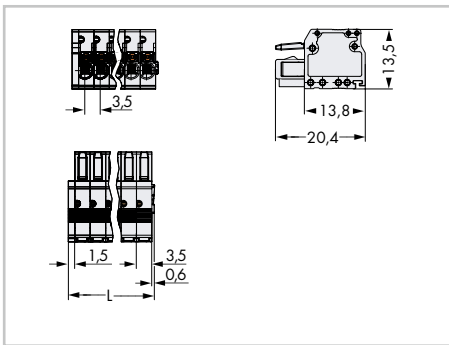
# Female Connectors with Push-Buttons MCS MINI

PUSH-IN CAGE CLAMP®

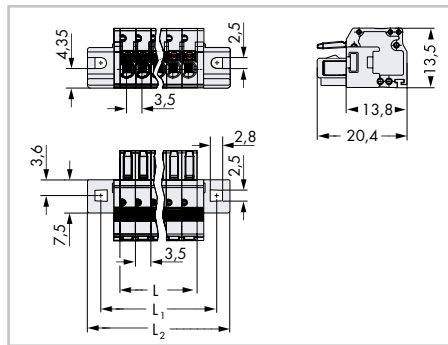
5

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Pin spacing: 3.5 mm / 0.138 in.		With fixing flanges Pin spacing: 3.5 mm / 0.138 in.		With fixing flanges and reinforcing strips Pin spacing: 3.5 mm / 0.138 in.	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



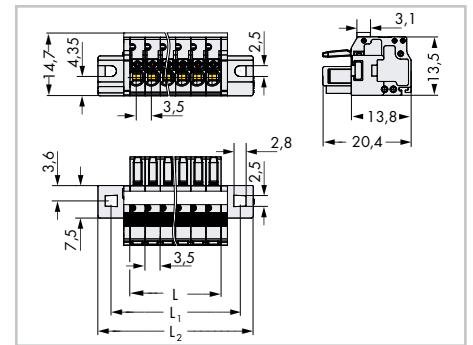
$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



$$L = \text{pole no.} \times \text{pin spacing}$$

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$$

$$L_2 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$$



$$L = \text{pole no.} \times \text{pin spacing}$$

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$$

$$L_2 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$$

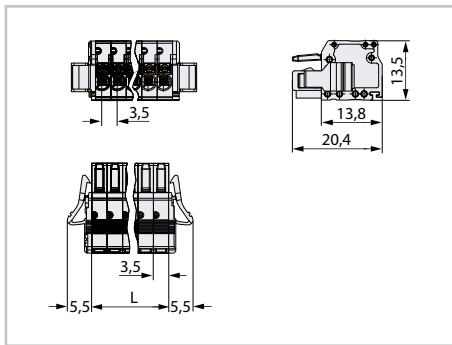
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector with push-buttons, light gray			Female connector with push-buttons and fixing flanges, light gray			Female connector with push-buttons, fixing flanges and reinforcing strips, light gray		
2	2734-102	200	2	2734-102/031-000	100			
3	2734-103	200	3	2734-103/031-000	100			
4	2734-104	100	4	2734-104/031-000	50			
5	2734-105	100	5	2734-105/031-000	50			
6	2734-106	100	6	2734-106/031-000	50			
7	2734-107	100	7	2734-107/031-000	50			
8	2734-108	50	8	2734-108/031-000	50			
9	2734-109	50	9	2734-109/031-000	50			
10	2734-110	50				10	2734-110/027-000	50
11	2734-111	50				11	2734-111/027-000	25
12	2734-112	50				12	2734-112/027-000	25
13	2734-113	50				13	2734-113/027-000	25
14	2734-114	50				14	2734-114/027-000	25
16	2734-116	25				16	2734-116/027-000	25
18	2734-118	25				18	2734-118/027-000	25
20	2734-120	25				20	2734-120/027-000	25
24	2734-124	25				24	2734-124/027-000	10
			For cutout dimensions, see page 334, Table 2			For cutout dimensions, see page 334, Table 2		

For other lengths, please contact factory.

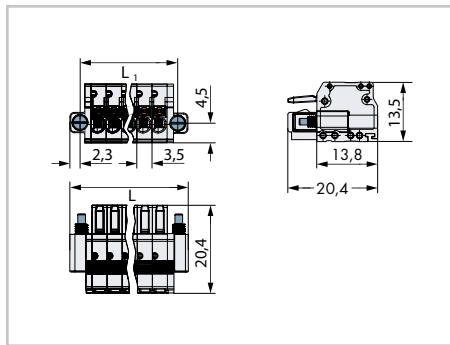
5

# Female Connectors with Push-Buttons MCS MINI

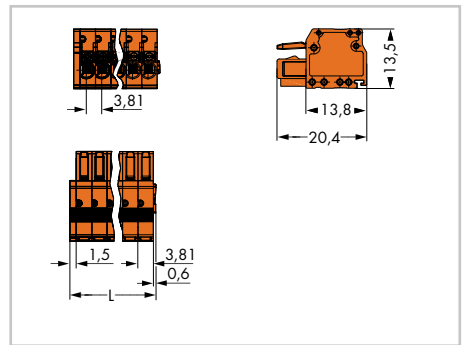
With locking levers Pin spacing: 3.5 mm / 0.138 in.		With screw flanges Pin spacing: 3.5 mm / 0.138 in.		Pin spacing: 3.81 mm / 0.15 in.	
0.2 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	24 ... 16 AWG 300 V/10 A	0.2 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	24 ... 16 AWG 300 V/10 A	0.2 ... 1.5 mm <sup>2</sup> 160 V/2.5 kV/2 10 A	24 ... 16 AWG 300 V/10 A



L = pole no. x pin spacing



L = (pole no. x pin spacing) + 9.5 mm  
L<sub>1</sub> = (pole no. x pin spacing) + 4.9 mm



L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector with push-buttons and locking levers, light gray			Female connector with push-buttons and screw flanges, light gray			Female connector with push-buttons, orange		
2	2734-102/037-000	100	2	2734-102/107-000	100	2	2734-202	200
3	2734-103/037-000	100	3	2734-103/107-000	100	3	2734-203	200
4	2734-104/037-000	100	4	2734-104/107-000	100	4	2734-204	100
5	2734-105/037-000	50	5	2734-105/107-000	50	5	2734-205	100
6	2734-106/037-000	50	6	2734-106/107-000	50	6	2734-206	100
7	2734-107/037-000	50	7	2734-107/107-000	50			
8	2734-108/037-000	50	8	2734-108/107-000	50	8	2734-208	50
9	2734-109/037-000	50	9	2734-109/107-000	50	9	2734-209	50
10	2734-110/037-000	50	10	2734-110/107-000	50	10	2734-210	50
11	2734-111/037-000	50	11	2734-111/107-000	50			
12	2734-112/037-000	50	12	2734-112/107-000	50	12	2734-212	25
13	2734-113/037-000	25	13	2734-113/107-000	25			
14	2734-114/037-000	25	14	2734-114/107-000	25	14	2734-214	25
16	2734-116/037-000	25	16	2734-116/107-000	25	16	2734-216	25
18	2734-118/037-000	25	18	2734-118/107-000	25	18	2734-218	25
20	2734-120/037-000	25	20	2734-120/107-000	25	19	2734-219	25
24	2734-124/037-000	10	24	2734-124/107-000	10	20	2734-220	25

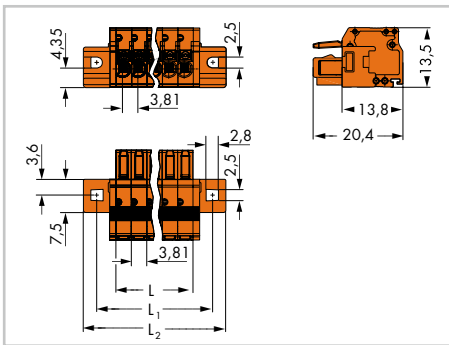
# Female Connectors with Push-Buttons MCS MINI

PUSH-IN CAGE CLAMP®

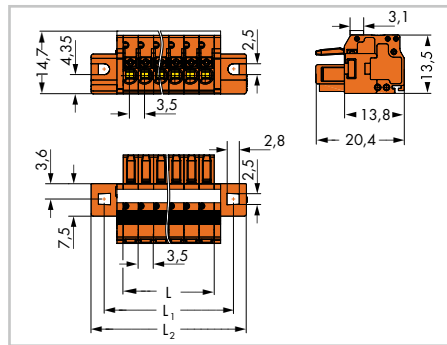
5

305

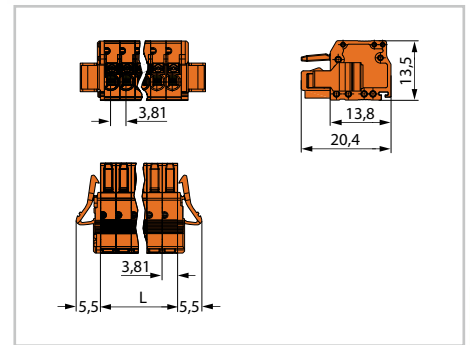
With fixing flanges Pin spacing: 3.81 mm / 0.15 in.		With fixing flanges and reinforcing strips Pin spacing: 3.81 mm / 0.15 in.		With locking levers Pin spacing: 3.81 mm / 0.15 in.	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = pole no. x pin spacing  
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$



L = pole no. x pin spacing  
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$



L = pole no. x pin spacing

5

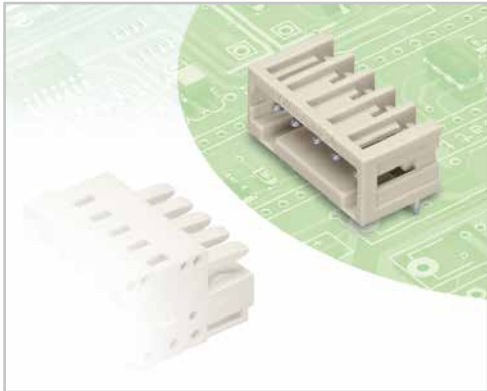
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female connector with push-buttons and fixing flanges, orange</b>			<b>Female connector with push-buttons, fixing flanges and reinforcing strips, orange</b>			<b>Female connector with push-buttons and locking levers, orange</b>		
2	2734-202/031-000	100				2	2734-202/037-000	100
3	2734-203/031-000	100				3	2734-203/037-000	100
4	2734-204/031-000	50				4	2734-204/037-000	100
5	2734-205/031-000	50				5	2734-205/037-000	50
6	2734-206/031-000	50				6	2734-206/037-000	50
8	2734-208/031-000	50				8	2734-208/037-000	50
9	2734-209/031-000	50				9	2734-209/037-000	50
			10	2734-210/027-000	50	10	2734-210/037-000	50
			12	2734-212/027-000	25	12	2734-212/037-000	25
			14	2734-214/027-000	25	14	2734-214/037-000	25
			16	2734-216/027-000	25	16	2734-216/037-000	25
			18	2734-218/027-000	25	18	2734-218/037-000	25
			19	2734-219/027-000	25	19	2734-219/037-000	25
			20	2734-220/027-000	25	20	2734-220/037-000	25
For cutout dimensions, see page 334, Table 2			For cutout dimensions, see page 334, Table 2					

For other lengths, please contact factory.

# Male Headers with Solder and Press-In Pins, MCS-MIDI

## Pin Spacing: 3.5 mm, 3.81 mm

### MCS MINI



- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- 1 x 1 mm pin cross section (MCS MINI) allows a nominal current of 10 A
- Double-deck male headers save space on the PCB, providing a large number of “wire-to-board” connections
- 100% protected against mismatching
- Coding pins available

**Technical data:**

Pin Spacing	3.5/3.81 mm 0.138 in.			3.5/3.81 mm 0.138 in.			3.5/3.81 mm 0.138 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	8 A	8 A	8 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A

**Press-in technology:**

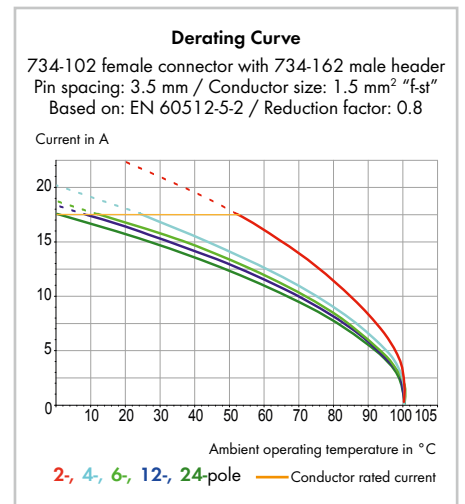
**Double-deck version:**

**Solder and press-in pin data:**

Solder pin: length/width	4.5 mm / 1 x 1 mm (straight)
Solder pin: length/width	3.8 mm / 1 x 1 mm (angled)
Solder pin: length/width	3.6 mm / 1 x 1 mm (double-deck male headers)
Solder pin: drilled hole diameter	1.4 <sup>+0.1</sup> mm
Press-in pin: length/width	2.9 mm / 0.6 x 1.2 mm
Press-in pin: drilled hole diameter	1,15 <sup>±0.025</sup> mm
Press-in pin: metal-plated hole	1.0 Ø <sup>+0.009</sup> <sub>-0.008</sub> mm (HAL Sn)
Press-in pin: metal-plated hole	1.0 Ø <sup>+0.009</sup> <sub>-0.008</sub> mm (Chem. Sn)
For other pin lengths, please contact factory.	

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C / Press-in pin: -40 °C / +85 °C
Contact material	Electrolytic copper (E <sub>cu</sub> ) / Copper alloy for press-in technology
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	



**MCS MINI accessory:**

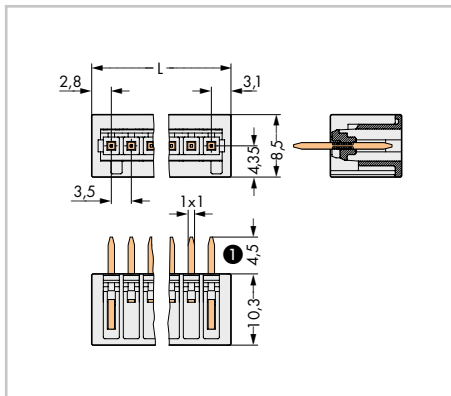
**Page:**

Coding keys	329

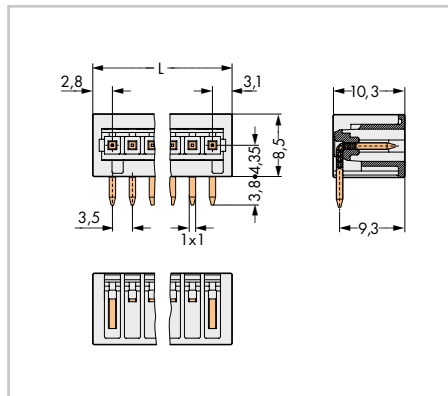
The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Male Headers with Solder Pins MCS MINI

<b>With straight solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>With angled solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



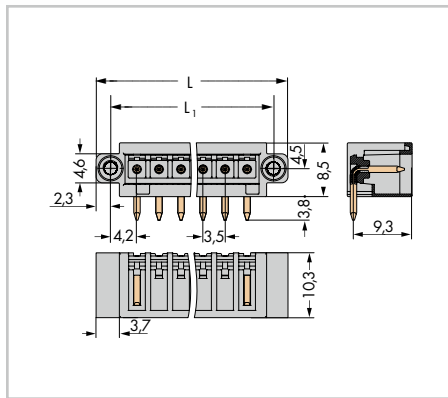
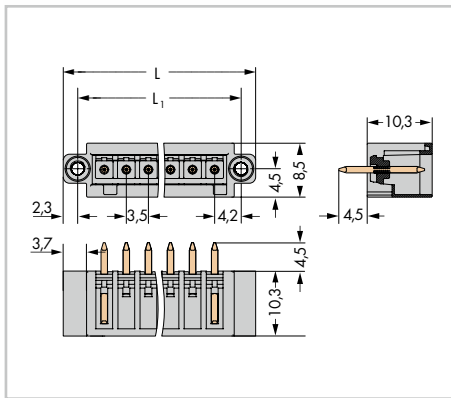
$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male header with straight solder pins, light gray</b>			<b>Male header with angled solder pins, light gray</b>		
2	734-132	200	2	734-162	200
3	734-133	200	3	734-163	200
4	734-134	200	4	734-164	200
5	734-135	200	5	734-165	200
6	734-136	100	6	734-166	100
7	734-137	100	7	734-167	100
8	734-138	100	8	734-168	100
9	734-139	100	9	734-169	100
10	734-140	100	10	734-170	100
11	734-141	100	11	734-171	100
12	734-142	100	12	734-172	100
13	734-143	100	13	734-173	100
14	734-144	100	14	734-174	100
16	734-146	50	16	734-176	50
18	734-148	50	18	734-178	50
20	734-150	50	20	734-180	50
24	734-154	50	24	734-184	50

① MCS MINI male headers with straight solder pins are also available with 3.8 mm pin projection upon request.  
**Item no. suffix: .../046-000**

# Male Headers with Solder Pins and Threaded Flanges MCS MINI

<b>With straight solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>With angled solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A

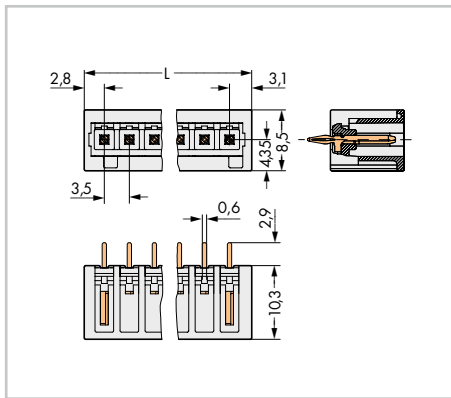
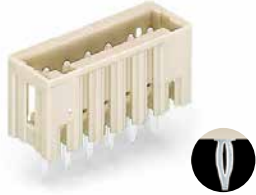


$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$   
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male header with straight solder pins and threaded flanges, light gray</b>			<b>Male header with angled solder pins and threaded flanges, light gray</b>		
2	734-132/108-000	200	2	734-162/108-000	200
3	734-133/108-000	200	3	734-163/108-000	200
4	734-134/108-000	200	4	734-164/108-000	200
5	734-135/108-000	100	5	734-165/108-000	100
6	734-136/108-000	100	6	734-166/108-000	100
7	734-137/108-000	100	7	734-167/108-000	100
8	734-138/108-000	100	8	734-168/108-000	100
9	734-139/108-000	100	9	734-169/108-000	100
10	734-140/108-000	100	10	734-170/108-000	100
11	734-141/108-000	100	11	734-171/108-000	100
12	734-142/108-000	100	12	734-172/108-000	100
13	734-143/108-000	50	13	734-173/108-000	50
14	734-144/108-000	50	14	734-174/108-000	50
16	734-146/108-000	50	16	734-176/108-000	50
18	734-148/108-000	50	18	734-178/108-000	50
20	734-150/108-000	50	20	734-180/108-000	50
24	734-154/108-000	50	24	734-184/108-000	50

# Male Headers for Press-In Technology MCS MINI

<p><b>With straight press-in pins</b>  <b>Pin spacing: 3.5 mm / 0.138 in.</b></p>	<p>160 V/2.5 kV/2 8 A   300 V/10 A</p>	<p><b>Press-In Technology</b></p>
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$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit
<b>Male header for press-in technology,</b> 0.6 x 1.2 mm press-in pin, light gray		
2	734-132/100-000	200
3	734-133/100-000	200
4	734-134/100-000	200
5	734-135/100-000	200
6	734-136/100-000	100
7	734-137/100-000	100
8	734-138/100-000	100
9	734-139/100-000	100
10	734-140/100-000	100
11	734-141/100-000	100
12	734-142/100-000	100

For information on press-in tool design, please contact factory.

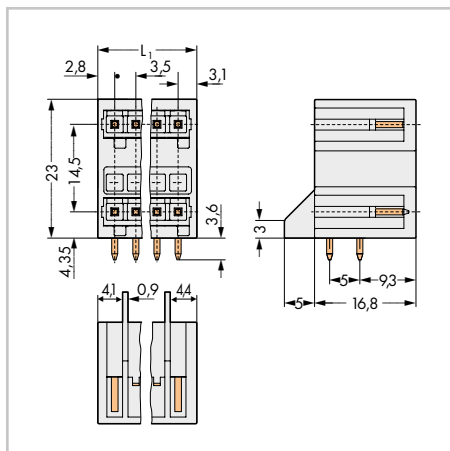
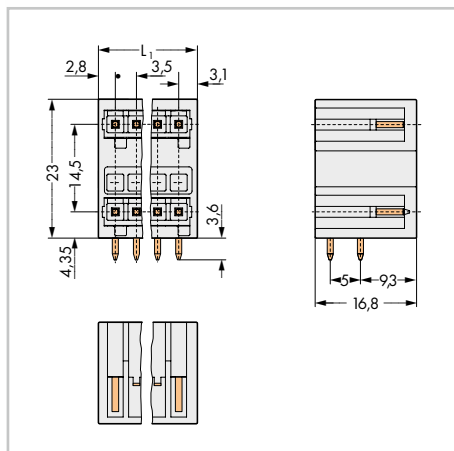
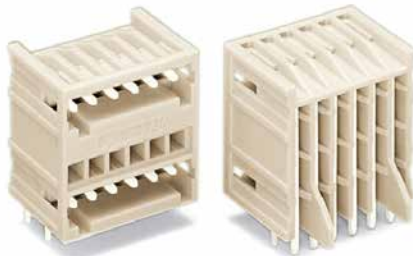
**Unique features of WAGO press-in technology:**

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.08</sup><sub>-0.08</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.08</sup><sub>-0.08</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm - no unnecessary projection on underside of PCB
- low press-in force required
  - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole - reduces wear and tear on PCB and contact points

# Double-Deck Male Headers with Solder Pins

## MCS MINI

<b>With angled solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>With angled solder pins and support</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



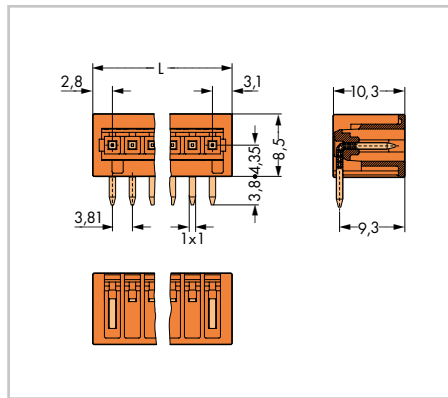
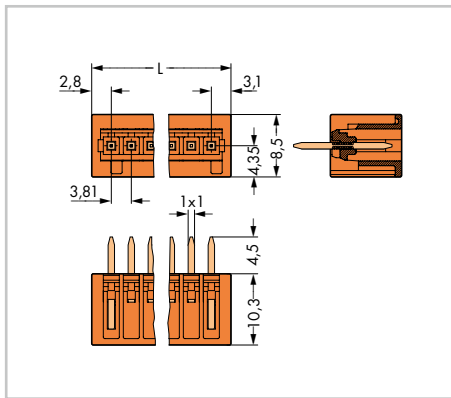
$L_1 = (\text{pole no.}/2 - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Double-deck male header with angled solder pins light gray</b>			<b>Double-deck male header with angled solder pins and support, light gray</b>		
4 (2 x 2)	734-402	100	4 (2 x 2)	734-402/001-000	100
6 (3 x 2)	734-403	100	6 (3 x 2)	734-403/001-000	100
8 (4 x 2)	734-404	100	8 (4 x 2)	734-404/001-000	100
10 (5 x 2)	734-405	100	10 (5 x 2)	734-405/001-000	100
12 (6 x 2)	734-406	100	12 (6 x 2)	734-406/001-000	50
14 (7 x 2)	734-407	50	14 (7 x 2)	734-407/001-000	50
16 (8 x 2)	734-408	50	16 (8 x 2)	734-408/001-000	50
18 (9 x 2)	734-409	50	18 (9 x 2)	734-409/001-000	50
20 (10 x 2)	734-410	50	20 (10 x 2)	734-410/001-000	50
24 (12 x 2)	734-412	50	24 (12 x 2)	734-412/001-000	50



# Male Headers with Solder Pins MCS MINI

<b>With straight solder pins</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>With angled solder pins</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



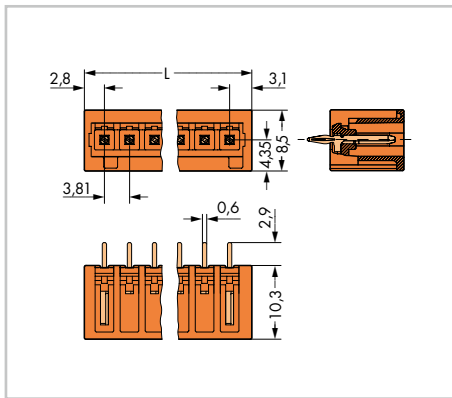
L = (pole no. - 1) x pin spacing + 5.9 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male header with straight solder pins, orange</b>			<b>Male header with angled solder pins, orange</b>		
2	734-232	200	2	734-262	200
3	734-233	200	3	734-263	200
4	734-234	200	4	734-264	200
5	734-235	200	5	734-265	200
6	734-236	100	6	734-266	100
8	734-238	100	8	734-268	100
9	734-239	100	9	734-269	100
10	734-240	100	10	734-270	100
12	734-242	100	12	734-272	100
14	734-244	100	14	734-274	100
16	734-246	50	16	734-276	50
18	734-248	50	18	734-278	50
19	734-249	50	19	734-279	50
20	734-250	50	20	734-280	50

# 5 Male Headers for Press-In Technology MCS MINI

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<p>With straight press-in pins Pin spacing: 3.81 mm / 0.15 in.</p>		<p>Press-in technology</p>
<p>160 V/2.5 kV/2 8 A</p>	<p>300 V/10 A</p>	



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit
<b>Male header for press-in technology,</b>		
0.6 x 1.2 mm press-in pin, orange		
2	734-232/100-000	200
3	734-233/100-000	200
4	734-234/100-000	200
5	734-235/100-000	200
6	734-236/100-000	100
8	734-238/100-000	100
9	734-239/100-000	100
10	734-240/100-000	100
12	734-242/100-000	100

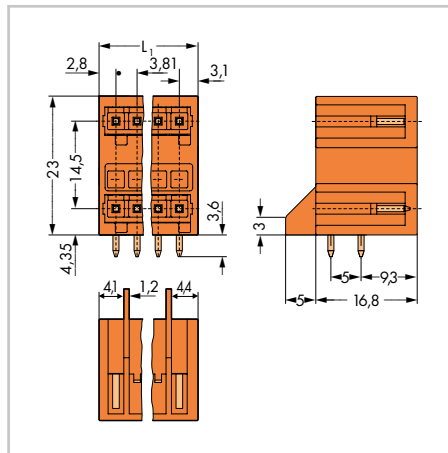
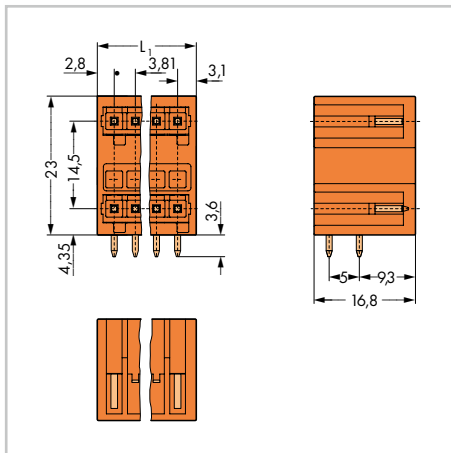
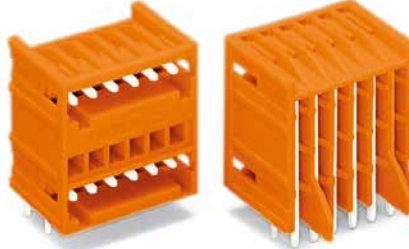
For information on press-in tool design, please contact factory.

### Unique features of WAGO press-in technology:

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.02</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.02</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm - no unnecessary projection on underside of PCB
- low press-in force required
  - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole - reduces wear and tear on PCB and contact points

# Double-Deck Male Headers with Solder Pins MCS MINI

With angled solder pins Pin spacing: 3.81 mm / 0.15 in.		With angled solder pins and support Pin spacing: 3.81 mm / 0.15 in.	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



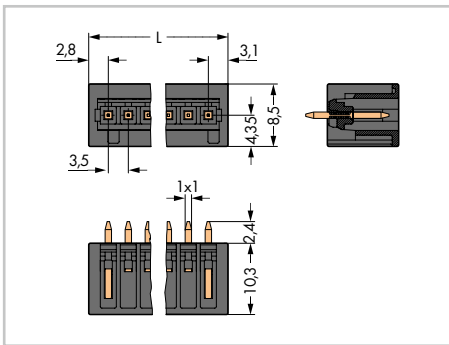
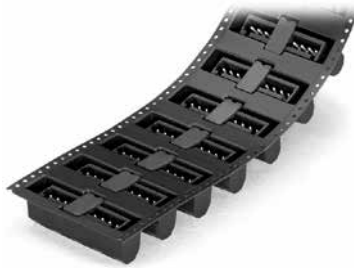
$L_1 = (\text{pole no.}/2 - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Double-deck male header with angled solder pins, orange			Double-deck male header with angled solder pins and support, orange		
4 (2 x 2)	734-432	100	4 (2 x 2)	734-432/001-000	100
6 (3 x 2)	734-433	100	6 (3 x 2)	734-433/001-000	100
8 (4 x 2)	734-434	100	8 (4 x 2)	734-434/001-000	100
10 (5 x 2)	734-435	100	10 (5 x 2)	734-435/001-000	100
12 (6 x 2)	734-436	100	12 (6 x 2)	734-436/001-000	50
14 (7 x 2)	734-437	50	14 (7 x 2)	734-437/001-000	50
16 (8 x 2)	734-438	50	16 (8 x 2)	734-438/001-000	50
18 (9 x 2)	734-439	50	18 (9 x 2)	734-439/001-000	50
20 (10 x 2)	734-440	50	20 (10 x 2)	734-440/001-000	50
24 (12 x 2)	734-442	50	24 (12 x 2)	734-442/001-000	50

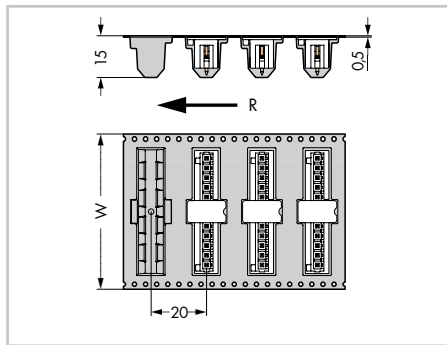


# Male Headers with Solder Pins, THR MCS MINI

<b>With straight solder pins</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>With straight solder pins, in tape-and-reel packaging</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



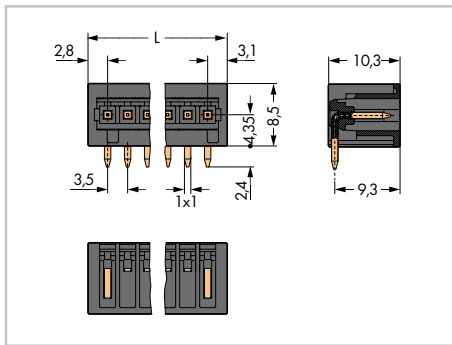
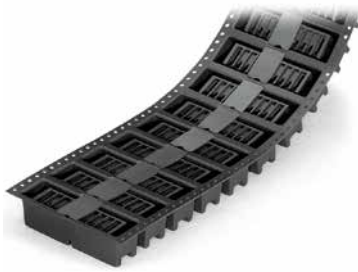
W = Tape width  
R = Feed direction

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
Male header with straight solder pins, black			Male header with straight solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black		
			(mm)		
2	734-132/105-604	200	2	734-132/105-604/997-405	32
3	734-133/105-604	200	3	734-133/105-604/997-405	32
4	734-134/105-604	200	4	734-134/105-604/997-405	32
5	734-135/105-604	200	5	734-135/105-604/997-405	32
6	734-136/105-604	100	6	734-136/105-604/997-407	56
7	734-137/105-604	100	7	734-137/105-604/997-407	56
8	734-138/105-604	100	8	734-138/105-604/997-407	56
9	734-139/105-604	100	9	734-139/105-604/997-407	56
10	734-140/105-604	100	10	734-140/105-604/997-407	56
11	734-141/105-604	100	11	734-141/105-604/997-407	56
12	734-142/105-604	100	12	734-142/105-604/997-407	56
14	734-144/105-604	100	14	734-144/105-604/997-408	72
16	734-146/105-604	50	16	734-146/105-604/997-408	72
Reel diameter: 330 mm, 200 pieces per reel					

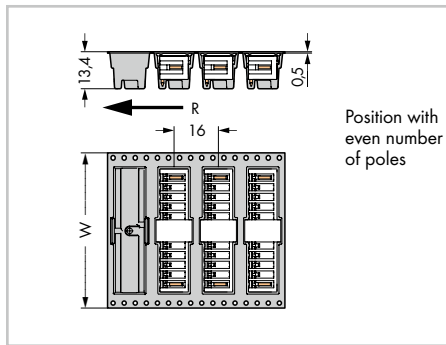
For other lengths, please contact factory.

# Male Headers with Solder Pins, THR MCS MINI

With angled solder pins Pin spacing: 3.5 mm / 0.138 in.		With angled solder pins, in tape-and-reel packaging Pin spacing: 3.5 mm / 0.138 in.		With straight solder pins Pin spacing: 3.81 mm / 0.15 in.	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	

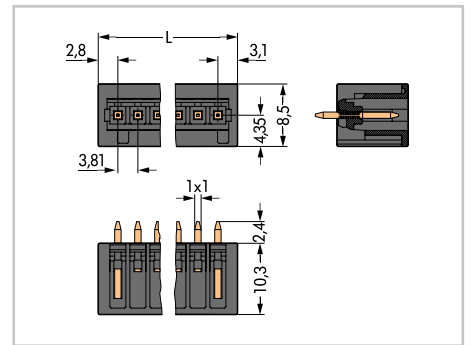


$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



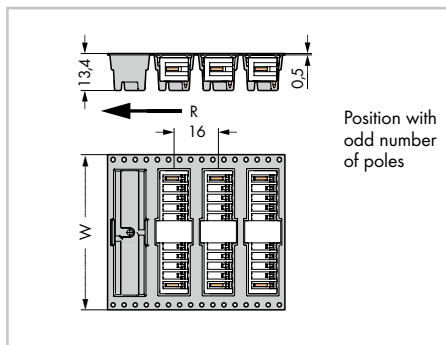
W = Tape width R = Feed direction

Position with even number of poles



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W	Pole No.	Item No.	Pack. Unit
Male header with angled solder pins, black			Male headers with angled solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black			Male header with straight solder pins, black		
					(mm)			
2	734-162/105-604	200	2	734-162/105-604/997-405	32	2	734-232/105-604	200
3	734-163/105-604	200	3	734-163/105-604/997-405	32	3	734-233/105-604	200
4	734-164/105-604	200	4	734-164/105-604/997-405	32	4	734-234/105-604	200
5	734-165/105-604	200	5	734-165/105-604/997-405	32	5	734-235/105-604	200
6	734-166/105-604	100	6	734-166/105-604/997-407	56	6	734-236/105-604	100
7	734-167/105-604	100	7	734-167/105-604/997-407	56	7		
8	734-168/105-604	100	8	734-168/105-604/997-407	56	8	734-238/105-604	100
9	734-169/105-604	100	9	734-169/105-604/997-407	56	9		
10	734-170/105-604	100	10	734-170/105-604/997-407	56	10	734-240/105-604	100
11	734-171/105-604	100	11	734-171/105-604/997-407	56	11		
12	734-172/105-604	100	12	734-172/105-604/997-407	56	12	734-242/105-604	100
14	734-174/105-604	100	14	734-174/105-604/997-408	72			
16	734-176/105-604	50	16	734-176/105-604/997-408	72			
			Reel diameter: 330 mm, 280 pieces per reel					

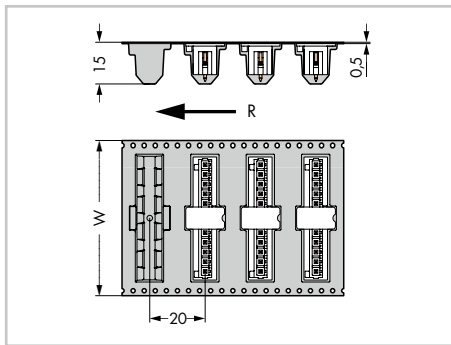
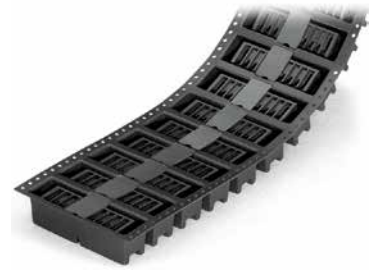


W = Tape width R = Feed direction

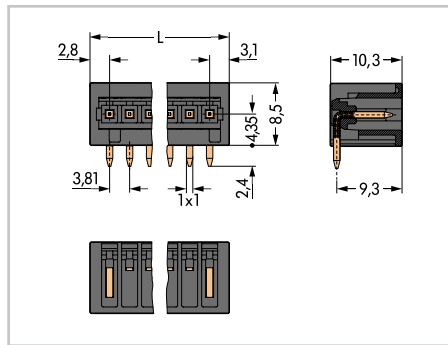
Position with odd number of poles

# Male Headers with Solder Pins, THR MCS MINI

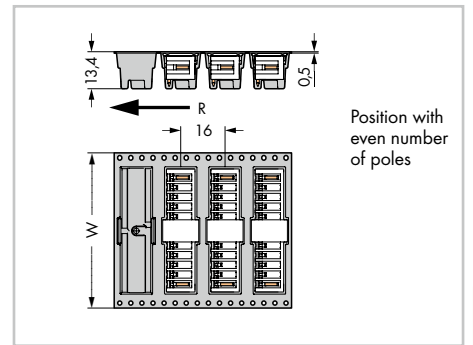
<p><b>With straight solder pins, in tape-and-reel packaging</b> Pin spacing: 3.81 mm / 0.15 in.</p> <p>160 V/2.5 kV/2 10 A</p>	<p><b>With angled solder pins</b> Pin spacing: 3.81 mm / 0.15 in.</p> <p>160 V/2.5 kV/2 10 A</p>	<p><b>With angled solder pins, in tape-and-reel packaging</b> Pin spacing: 3.81 mm / 0.15 in.</p> <p>160 V/2.5 kV/2 10 A</p>
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W = Tape width  
R = Feed direction

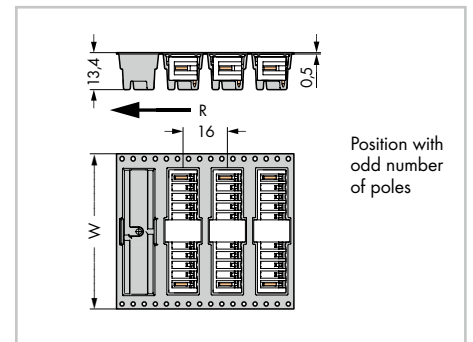


$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



W = Tape width  
R = Feed direction

Pole No.	Item No.	W	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
Male headers with straight solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black			Male header with angled solder pins, black			Male headers with angled solder pins, in tape-and-reel packaging acc. to IEC 60286-3, black		
		(mm)						(mm)
2	734-232/105-604/997-405	32	2	734-262/105-604	200	2	734-262/105-604/997-405	32
3	734-233/105-604/997-405	32	3	734-263/105-604	200	3	734-263/105-604/997-405	32
4	734-234/105-604/997-405	32	4	734-264/105-604	200	4	734-264/105-604/997-405	32
5	734-235/105-604/997-407	56	5	734-265/105-604	200	5	734-265/105-604/997-407	56
6	734-236/105-604/997-407	56	6	734-266/105-604	100	6	734-266/105-604/997-407	56
8	734-238/105-604/997-407	56	8	734-268/105-604	100	8	734-268/105-604/997-407	56
10	734-240/105-604/997-407	56	10	734-270/105-604	100	10	734-270/105-604/997-407	56
12	734-242/105-604/997-408	72	12	734-272/105-604	100	12	734-272/105-604/997-408	72
Reel diameter: 330 mm, 200 pieces per reel						Reel diameter: 330 mm, 280 pieces per reel		

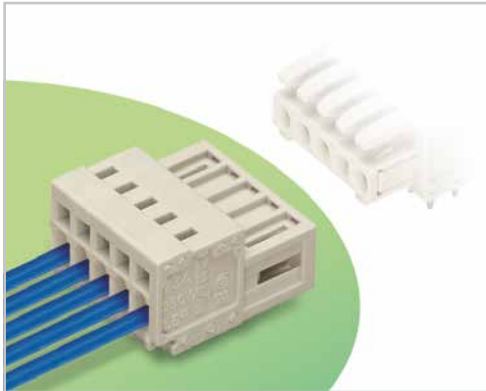


W = Tape width  
R = Feed direction

## Male Connectors

### Pin Spacing: 3.5 mm, 3.81 mm

### MCS MINI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Strain relief plates and housings for factory and in-the-field assembly
- 100% protected against mismatching
- with coding elements

#### Technical data:

Pin Spacing	3.5 mm 0.138 in.			3.81 mm 0.15 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

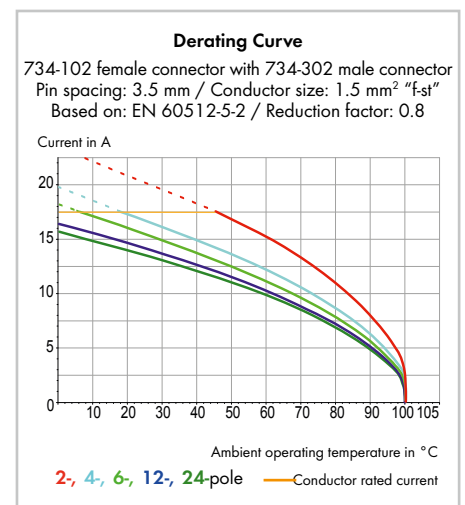
#### Conductor data:

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	28 ... 14	14: THHN, THWN
Strip length	6 ... 7 mm / 0.24 ... 0.28 in.	
* Only every other clamping unit can be terminated using 1.5 mm <sup>2</sup> connectors with insulated ferrules.		

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	

The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these pins connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.



#### MCS MINI accessories:

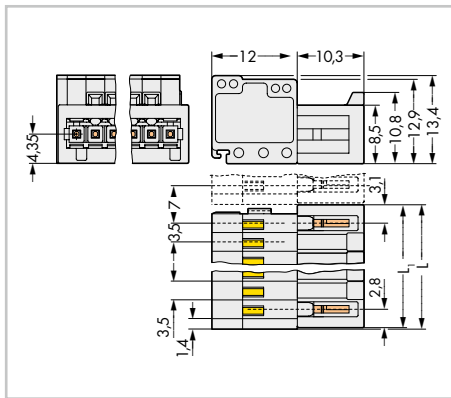
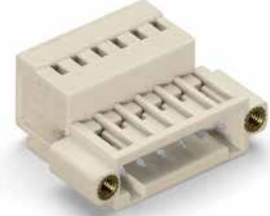
#### Page:

Marking accessories	512
Operating tools	328
Direct marking	332
Coding keys	329
Mounting adapter	375
Screws	334
Strain relief housings	330
Strain relief plates	331

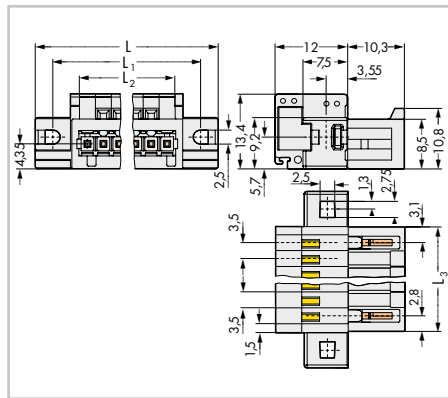


# Male Connectors MCS MINI

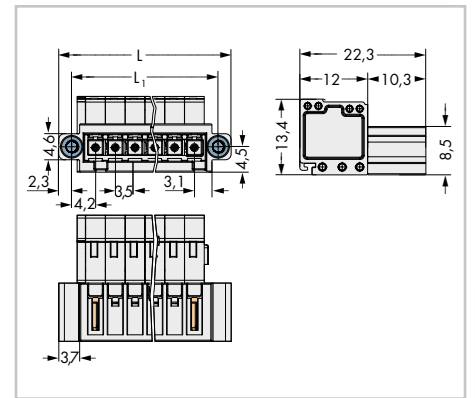
Pin spacing: 3.5 mm / 0.138 in.		With fixing flanges Pin spacing: 3.5 mm / 0.138 in.		With threaded flanges Pin spacing: 3.5 mm / 0.138 in.	
0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$



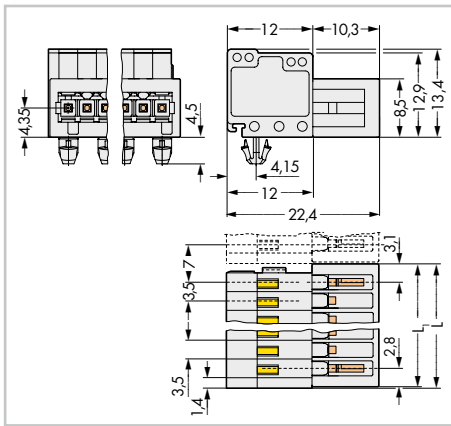
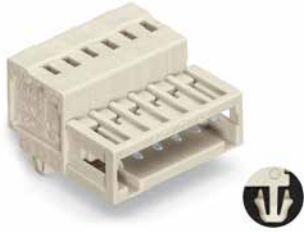
$L = \text{pole no.} \times \text{pin spacing} + 14.8 \text{ mm}$   
 $L_1 = \text{pole no.} \times \text{pin spacing} + 8.8 \text{ mm}$   
 $L_2 = \text{pole no.} \times \text{pin spacing}$   
 $L_3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



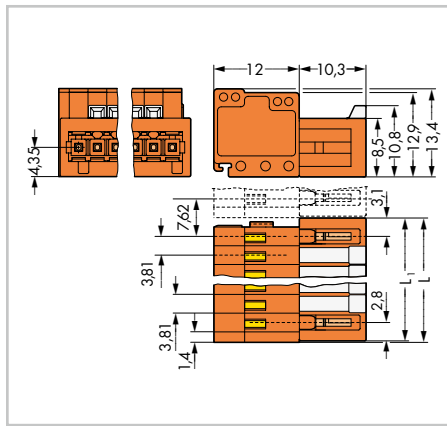
$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$   
 $L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male connector, light gray</b>			<b>Male connector with fixing flanges, light gray</b>			<b>Male connector with threaded flanges, light gray</b>		
2	734-302	200	2	734-302/019-000	100	2	734-302/109-000	100
3	734-303	200	3	734-303/019-000	100	3	734-303/109-000	100
4	734-304	100	4	734-304/019-000	50	4	734-304/109-000	100
5	734-305	100	5	734-305/019-000	50	5	734-305/109-000	50
6	734-306	100	6	734-306/019-000	50	6	734-306/109-000	50
7	734-307	100	7	734-307/019-000	50	7	734-307/109-000	50
8	734-308	50	8	734-308/019-000	50	8	734-308/109-000	50
9	734-309	50	9	734-309/019-000	50	9	734-309/109-000	50
10	734-310	50	10	734-310/019-000	50	10	734-310/109-000	50
11	734-311	50	11	734-311/019-000	25	11	734-311/109-000	50
12	734-312	50	12	734-312/019-000	25	12	734-312/109-000	50
13	734-313	50	13	734-313/019-000	25	13	734-313/109-000	25
14	734-314	50	14	734-314/019-000	25	14	734-314/109-000	25
16	734-316	25	16	734-316/019-000	25	16	734-316/109-000	25
18	734-318	25	18	734-318/019-000	25	18	734-318/109-000	25
20	734-320	25	20	734-320/019-000	25	20	734-320/109-000	25
24	734-324	25	24	734-324/019-000	10	24	734-324/109-000	10
For cutout dimensions, see page 334, Table 1								

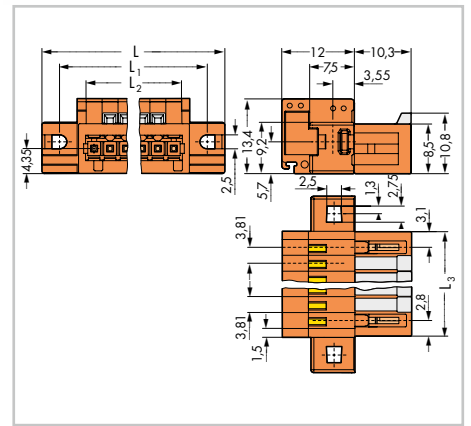
Pin spacing: 3.5 mm / 0.138 in.		Pin spacing: 3.81 mm / 0.15 in.		With fixing flanges Pin spacing: 3.81 mm / 0.15 in.	
0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$

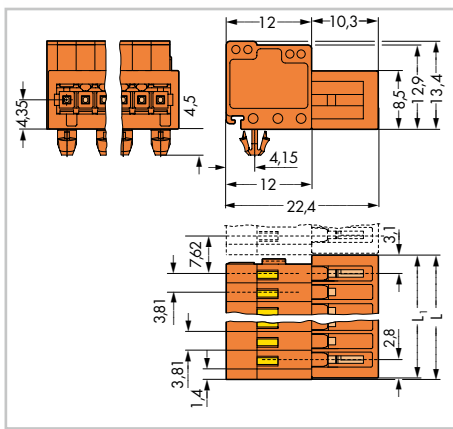


$L = \text{pole no.} \times \text{pin spacing} + 14.8 \text{ mm}$   
 $L_1 = \text{pole no.} \times \text{pin spacing} + 8.8 \text{ mm}$   
 $L_2 = \text{pole no.} \times \text{pin spacing}$   
 $L_3 = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$

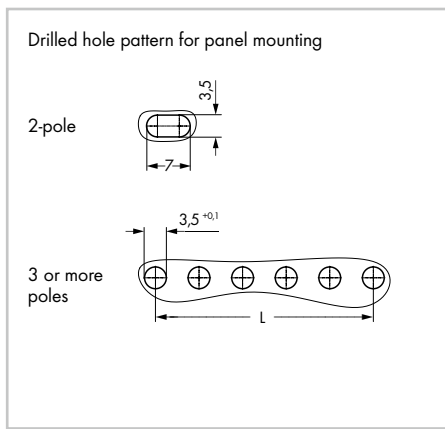
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male connector with snap-in mounting feet,</b> for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, light gray			<b>Male connector,</b> orange			<b>Male connector with fixing flanges,</b> orange		
2	734-302/018-000	200	2	734-332	200	2	734-332/019-000	100
3	734-303/018-000	200	3	734-333	200	3	734-333/019-000	100
4	734-304/018-000	100	4	734-334	100	4	734-334/019-000	50
5	734-305/018-000	100	5	734-335	100	5	734-335/019-000	50
6	734-306/018-000	100	6	734-336	100	6	734-336/019-000	50
7	734-307/018-000	100	8	734-338	50	8	734-338/019-000	50
8	734-308/018-000	50	9	734-339	50	9	734-339/019-000	50
9	734-309/018-000	50	10	734-340	50	10	734-340/019-000	50
10	734-310/018-000	50	12	734-342	25	12	734-342/019-000	25
11	734-311/018-000	50	14	734-344	25	14	734-344/019-000	25
12	734-312/018-000	50	16	734-346	25	16	734-346/019-000	25
13	734-313/018-000	50	18	734-348	25	18	734-348/019-000	25
14	734-314/018-000	50	19	734-349	25	19	734-349/019-000	25
16	734-316/018-000	25	20	734-350	25	20	734-350/019-000	25
18	734-318/018-000	25						
20	734-320/018-000	25						
24	734-324/018-000	25						
Three or more pole female connectors have a snap-in mounting foot at every other pole (2-pole female connectors/two snap-in mounting feet)						For cutout dimensions, see page 334, Table 1		
<b>Accessory</b>		<b>Page</b>						
Mounting adapter for DIN 35 rail, 3 or more poles (209-187)		375						

# Male Connectors MCS MINI

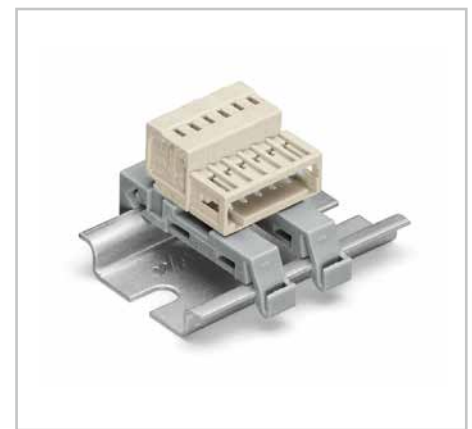
<p><b>With snap-in mounting feet</b> Pin spacing: 3.81 mm / 0.15 in.</p> <p>0.08 ... 1.5 mm<sup>2</sup>   28 ... 14 AWG 160 V/2.5 kV/2 10 A   300 V/10 A</p>	<p><b>Male connectors with snap-in mounting feet</b></p> <p><b>Drilled hole pattern for panel mounting</b></p>	
--	--	--



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm} + 0.45 \text{ mm}$   
 $L_1 = L - 0.45 \text{ mm}$

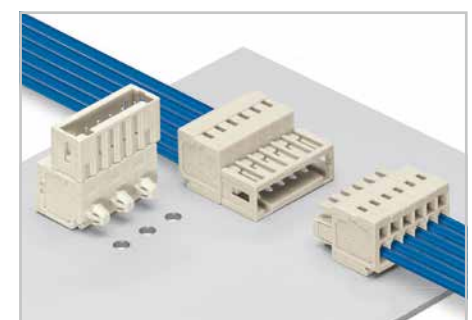


Even pole number :  $L = (\text{pole no.} - 2) \times \text{pin spacing}$   
 Odd pole number :  $L = (\text{pole no.} - 1) \times \text{pin spacing}$



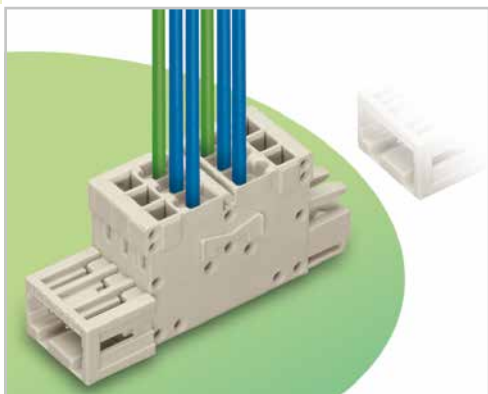
Using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.

Pole No.	Item No.	Pack. Unit
<b>Male connector with snap-in mounting feet,</b> for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, orange		
2	734-332/018-000	100
3	734-333/018-000	100
4	734-334/018-000	100
5	734-335/018-000	50
6	734-336/018-000	50
8	734-338/018-000	50
9	734-339/018-000	50
10	734-340/018-000	50
12	734-342/018-000	50
14	734-344/018-000	25
16	734-346/018-000	25
18	734-348/018-000	25
19	734-349/018-000	25
20	734-350/018-000	25
Three or more pole female connectors have a snap-in mounting foot at every other pole (2-pole female connectors/two snap-in mounting feet)		
<b>Accessory</b>		<b>Page</b>
Mounting adapter for DIN 35 rail, 3 or more poles (209-187)		375



## 2-Conductor Combi Strips

Pin spacing: 3.5 mm  
MCS MINI



- Universal connection for all conductor types
- 2-conductor strip combines pin and socket connections
- For multiplying potentials
- Strain relief plates for factory and in-the-field assembly
- Supply via pin-contact side
- Combi strips may be connected to multiply outputs
- 100% protected against mismatching
- Coding pins available

### Technical data:

Pin Spacing	3.5 mm 0.138 in.		
	Ratings per	IEC/EN 60664-1	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	10 A	-	10 A
Nominal current CSA	10 A	-	10 A

### Conductor data:

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 1.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	28 ... 14	14: THHN, THWN
Strip length	6 ... 7 mm / 0.24 ... 0.28 in.	
* Only every other clamping unit can be terminated using 1.5 mm <sup>2</sup> connectors with insulated ferrules.		

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated

### MCS MINI accessories

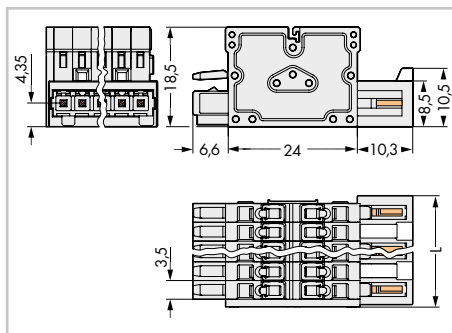
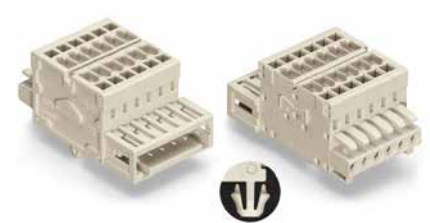
### Page:

Marking accessories	512
Operating tools	328
Direct marking	332
Coding keys	329
Mounting adapter	375
Test pin	510
Strain relief plates	331

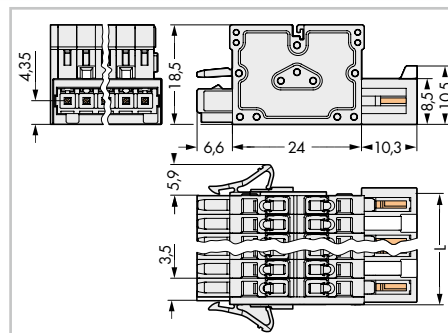
The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# 2-Conductor Combi Strips MCS MINI

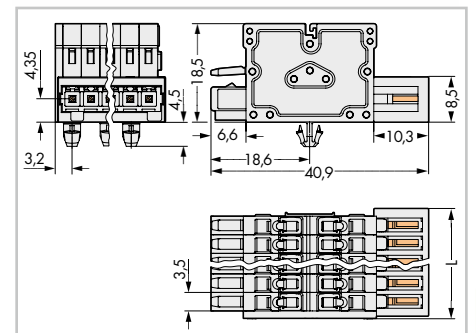
Pin spacing: 3.5 mm / 0.138 in.		With locking levers Pin spacing: 3.5 mm / 0.138 in.		With snap-in mounting feet Pin spacing: 3.5 mm / 0.138 in.	
0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG	0.08 ... 1.5 mm <sup>2</sup>	28 ... 14 AWG
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm



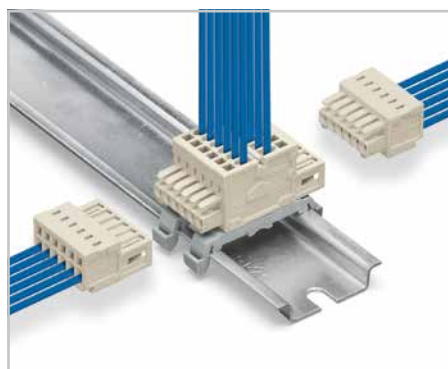
See drawing at left for other dimensions.



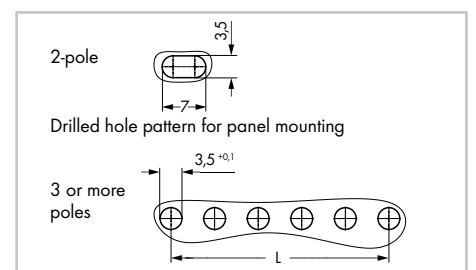
L = (pole no. - 1) x pin spacing + 5.9 mm + 0.45 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>2-conductor combi strip,</b> light gray			<b>2-conductor combi strip with locking levers,</b> light gray			<b>2-conductor combi strip with snap-in mounting feet,</b> for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, light gray		
2	734-362	100	2	734-362/037-000	100	2	734-362/008-000	100
3	734-363	50	3	734-363/037-000	50	3	734-363/008-000	50
4	734-364	50	4	734-364/037-000	50	4	734-364/008-000	50
5	734-365	50	5	734-365/037-000	50	5	734-365/008-000	50
6	734-366	50	6	734-366/037-000	50	6	734-366/008-000	50
7	734-367	50	7	734-367/037-000	50	7	734-367/008-000	25
8	734-368	50	8	734-368/037-000	25	8	734-368/008-000	25
9	734-369	25	9	734-369/037-000	25	9	734-369/008-000	25
10	734-370	25	10	734-370/037-000	25	10	734-370/008-000	25
11	734-371	25	11	734-371/037-000	25	11	734-371/008-000	25
12	734-372	25	12	734-372/037-000	25	12	734-372/008-000	25
Three or more pole combi strips have a snap-in mounting foot at every other pole (2-pole combi strips/two snap-in mounting feet)								

Accessory	Page
Mounting adapter for DIN 35 rail, 3 or more poles (209-120)	375



2-conductor combi strip with snap-in mounting feet using two DIN 35-rail mounting adapters (209-137) for 3 or more poles. Distance between two mounting adapters: maximum 7 poles.



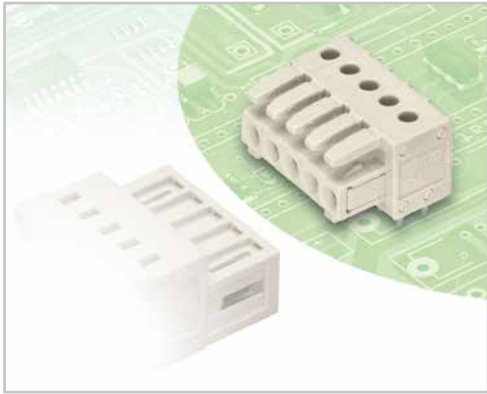
Even pole number : L = (pole no. - 2) x pin spacing  
Odd pole number: L = (pole no. - 1) x pin spacing

For other lengths, please contact factory.

# Female Connectors with Solder Pins

## Pin Spacing: 3.5 mm, 3.81 mm

### MCS MINI



- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- Integrated test ports for 2 mm Ø test plugs
- For “board-to-board” and “board-to-wire” connections
- PCB outputs are protected against accidental contact
- Easy-to-identify inputs and outputs
- 100% protected against mismatching
- Coding pins available

**Technical data:**

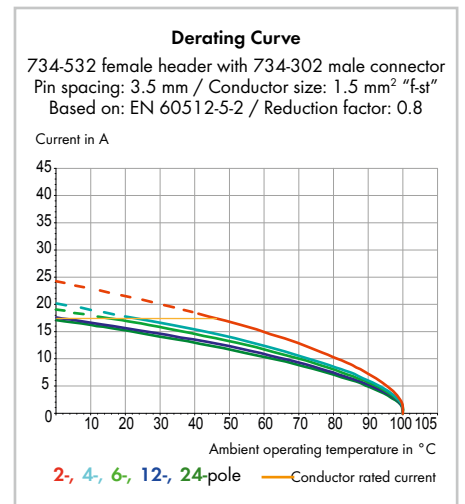
Pin Spacing	3.5 mm 0.138 in.			3.81 mm 0.15 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overvoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL	CSA	UL/CSA	UL	CSA	UL/CSA
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	-	-	-	-	-	-

**Conductor and solder pin data:**

Solder pin: length/width	3.8 mm / 0.9 x 0.9 mm
Solder pin: drilled hole diameter	1.4 <sup>+0.1</sup> mm

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”	



**MCS MINI accessories**

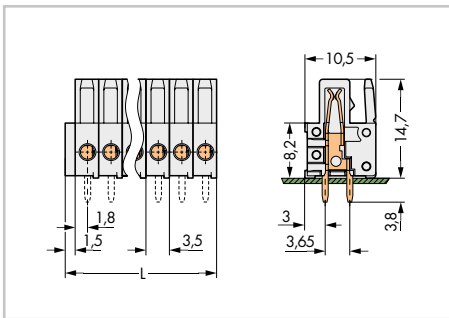
**Page:**

Marking accessories	512
Test plug, 2 mm Ø	510

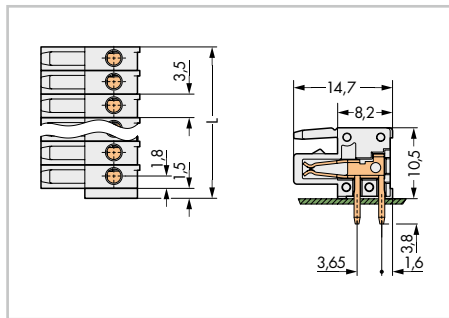
The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Female Connectors with Solder Pins MCS MINI

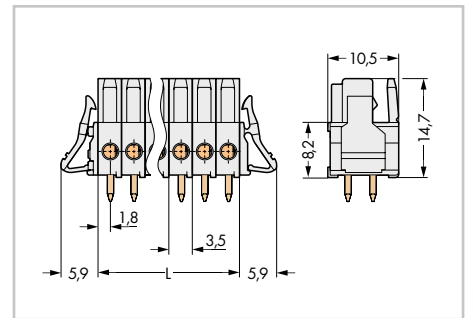
With straight solder pins Pin spacing: 3.5 mm / 0.138 in.		With angled solder pins Pin spacing: 3.5 mm / 0.138 in.		With straight solder pins and locking levers Pin spacing: 3.5 mm / 0.138 in.	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm



L = (pole no. x pin spacing) + 1.5 mm



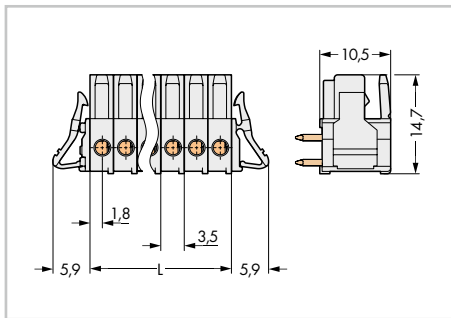
L = pole no. x pin spacing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female header with straight solder pins, light gray			Female header with angled solder pins, light gray			Female header with straight solder pins and locking levers, light gray		
2	734-462	200	2	734-532	200	2	734-462/037-000	100
3	734-463	200	3	734-533	200	3	734-463/037-000	100
4	734-464	100	4	734-534	100	4	734-464/037-000	100
5	734-465	100	5	734-535	100	5	734-465/037-000	50
6	734-466	100	6	734-536	100	6	734-466/037-000	50
7	734-467	100	7	734-537	100	7	734-467/037-000	50
8	734-468	50	8	734-538	50	8	734-468/037-000	50
9	734-469	50	9	734-539	50	9	734-469/037-000	50
10	734-470	50	10	734-540	50	10	734-470/037-000	50
11	734-471	50	11	734-541	50	11	734-471/037-000	50
12	734-472	50	12	734-542	50	12	734-472/037-000	50
13	734-473	50	13	734-543	50	13	734-473/037-000	25
14	734-474	50	14	734-544	50	14	734-474/037-000	25
16	734-476	25	16	734-546	25	16	734-476/037-000	25
18	734-478	25	18	734-548	25	18	734-478/037-000	25
20	734-480	25	20	734-550	25	20	734-480/037-000	25
24	734-484	25	24	734-554	25	24	734-484/037-000	10

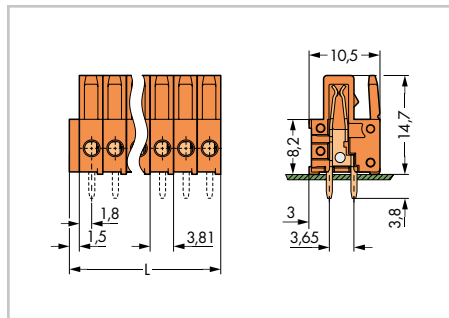
# 5 Female Connectors with Solder Pins MCS MINI

326

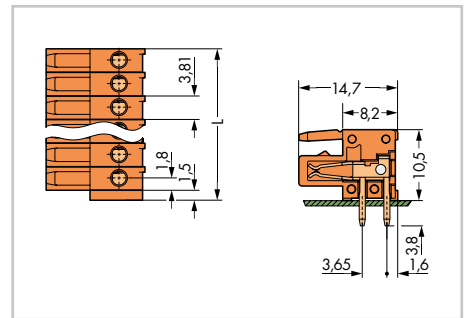
<b>With angled solder pins and locking levers</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>With straight solder pins</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>With angled solder pins</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = pole no. x pin spacing



L = (pole no. x pin spacing) + 1.5 mm



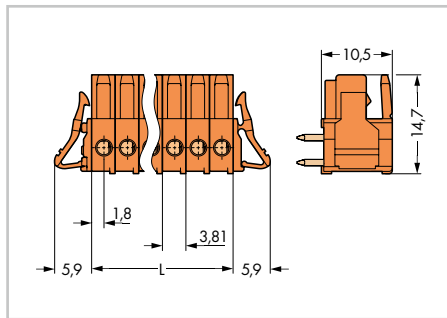
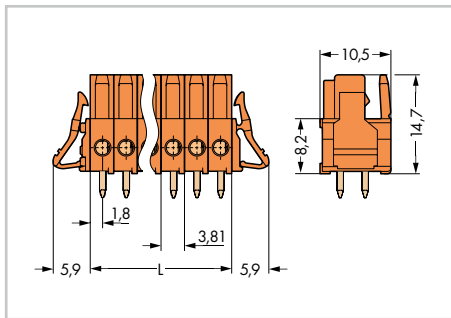
L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female header with angled solder pins and locking levers, light gray</b>			<b>Female header with straight solder pins, orange</b>			<b>Female header with angled solder pins, orange</b>		
2	734-532/037-000	100	2	734-502	200	2	734-562	200
3	734-533/037-000	100	3	734-503	200	3	734-563	200
4	734-534/037-000	100	4	734-504	100	4	734-564	100
5	734-535/037-000	50	5	734-505	100	5	734-565	100
6	734-536/037-000	50	6	734-506	100	6	734-566	100
7	734-537/037-000	50						
8	734-538/037-000	50	8	734-508	50	8	734-568	50
9	734-539/037-000	50	9	734-509	50	9	734-569	50
10	734-540/037-000	50	10	734-510	50	10	734-570	50
11	734-541/037-000	50						
12	734-542/037-000	50	12	734-512	25	12	734-572	25
13	734-543/037-000	25						
14	734-544/037-000	25	14	734-514	25	14	734-574	25
16	734-546/037-000	25	16	734-516	25	16	734-576	25
18	734-548/037-000	25						
20	734-550/037-000	25	20	734-520	25		734-580	25
24	734-554/037-000	10						



# Female Connectors with Solder Pins MCS MINI

<b>With straight solder pins and locking levers</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>With angled solder pins and locking levers</b> <b>Pin spacing: 3.81 mm / 0.15 in.</b>		
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A	



L = pole no. x pin spacing

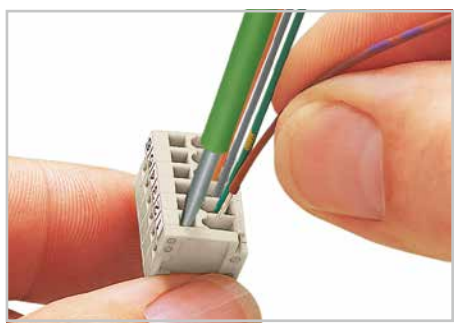
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female header with straight solder pins and locking levers, orange</b>			<b>Female header with angled solder pins and locking levers, orange</b>		
2	734-502/037-000	100	2	734-562/037-000	100
3	734-503/037-000	100	3	734-563/037-000	100
4	734-504/037-000	100	4	734-564/037-000	100
5	734-505/037-000	50	5	734-565/037-000	50
6	734-506/037-000	50	6	734-566/037-000	50
8	734-508/037-000	50	8	734-568/037-000	50
9	734-509/037-000	50	9	734-569/037-000	50
10	734-510/037-000	50	10	734-570/037-000	50
12	734-512/037-000	25	12	734-572/037-000	25
14	734-514/037-000	25	14	734-574/037-000	25
16	734-516/037-000	25	16	734-576/037-000	25
20	734-520/037-000	25	20	734-580/037-000	25

# Accessories Operating Tools MCS MINI

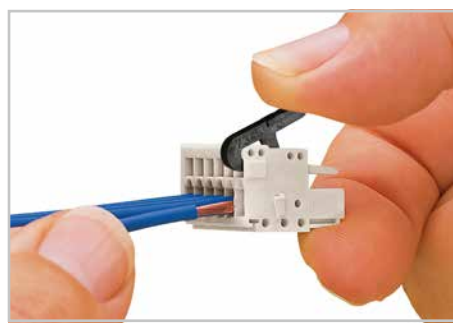
<b>Operating tool</b>	<b>Operating levers</b>	<b>Operating tools</b>
with partially insulated shaft Type 1	for male and female connectors equipped with CAGE CLAMP®	for male and female connectors equipped with CAGE CLAMP®



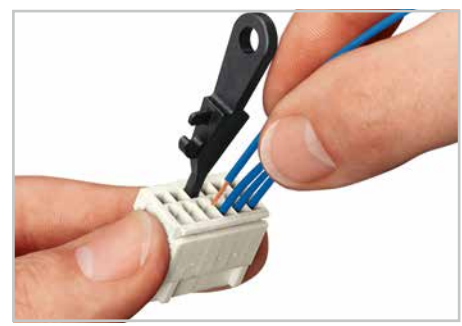
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade</b>			<b>Operating lever, 3.5/3.81 mm pin spacing</b>			<b>Operating tool, 3.5/3.81 mm pin spacing</b>		
	210-719	1	white	734-230	100 (4 x 25)	white	734-190	100 (4 x 25)
			black	734-191	100 (4 x 25)	black	734-231	100 (4 x 25)



Conductor termination parallel to CAGE CLAMP® actuation.

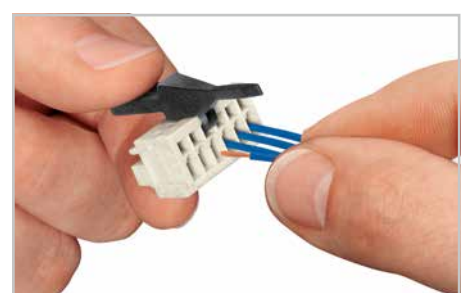


Conductor connected using push-button.

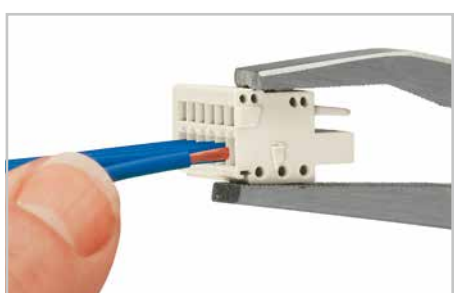


Conductor termination parallel to CAGE CLAMP® actuation.

Color	Item No.	Pack. Unit
<b>Operating tool for MCS MINI</b>		
red	210-250	1
yellow	210-251	1



Inserting conductors - Operation perpendicular to conductor entry.



**Note:** Terminating MCS MINI male and female connectors with CAGE CLAMP® can be performed via 210-250 and 210-251 operating tools.

# Accessories

## Insulation Stop and Coding Keys

### MCS MINI

<b>Insulation stop</b>  for male and female connectors equipped with CAGE CLAMP®	<b>Coding keys</b>  for double-deck male headers to be snapped in bottom level	<b>Coding keys</b>  for male headers
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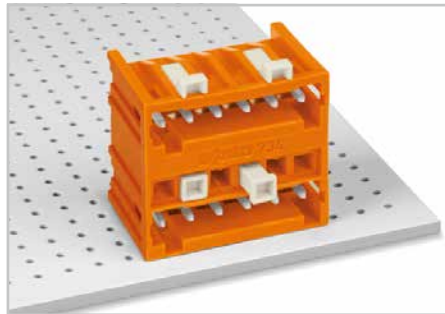


Conductor cross section	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Insulation stop,</b> 8 pcs/strip, <b>3.5 mm pin spacing</b>			<b>Coding key for double deck headers,</b> to be snapped in bottom level, <b>3.5/3.81 mm / 0.138/0.15 in. pin spacing</b>			<b>Coding key for male headers,</b> <b>3.5/3.81 mm pin spacing</b>		
0.08 ... 0.2 mm <sup>2</sup> "sol." (0.14 mm <sup>2</sup> "fst")			light gray	<b>734-400</b>	100	white	<b>734-130</b>	100
white	<b>734-671</b>	200 (8 x 25)				black	<b>734-159</b> (suitable for THR soldering)	100

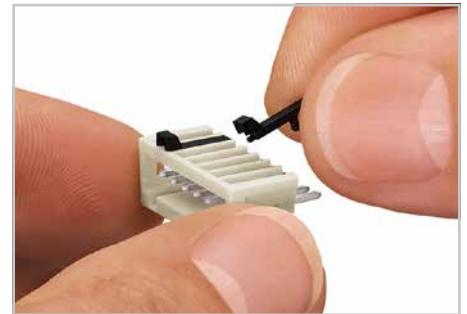


The bending resistance of conductors with small cross sections is so low that the wire may bend when it is inserted all the way into the clamping point. This can result in the conductor insulation being pushed in and clamped together with the conductor in the clamping unit.

Insulation stops for 734 Series male and female connectors equipped with CAGE CLAMP® reliably ensure proper termination.



Coding a double-deck male header – lower level.



Snap-on coding key for headers.

# Accessories

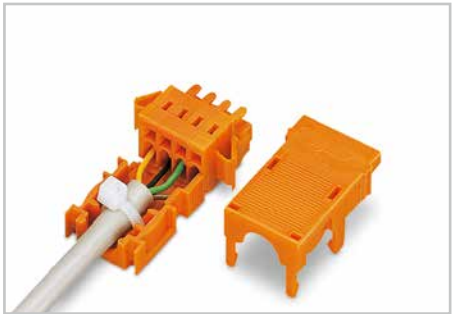
## Strain Relief Housings

### MCS MINI

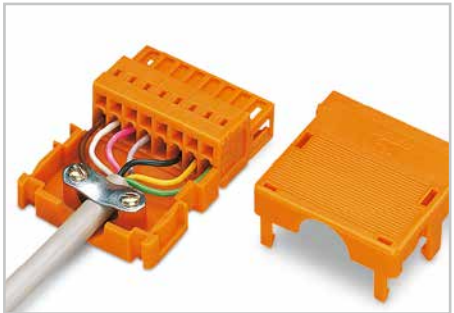
<p><b>Snap-on type strain relief housings</b> Pin spacing: 3.5 mm / 0.138 in.</p> <p>for male and female connectors equipped with CAGE CLAMP®</p>	<p><b>Snap-on type strain relief housings</b> Pin spacing: 3.81 mm / 0.15 in.</p> <p>for male and female connectors equipped with CAGE CLAMP®</p>
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Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Snap-on type strain relief housing, suitable for 3.5 mm pin spacing, gray consisting of strain relief support and housing			Snap-on type strain relief housing, suitable for 3.81 mm pin spacing, orange consisting of strain relief support and housing		
2	734-602	50	2	734-632	50
3	734-603	25	3	734-633	25
4	734-604	25	4	734-634	25
5	734-605	25	5	734-635	25
6	734-606	25	6	734-636	25
7	734-607	25			
8	734-608	25	8	734-638	25
9	734-609	25	9	734-639	25
10	734-610	25	10	734-640	25
11	734-611	25			
12	734-612	25	12	734-642	25





4-pole female connector with locking levers and strain relief housing. (2- to 5-pole strain relief housings only suitable for cable ties).

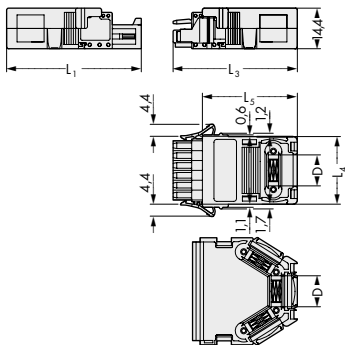


8-pole male connector with strain relief housing. (6- to 12-pole strain relief housing suitable for cable clamp).

2- to 5-pole, only suitable for cable ties, 1 cable outlet (rear side), max. cable tie width 3.6 mm;  
 6- to 9-pole, suitable for cable clamp, 1 x cable outlet (rear side);  
 10- to 12-pole, suitable for cable clamp, 1 x cable outlet (rear side) and 2 x cable outlets (side);  
 Removable built-in lockout caps

Accessories	Item No.	Pack. Unit
<b>Cable clamp</b> , for strain relief, 6 ... 12 poles		
	209-177	25
<b>Fixing screws</b> , for cable clamp, 6 ... 12 poles		
	209-172	50

Strain Relief Housing Dimensions							
Pole No.	L <sub>4</sub> Pin spacing		L <sub>3</sub>	L <sub>1</sub>	L <sub>5</sub>	D	D
	3.5	3.81					
2	10.0	10.6	43.1	46.8	32.7	5.0	
3	13.5	14.4	43.1	46.8	32.7	8.5	
4	17.0	18.2	43.1	46.8	32.7	8.5	
5	20.5	22.0	43.1	46.8	32.7	8.5	
6	24.0	25.9	44.1	47.8	33.7	11.5	
7	27.5	-	44.1	47.8	33.7	11.5	
8	31.0	33.5	44.1	47.8	33.7	11.5	
9	34.5	37.3	44.1	47.8	33.7	11.5	
10	38.0	41.1	53.1	56.8	42.7	11.5	
11	41.5	-	53.1	56.8	42.7	11.5	
12	45.0	48.7	53.1	56.8	42.7	11.5	



# Accessories

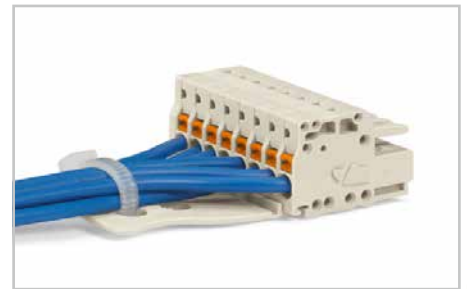
## Strain Relief Plates

### MCS MINI

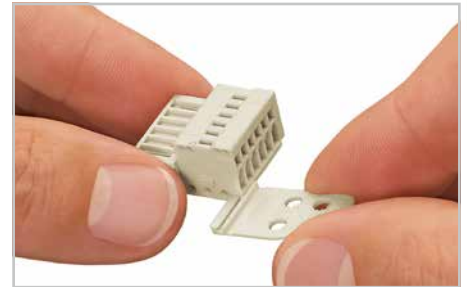
<p><b>Strain relief plates for in-the-field assembly</b></p> <p>for male and female connectors with CAGE CLAMP® and Push-in CAGE CLAMP®</p>	<p><b>Strain relief plates, factory-assembled</b></p> <p>for male and female connectors with CAGE CLAMP® and Push-in CAGE CLAMP®</p>
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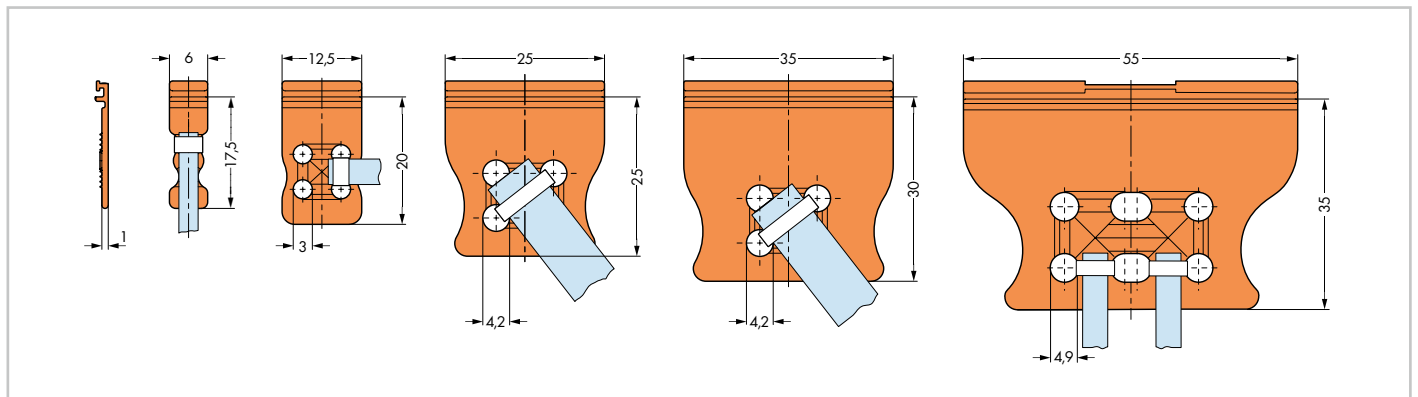
Width	Pole No.	Item No.	Pack. Unit	Width	Pole No.	Item No. Suffix
<p><b>Strain relief plate, 3.5 mm pin spacing, light gray</b></p>				<p><b>Strain relief plate, factory-assembled, 3.5/3.81 mm pin spacing</b></p>		
6 mm	2 ... 3	<b>734-127</b>	100 (4 x 25)	6 mm	2 ... 3	.../032-000
12.5 mm	4 ... 8	<b>734-128</b>	100 (4 x 25)	12.5 mm	4 ... 8	.../033-000
25 mm	9 ... 12	<b>734-129</b>	100 (4 x 25)	25 mm	9 ... 12	.../034-000
35 mm	13 ... 16	<b>734-126</b>	100 (4 x 25)	35 mm	13 ... 16	.../035-000
55 mm	17 ... max.	<b>734-426</b>	50 (2 x 25)	55 mm	17 ... max.	.../036-000
Width	Pole No.	Item No.	Pack. Unit			
<p><b>Strain relief plate, 3.81 mm/0.15 in. pin spacing, orange</b></p>				<p><b>Ordering example:</b></p> <p>Female connector, 3.81 mm pin spacing, 8-pole, orange, with strain relief plate: <b>734-208/033-000</b></p>		
6 mm	2 ... 3	<b>734-227</b>	100 (4 x 25)			
12.5 mm	4 ... 8	<b>734-228</b>	100 (4 x 25)			
25 mm	9 ... 12	<b>734-229</b>	100 (4 x 25)			
35 mm	13 ... 16	<b>734-226</b>	100 (4 x 25)			
55 mm	17 ... max.	<b>734-428</b>	50 (2 x 25)			
<p>An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of male or female connector.</p>						



**Ordering example:**  
Female connector, 3.5 mm pin spacing, 8-pole, light gray, with strain relief plate: **2734-108/033-000**



734-128 strain relief plate, for in-the-field assembly.



The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.

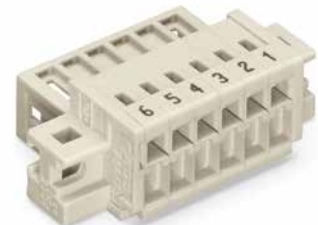
# 5 Accessories

## Finger Guards and Direct Marking

### MCS MINI

332

<b>Finger guard</b> for male headers <b>IP20</b>	<b>Direct marking</b> <b>of male and female connectors</b> <b>for conductor termination</b>	<b>Directe marking</b> <b>pole no. – 1</b> of male connectors for conductor termination
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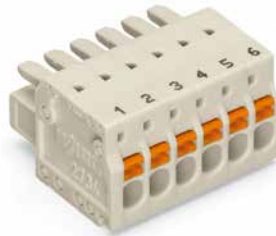
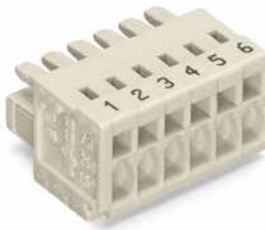
Pole No.	Item No.	Pack. Unit	Marking MCS MINI	Marking Perpendicular to Conductor Entry Item No. Suffix: /... - 044
<b>Finger guard for male headers, black, 3.5/3.81 mm pin spacing</b>			<p>Male and female connectors for conductor connection can be provided with direct marking of poles from 1 - number of poles at the factory.</p> <p>Two standard marking orientations are available:</p> <ol style="list-style-type: none"> <li>1. Marking perpendicular to conductor entry</li> <li>2. Marking parallel to conductor entry</li> </ol> <p>Other custom marking options are available upon request.</p> <p>Direct marking of MCS headers with solder pins is not possible. WAGO recommends pole marking on the PCB for these headers.</p> <p>Female headers with solder pins are exposed to aggressive flux agents during wave soldering. Select inkjet marking procedures are available upon request for these items.</p> <p>The marking type is always defined by the second 4-digit block of the item no. suffix for items with standard colors and materials.            Example: 734-106/... - xxxx            xxxx = Item no. suffix for marking</p>	<p><b>Ordering examples:</b></p> <p><b>Male connector,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/000-044</b></p>
4-way	<b>734-420</b>	100 (4 x 25)		<p><b>Male connector with fixing flanges,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/019-044</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/019-044/033-000</b></p>
<p>Finger guards provide touch-proof protection (IP20).</p>			<p>Insert the finger guard into the male header to be protected.</p>	
<p>Cut finger guard to the required number of poles.  <u>Do not use single-pole covers!</u></p>				<p><b>Marking Parallel to Conductor Entry</b>  <b>Item No. Suffix: /... - 9034</b></p> <p><b>Ordering examples:</b></p> <p><b>Male connector,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/000-9034</b></p> <p><b>Male connector with fixing flanges,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/019-9034</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b>            3.5 mm pin spacing, 6-pole, light gray  <b>734-306/019-9034/033-000</b></p>

# Accessories

## Direct Marking

### MCS MINI

<p><b>Direct marking</b> 1 – pole no.</p> <p>of female connectors for conductor termination</p>	<p><b>Direct marking</b> 1 – pole no.</p> <p>of female connectors with push-buttons for conductor termination</p>	<p><b>Direct marking</b> 1 – pole no.</p> <p>of 2-conductor combi strips for conductor termination</p>
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Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047	Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047	Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047
<p><b>Ordering examples:</b></p> <p><b>Female connector,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/000-047</b></p>	<p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/000-047</b></p>	<p><b>Ordering examples:</b></p> <p><b>2-conductor combi strip,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/000-047</b></p>
<p><b>Female connector with locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/037-047</b></p>	<p><b>Female connector with push-buttons and locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/037-047</b></p>	<p><b>2-conductor combi strip with locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/037-047</b></p>
<p><b>Female connector with strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/033-047</b></p>	<p><b>Female connector with push-buttons and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/033-047</b></p>	<p><b>2-conductor combi strip with locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/037-047/033-000</b></p>
<p><b>Female connector with locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/037-047/033-000</b></p>	<p><b>Female connector with push-buttons, locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/037-047/033-000</b></p>	



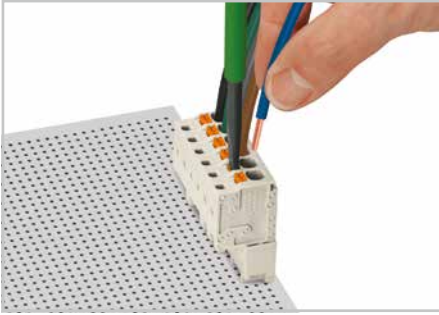
Marking Parallel to Conductor Entry Item No. Suffix: /...-9037	Marking Parallel to Conductor Entry Item No. Suffix: /...-9037	Marking Parallel to Conductor Entry Item No. Suffix: /...-9037
<p><b>Ordering examples:</b></p> <p><b>Female connector,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/000-9037</b></p>	<p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/000-9037</b></p>	<p><b>Ordering examples:</b></p> <p><b>2-conductor combi strip,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/000-9037</b></p>
<p><b>Female connector with locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/037-9037</b></p>	<p><b>Female connector with push-buttons and locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/037-9037</b></p>	<p><b>2-conductor combi strip with locking levers,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/037-9037</b></p>
<p><b>Female connector with strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/033-9037</b></p>	<p><b>Female connector with push-buttons and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/033-9037</b></p>	<p><b>2-conductor combi strip with locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-366/037-9037/033-000</b></p>
<p><b>Female connector with locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>734-106/037-9037/033-000</b></p>	<p><b>Female connector with push-buttons, locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>2734-106/037-9037/033-000</b></p>	



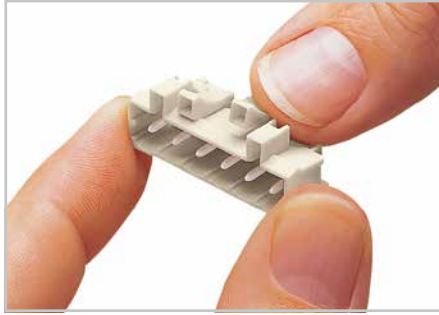




# Description and Handling MCS MIDI 100% Protected Against Mismatching



Inserting/removing conductor via 3.5 mm screwdriver - Push-in CAGE CLAMP® connection. Actuation in mated condition.

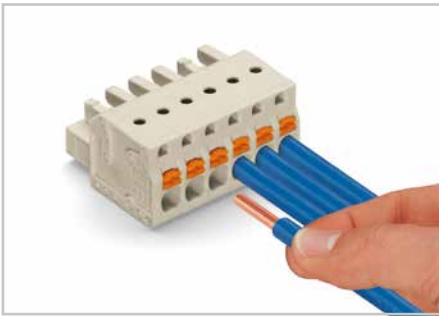


Coding a male header - fitting coding key(s).



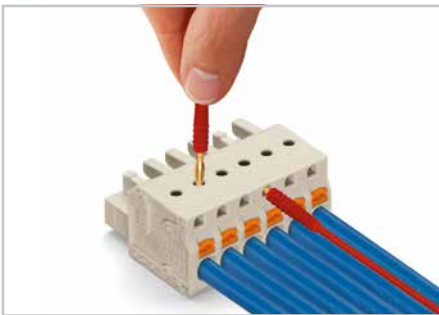
Coding a female connector - removing coding finger(s).

## 2721 Series Female Connector with Push-Buttons



Inserting a solid conductor via Push-in CAGE CLAMP® push-in termination.

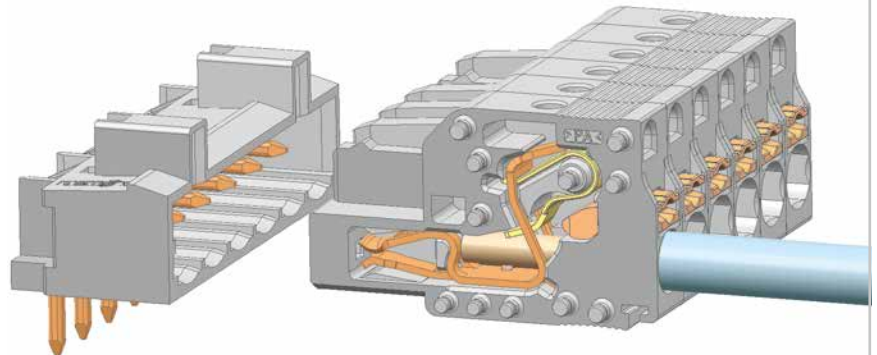
Terminate solid or ferruled conductors by simply pushing them in.



Testing parallel to conductor entry via integrated test ports - female connector with push-button actuated Push-in CAGE CLAMP®. Tip contact with current bar from top of unit.

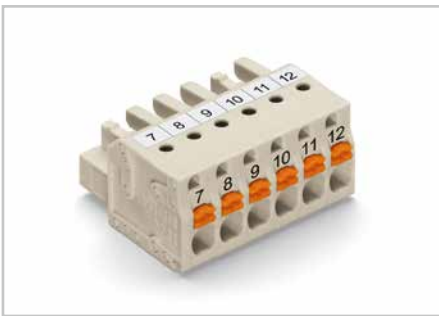
100% protected against mismatching

**PUSH-IN CAGE CLAMP®**

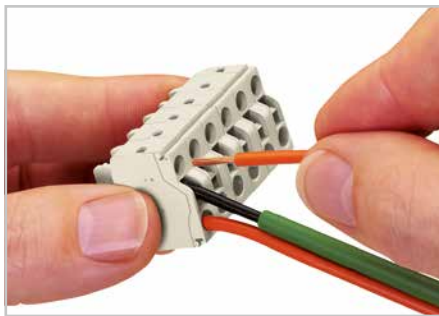


MCS MIDI

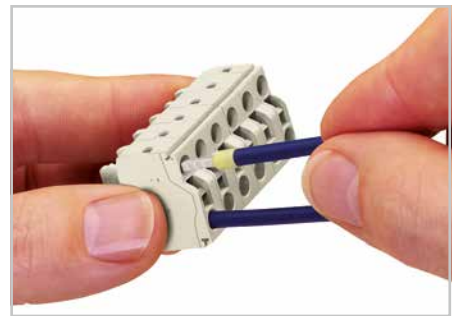
Pin Spacing: 5 mm and 7.5 mm



Marking via self-adhesive strips or factory direct printing.



Terminating conductor via 3.5 mm screwdriver into a 2-conductor female connector equipped with Push-in CAGE CLAMP®.



Inserting ferruled, fine-stranded conductor via Push-in CAGE CLAMP® push-in termination.



**CAGE CLAMP® and Push-in CAGE CLAMP® terminate the following copper conductors:\***  
solid

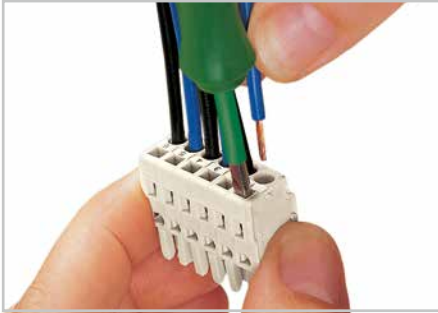


stranded

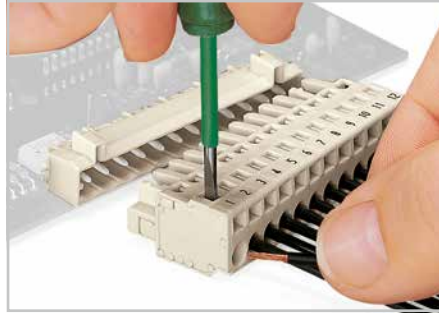


fine-stranded, also with tinned single strands

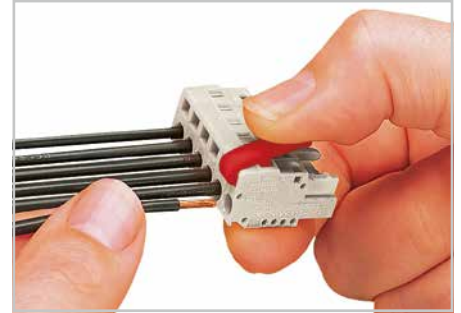
\* For aluminum conductors, see page 511.



Inserting conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.

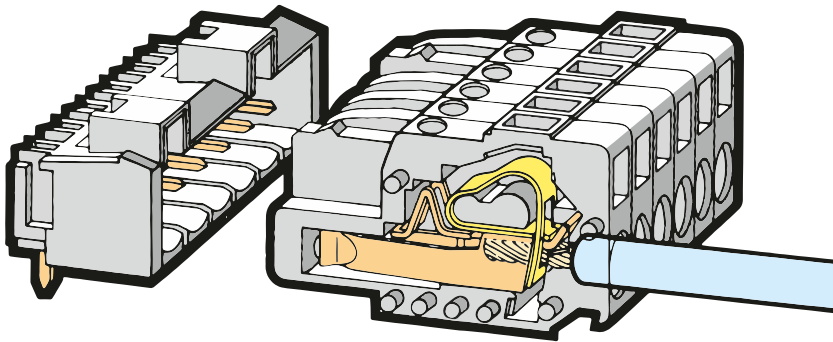


Inserting conductor into CAGE CLAMP® unit via 231-291 operating lever.

**721, 722 and 723 Series**

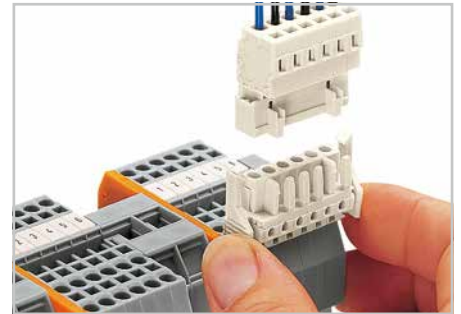
**100% protected against mismatching**

**CAGE CLAMP®**



**MCS MIDI**

Pin Spacing: 5 mm and 7.5 mm



Connectors for 280 Series rail-mounted terminal blocks.



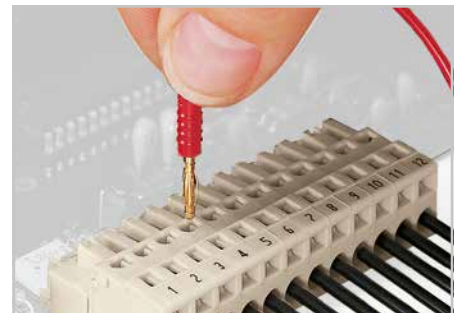
Angled female connector for panel mounting.



Male connector with strain relief plate.



Strain relief housing shown with a male connector equipped with CAGE CLAMP®.



Testing – female connector with CAGE CLAMP®. Vertical insertion of 2 mm or 2.3 mm Ø test plug.



fine-stranded, tip-bonded



fine-stranded, with ferrules (gastight crimped)

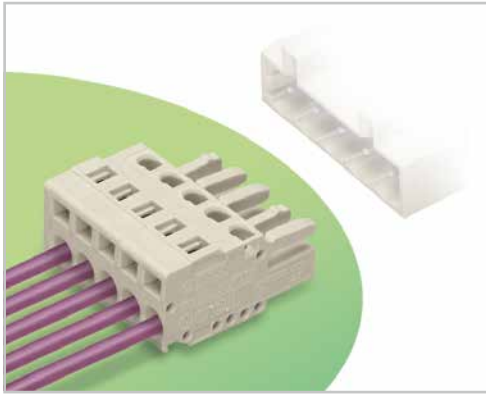


fine-stranded, with pin terminal (gastight crimped)

# Female Connectors

## Pin Spacing: 5 mm

### MCS MIDI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Integrated test ports
- 100% protected against mismating
- Coding pins available

**Technical data:**

Pin Spacing	Straight 5 mm / 0.197 in.			Angled 5 mm / 0.197 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A	14 A	14 A	14 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A

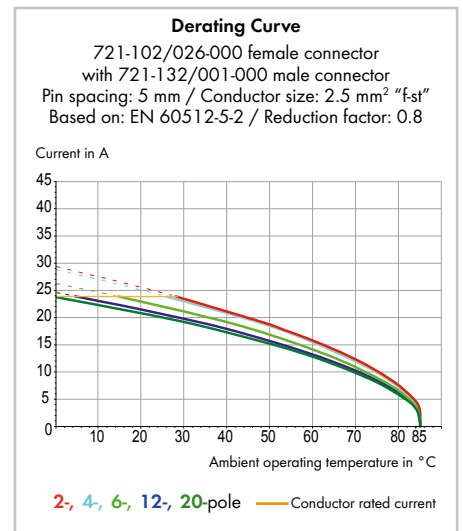
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup>	(with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup>	(with uninsulated ferrule)
AWG	28 ... 12	12: THHN, THWN
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.	

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +85 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MIDI accessories:**

**Page:**

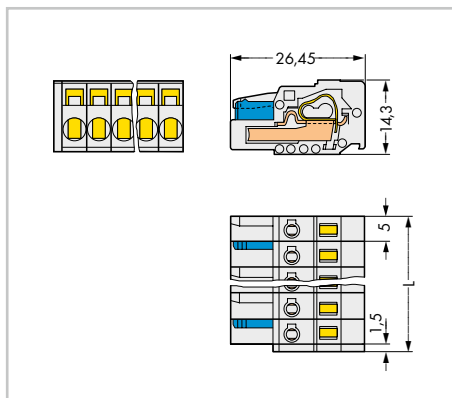
Marking accessories	512
Operating tools	366
Direct marking	362
Comb-style jumper bars	376
Insulation stop	369
Test plug adapter	374
Test plug	510
Screws	377
Strain relief housings	372
Strain relief plates	370

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

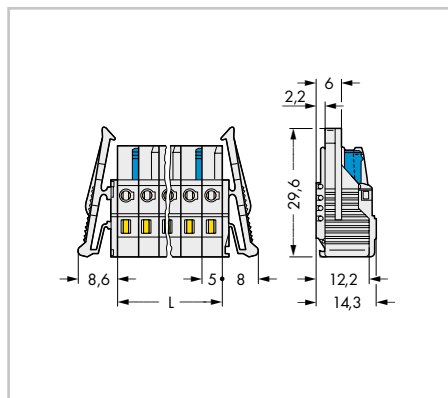
When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Female Connectors MCS MIDI

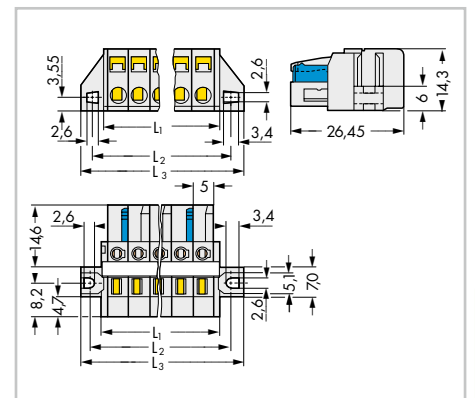
Pin spacing: 5 mm / 0.197 in.		With locking levers Pin spacing: 5 mm / 0.197 in.		With fixing flanges, for racks and through-panel mounting Pin spacing: 5 mm / 0.197 in.	
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	28 ... 12 AWG 300 V/15 A	0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	28 ... 12 AWG 300 V/15 A	0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	28 ... 12 AWG 300 V/15 A



L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing

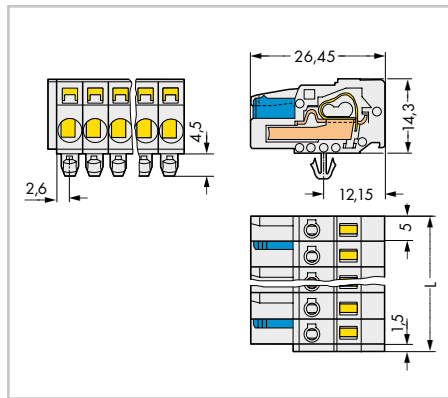
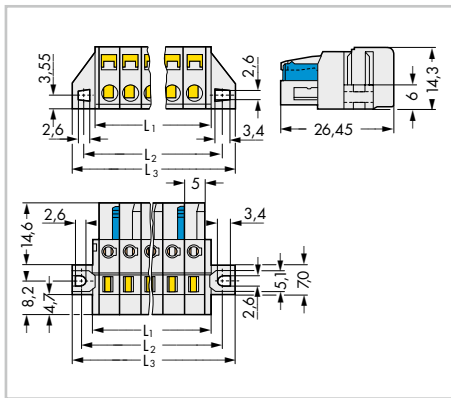


L<sub>1</sub> = (pole no. x pin spacing) + 3 mm  
L<sub>2</sub> = (pole no. x pin spacing) + 8.8 mm  
L<sub>3</sub> = (pole no. x pin spacing) + 14.8 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector, light gray			Female connector with locking levers, light gray			Female connector with fixing flanges, for racks and through-panel mounting, with reinforcing strips, light gray		
2	721-102/026-000	100	2	721-102/037-000	100	2	721-102/031-000	100
3	721-103/026-000	100	3	721-103/037-000	50	3	721-103/031-000	50
4	721-104/026-000	100	4	721-104/037-000	50	4	721-104/031-000	50
5	721-105/026-000	100	5	721-105/037-000	50	5	721-105/031-000	50
6	721-106/026-000	50	6	721-106/037-000	50	6	721-106/027-000	50
7	721-107/026-000	50	7	721-107/037-000	50	7	721-107/027-000	50
8	721-108/026-000	50	8	721-108/037-000	25	8	721-108/027-000	50
9	721-109/026-000	50	9	721-109/037-000	25	9	721-109/027-000	25
10	721-110/026-000	50	10	721-110/037-000	25	10	721-110/027-000	25
11	721-111/026-000	25	11	721-111/037-000	25	11	721-111/027-000	25
12	721-112/026-000	25	12	721-112/037-000	25	12	721-112/027-000	25
13	721-113/026-000	25	13	721-113/037-000	25	13	721-113/027-000	25
14	721-114/026-000	25	14	721-114/037-000	25	14	721-114/027-000	25
15	721-115/026-000	25	15	721-115/037-000	25	15	721-115/027-000	25
16	721-116/026-000	25	16	721-116/037-000	10	16	721-116/027-000	10
20	721-120/026-000	10	20	721-120/037-000	10	20	721-120/027-000	10
2-pole female connectors - one latch only						Item nos. for 2- to 5-pole female connectors are identical to item nos. for panel-mount female connectors without reinforcing strips.		
						For cutout dimensions, see page 377, Table 1.		

# Female Connectors MCS MIDI

With fixing flanges for panel mounting Pin spacing: 5 mm / 0.197 in.		With snap-in mounting feet Pin spacing: 5 mm / 0.197 in.	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 16 A	300 V/15 A	320 V/4 kV/2 16 A	300 V/15 A



$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$

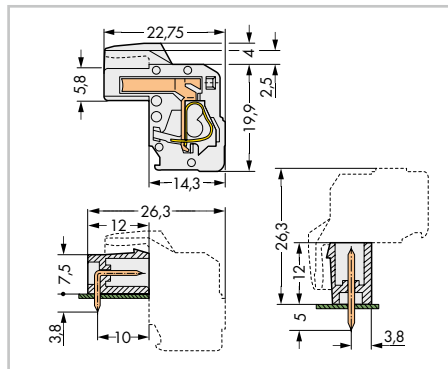
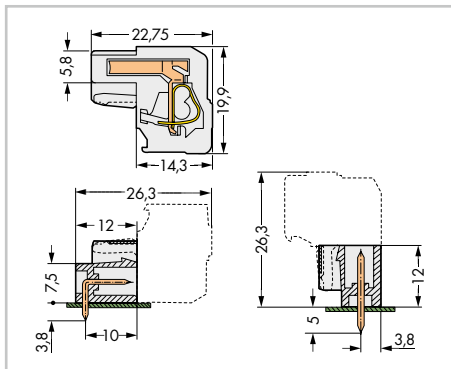
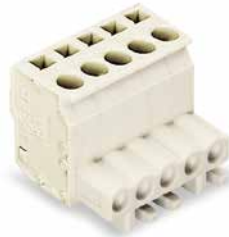
$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female connector with fixing flanges, for panel mounting, light gray			Female connector with snap-in mounting feet, for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, light gray		
2	721-102/031-000	100	2	721-102/008-000	100
3	721-103/031-000	50	3	721-103/008-000	100
4	721-104/031-000	50	4	721-104/008-000	100
5	721-105/031-000	50	5	721-105/008-000	100
6	721-106/031-000	50	6	721-106/008-000	50
7	721-107/031-000	50	7	721-107/008-000	50
8	721-108/031-000	50	8	721-108/008-000	50
9	721-109/031-000	25	9	721-109/008-000	50
10	721-110/031-000	25	10	721-110/008-000	50
11	721-111/031-000	25	11	721-111/008-000	25
12	721-112/031-000	25	12	721-112/008-000	25
13	721-113/031-000	25	13	721-113/008-000	25
14	721-114/031-000	25	14	721-114/008-000	25
15	721-115/031-000	25	15	721-115/008-000	25
16	721-116/031-000	10	16	721-116/008-000	25
20	721-120/031-000	10	20	721-120/008-000	10
For cutout dimensions, see page 377, Table 1.					
2-pole female connectors - one latch only					

Accessory	Page
Mounting adapter for DIN 35 rail, 3 or more poles (209-137)	375

# Female Connectors MCS MIDI

<b>Angled, conductor entry same direction as latches</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		<b>Angled, conductor entry opposite of latches</b> <b>Pin spacing: 5 mm / 0.197 in.</b>	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 14 A	300 V/15 A	320 V/4 kV/2 14 A	300 V/15 A



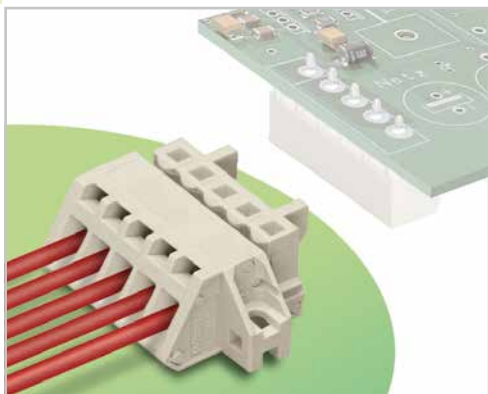
Total length = (pole no. x pin spacing) + 1.5 mm + 0.9 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Angled female connector, conductor entry same direction as latches, light gray			Angled female connector, conductor entry opposite of latches, light gray		
2	722-202/026-000	100	2	722-102/026-000	100
3	722-203/026-000	100	3	722-103/026-000	100
4	722-204/026-000	100	4	722-104/026-000	100
5	722-205/026-000	100	5	722-105/026-000	100
6	722-206/026-000	50	6	722-106/026-000	50
7	722-207/026-000	50	7	722-107/026-000	50
8	722-208/026-000	50	8	722-108/026-000	50
9	722-209/026-000	50	9	722-109/026-000	50
10	722-210/026-000	50	10	722-110/026-000	50
11	722-211/026-000	25	11	722-111/026-000	25
12	722-212/026-000	25	12	722-112/026-000	25
13	722-213/026-000	25			
14	722-214/026-000	25	14	722-114/026-000	25
15	722-215/026-000	25			
16	722-216/026-000	25	16	722-116/026-000	25
20	722-220/026-000	10	20	722-120/026-000	10
2-pole female connectors - one latch only					

# Angled Female Connectors for Panel Mounting

Pin Spacing: 5 mm

MCS MIDI



- Universal connection for all conductor types
- Attachment using snap-on mounting feet or fixing flanges at surfaces or feedthrough points
- Mounting adapter allows versions with snap-in mounting feet to be DIN-rail mounted
- Easy connection of wires, even with components already connected
- 100% protected against mismatching

**Technical data:**

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	15 A	-	10 A
Nominal current CSA	15 A	-	10 A

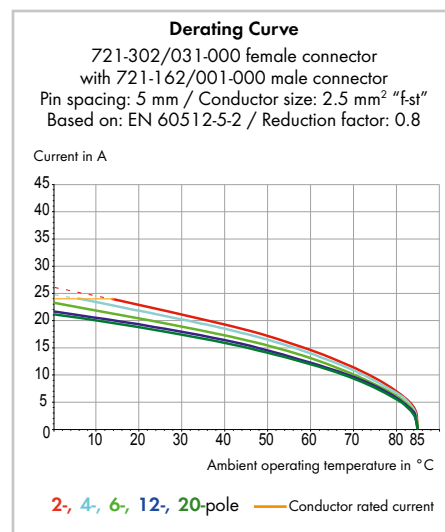
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup>	(with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup>	(with uninsulated ferrule)
AWG	28 ... 12	12: THHN, THWN
Strip length	7 ... 8 mm / 0.28 ... 0.31 in.	

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +85 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MIDI accessories:**

**Page:**

Marking accessories	512
Operating tools	366
Direct marking	362
Test plug adapter	374
Screws	377

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.



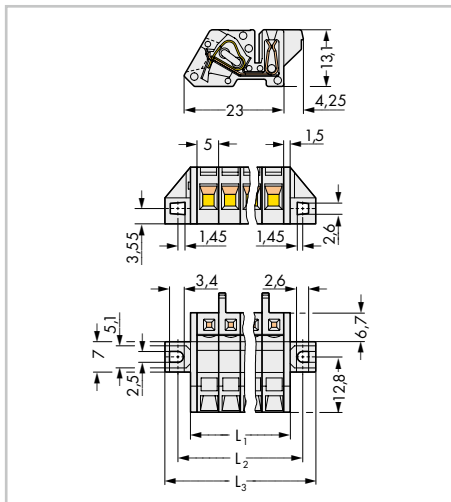
# Angled Female Connectors for Panel Mounting MCS MIDI

CAGE CLAMP®

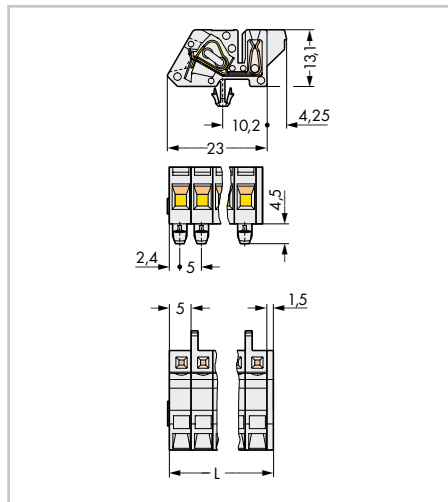
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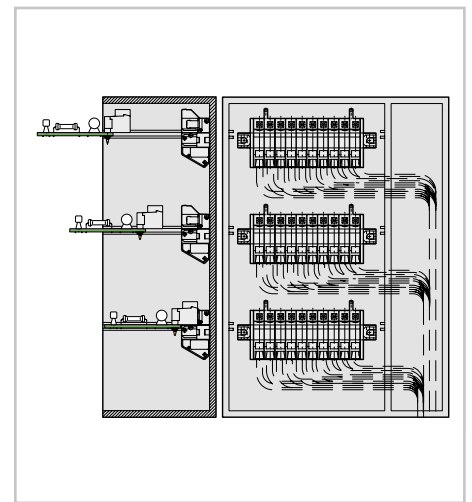
With fixing flanges Pin spacing: 5 mm / 0.197 in.		With snap-in mounting feet Pin spacing: 5 mm / 0.197 in.		Application Examples
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 12 A	28 ... 12 AWG 300 V/ 15 A	0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 12 A	28 ... 12 AWG 300 V/ 15 A	



$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$   
 $L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$   
 $L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$



$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$



Multilevel arrangement in a distributed electronic housing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Angled female connector with fixing flanges, light gray</b>			<b>Angled female connector with snap-in mounting feet, for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø fixing holes, light gray</b>		
2	721-302/031-000	100	2	721-302/008-000	100
3	721-303/031-000	50	3	721-303/008-000	50
4	721-304/031-000	50	4	721-304/008-000	50
5	721-305/031-000	50	5	721-305/008-000	50
6	721-306/031-000	50	6	721-306/008-000	50
7	721-307/031-000	50	7	721-307/008-000	50
8	721-308/031-000	50	8	721-308/008-000	50
9	721-309/031-000	25	9	721-309/008-000	50
10	721-310/031-000	25	10	721-310/008-000	50
11	721-311/031-000	25	11	721-311/008-000	25
12	721-312/031-000	25	12	721-312/008-000	25
13	721-313/031-000	25	13	721-313/008-000	25
14	721-314/031-000	25	14	721-314/008-000	25
15	721-315/031-000	25	15	721-315/008-000	25
16	721-316/031-000	10	16	721-316/008-000	25
20	721-320/031-000	10	20	721-320/008-000	10



Panel-mount connectors  
 Pictures shows a male connector with CAGE CLAMP® and strain relief plate for outgoing circuit.



Accessory	Page
Mounting adapter for DIN 35 rail, 3 or more poles (209-120)	375

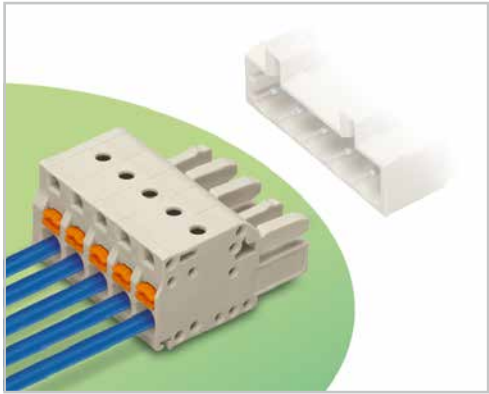
For other lengths, please contact factory.

# 5 Female Connectors with Push-Buttons

## Pin Spacing: 5 mm

### MCS MIDI

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- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Simple, push-in terminations of solid and ferruled conductors
- Integrated test ports for testing parallel to conductor entry
- 100% protected against mismating
- With coding elements

**Technical data:**

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	150 V	300 V
Nominal current UL	15 A	15 A	10 A
Nominal current CSA	15 A	15 A	10 A

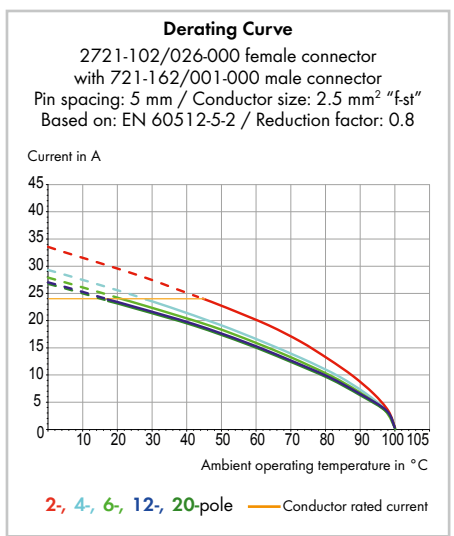
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

Connection technology	Push-in CAGE CLAMP®	
Conductor size: solid	0.2 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.2 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)	
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	24 ... 12	12: THHN, THWN
Strip length	10 ... 11 mm / 0.39 ... 0.43 in.	

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MIDI accessories:**

**Page:**

Marking accessories	512
Operating tools	366
Direct marking	362
Insulation stop	369
Test plug adapter	374
Test plug, 2 mm Ø	510
Screws	377
Strain relief plates	370

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.  
 When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

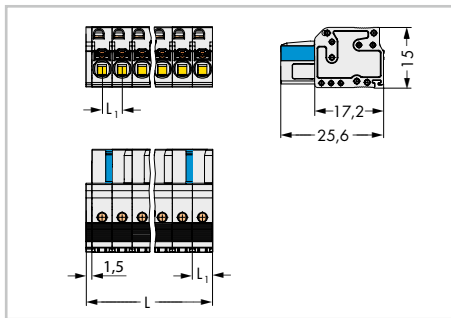
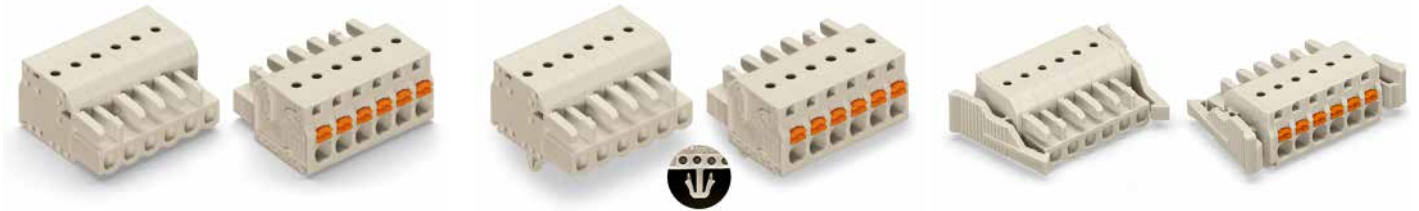
# Female Connectors with Push-Buttons MCS MIDI

PUSH-IN CAGE CLAMP®

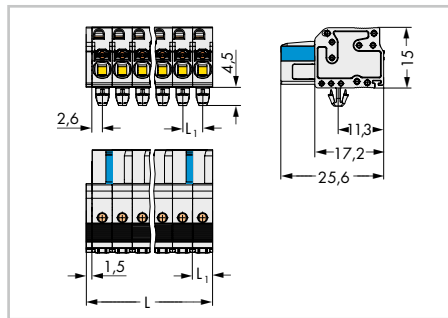
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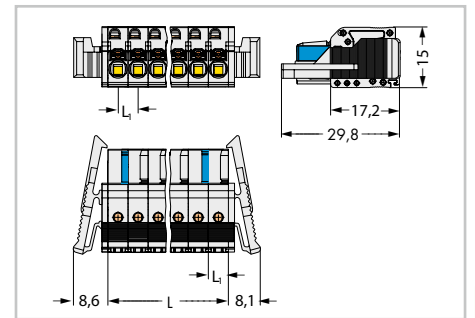
Pin spacing: 5 mm / 0.197 in.		With snap-in mounting feet Pin spacing: 5 mm / 0.197 in.		With locking levers Pin spacing: 5 mm / 0.197 in.	
0.2 ... 2.5 mm <sup>2</sup>	24 ... 12 AWG	0.2 ... 2.5 mm <sup>2</sup>	24 ... 12 AWG	0.2 ... 2.5 mm <sup>2</sup>	24 ... 12 AWG
320 V/4 kV/2 16 A	300 V/15 A	320 V/4 kV/2 16 A	300 V/15 A	320 V/4 kV/2 16 A	300 V/15 A



L = (pole no. x pin spacing) + 1.5 mm  
L<sub>1</sub> = 5 mm



L = (pole no. x pin spacing) + 1.5 mm  
L<sub>1</sub> = 5 mm



L = pole no. x pin spacing  
L<sub>1</sub> = 5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Female connector with push-buttons, light gray</b>			<b>Female connector with push-buttons and snap-in mounting feet, for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø fixing holes, light gray</b>			<b>Female connector with push-buttons and locking levers, light gray</b>		
2	2721-102/026-000	100	2	2721-102/008-000	100	2	2721-102/037-000	100
3	2721-103/026-000	100	3	2721-103/008-000	100	3	2721-103/037-000	50
4	2721-104/026-000	100	4	2721-104/008-000	100	4	2721-104/037-000	50
5	2721-105/026-000	100	5	2721-105/008-000	100	5	2721-105/037-000	50
6	2721-106/026-000	50	6	2721-106/008-000	50	6	2721-106/037-000	50
7	2721-107/026-000	50	7	2721-107/008-000	50	7	2721-107/037-000	50
8	2721-108/026-000	50	8	2721-108/008-000	50	8	2721-108/037-000	25
9	2721-109/026-000	50	9	2721-109/008-000	50	9	2721-109/037-000	25
10	2721-110/026-000	50	10	2721-110/008-000	50	10	2721-110/037-000	25
11	2721-111/026-000	25	11	2721-111/008-000	25	11	2721-111/037-000	25
12	2721-112/026-000	25	12	2721-112/008-000	25	12	2721-112/037-000	25
14	2721-114/026-000	25	14	2721-114/008-000	25	14	2721-114/037-000	25
16	2721-116/026-000	25	16	2721-116/008-000	25	16	2721-116/037-000	10
20	2721-120/026-000	10	20	2721-120/008-000	10	20	2721-120/037-000	10

2-pole female connectors - one latch only

Accessory	Page
Mounting adapter for DIN 35 rail, 3 or more poles (209-137)	375

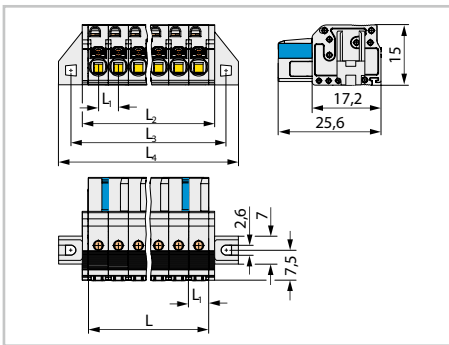
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# 5 Female Connectors with Push-Buttons MCS MIDI

PUSH-IN CAGE CLAMP®

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<b>With fixing flanges</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		
0.2 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	24 ... 12 AWG 300 V/15 A	



L = pole no. x pin spacing  
 L<sub>1</sub> = 5 mm  
 L<sub>2</sub> = L + 2.8 mm  
 L<sub>3</sub> = L + 8.8 mm  
 L<sub>4</sub> = L + 14.8 mm

Pole No.	Item No.	Pack. Unit
<b>Female connector with push-buttons and fixing flanges, light gray</b>		
2	2721-102/031-000	100
3	2721-103/031-000	50
4	2721-104/031-000	50
5	2721-105/031-000	50
6	2721-106/031-000	50
7	2721-107/031-000	50
8	2721-108/031-000	50
9	2721-109/031-000	25
10	2721-110/031-000	25
12	2721-112/031-000	25
14	2721-114/031-000	25
16	2721-116/031-000	10
20	2721-120/031-000	10
For cutout dimensions, see page 378, Table 2.		
2-pole female connectors - one latch only		

For other lengths, please contact factory.

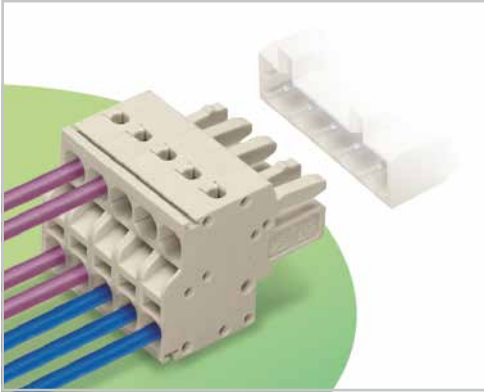


# 5 2-Conductor Female Connectors

## Pin Spacing: 5 mm

### MCS MIDI

348



- Universal connection for all conductor types
- Two conductor entries per pole
- For looping through power or data buses
- Bus connection is retained, even when unmated
- Simple, push-in terminations of solid and ferruled conductors
- 100% protected against mismatching
- Coding pins available

#### Technical data:

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	16 A	16 A	16 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	20 A	-	10 A
Nominal current CSA	15 A	-	10 A

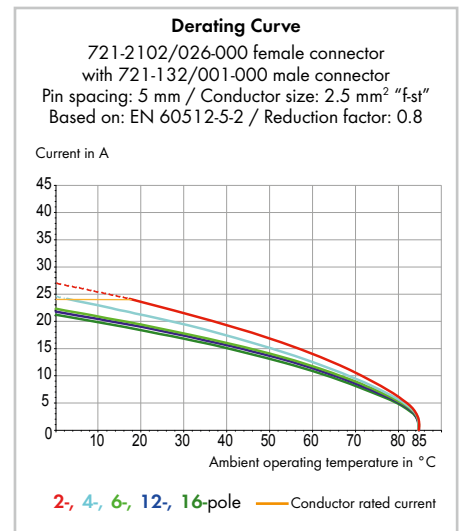
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

#### Conductor data:

Connection technology	Push-in CAGE CLAMP®	
Conductor size: solid	0.2 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.2 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)	
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	24 ... 12	12: THHN, THWN
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.	

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +85 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



#### MCS MIDI accessories:

#### Page:

Marking accessories	512
Operating tools	366
Direct marking	362
Insulation stop	369
Test plug adapter	374
Test pin	510
Strain relief plates	370

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

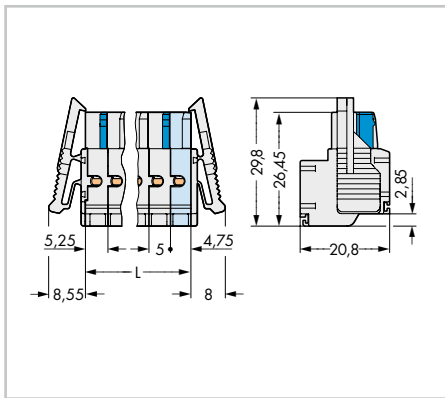
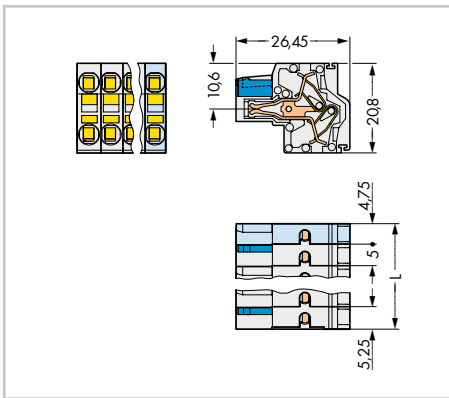
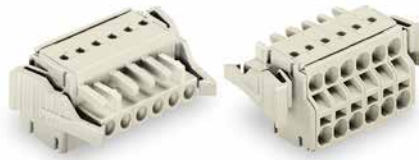
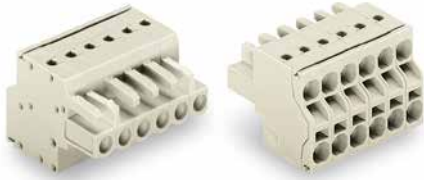
# 2-Conductor Female Connectors MCS MIDI

PUSH-IN CAGE CLAMP®

5

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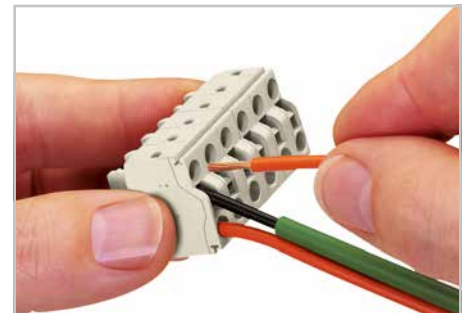
Pin spacing: 5 mm / 0.197 in.		With locking levers Pin spacing: 5 mm / 0.197 in.		Handling
0.2 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	24 ... 12 AWG 300 V/20 A	0.2 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 16 A	24 ... 12 AWG 300 V/20 A	



L = (pole no. - 2) x pin spacing + 10 mm

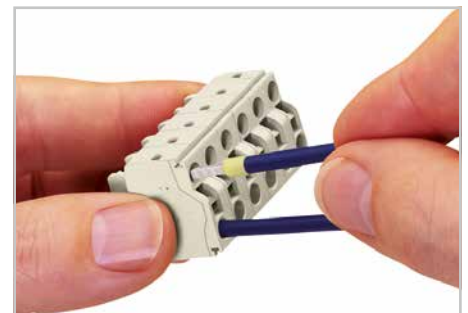
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>2-conductor female connector, light gray</b>			<b>2-conductor female connector with locking levers, light gray</b>		
2	721-2102/026-000	100	2	721-2102/037-000	100
3	721-2103/026-000	100	3	721-2103/037-000	50
4	721-2104/026-000	100	4	721-2104/037-000	50
5	721-2105/026-000	50	5	721-2105/037-000	50
6	721-2106/026-000	50	6	721-2106/037-000	50
7	721-2107/026-000	50	7	721-2107/037-000	50
8	721-2108/026-000	50	8	721-2108/037-000	25
9	721-2109/026-000	50	9	721-2109/037-000	25
10	721-2110/026-000	50	10	721-2110/037-000	25
11	721-2111/026-000	25	11	721-2111/037-000	25
12	721-2112/026-000	25	12	721-2112/037-000	25
13	721-2113/026-000	25	13	721-2113/037-000	25
14	721-2114/026-000	25	14	721-2114/037-000	25
15	721-2115/026-000	25	15	721-2115/037-000	25
16	721-2116/026-000	25	16	721-2116/037-000	10
2-pole female connectors - one latch only					

Female connectors equipped with two Push-in CAGE CLAMP® connections per pole allow conductors to be looped from one connector to another without interruption. Therefore, disconnecting one connector will not affect other connectors in the circuit. These female connectors can be mated with male headers or CAGE CLAMP®-equipped male connectors, which are 100 % protected against mismatching.



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Operating Push-in CAGE CLAMP® is easy, fast and identical to that of CAGE CLAMP®. The screwdriver is fully inserted into the operating slot, holding the Push-in CAGE CLAMP® open. After the conductor has been inserted into the clamping unit and the screwdriver been withdrawn, the conductor is clamped safely. Solid and fine-stranded conductors < 0.5 mm<sup>2</sup> are terminated and removed using a screwdriver.

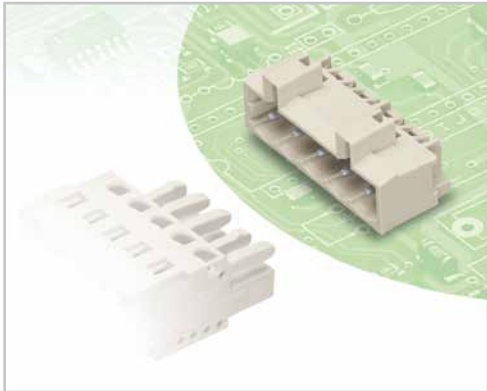


Solid conductors ≥ 0.5 mm<sup>2</sup> and ferruled, fine-stranded conductors can be terminated by simply pushing them in. Touch contacting is possible by inserting test probes into the test slots.

# Male Headers with Solder and Press-In Pins

## Pin Spacing: 5 mm

### MCS MIDI



- Horizontal or vertical PCB mounting via straight and angled solder pins
- 1.2 x 1.2 mm solder pins allow nominal current up to 16 A, enhancing stability of shorter headers
- Version with press-in pins provides solder-free connection to PCB
- 100% protected against mismatching
- With coding elements

**Technical data:**

Pin Spacing	5 mm/0.197 in. 1 x 1 mm Solder Pins			5 mm/0.197 in. 1.2 x 1.2 mm Solder Pins			5 mm/0.197 in. Press-In Technology		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per									
Overtoltage category	III	III	II	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A	16 A	16 A	16 A	8 A	8 A	8 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	10 A	-	10 A	15 A	-	10 A	10 A	-	10 A

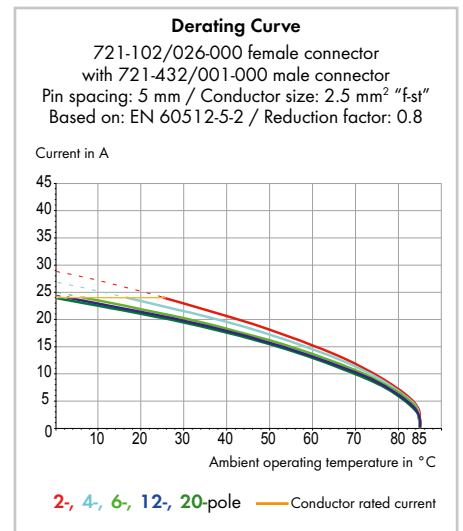
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Solder and press-in pin data:**

Solder pin: length/width	5 mm / 1 x 1 mm (straight)
Solder pin: length/width	3.8 mm / 1 x 1 mm (angled)
Solder pin: drilled hole diameter	1.4 <sup>+0.1</sup> mm
Solder pin: length/width	5 mm / 1.2 x 1.2 mm (straight)
Solder pin: length/width	3.8 mm / 1.2 x 1.2 mm (angled)
Solder pin: drilled hole diameter	1.7 <sup>+0.1</sup> mm
Press-in pin: length/width	3.2 mm/0.8 x 1.6 mm
Press-in pin: drilled hole diameter	1.6 <sup>+0.025</sup> mm
Press-in pin: metal-plated hole	Ø 1.45 <sup>+0.09</sup> <sub>-0.06</sub> mm (HAL Sn)
Press-in pin: metal-plated hole	Ø 1.45 <sup>+0.09</sup> <sub>-0.06</sub> mm (Chem. Sn)

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C / Press-in pin: -40 °C / +85 °C
Contact material	Electrolytic copper (E <sub>cu</sub> ) / Copper alloy for press-in technology
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."	



**MCS MIDI accessories:**

**Page:**

Fixing elements	369
Coding keys	368
Screws	377

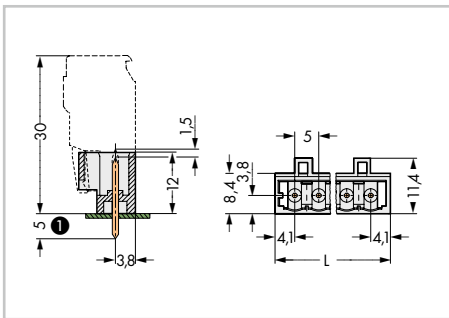
MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

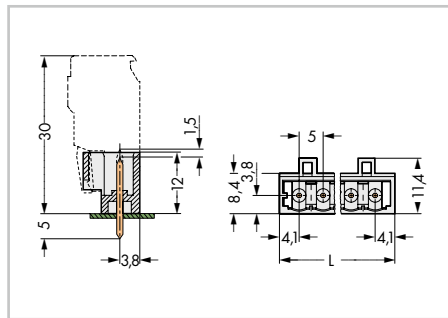


# Male Headers with Solder and Press-In Pins MCS MIDI

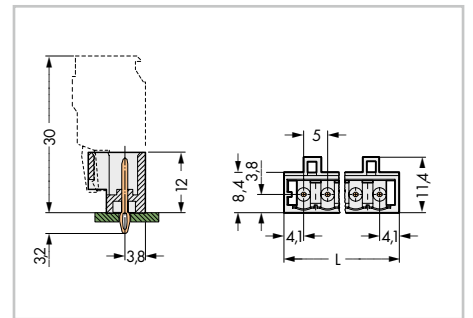
<b>With 1 x 1 mm straight solder pins</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		<b>With 1.2 x 1.2 mm straight solder pins</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		<b>With press-in pins</b> <b>Pin spacing: 5 mm / 0.197 in.</b>	
320 V/4 kV/2 12 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/15 A	320 V/4 kV/2 8 A	300 V/15 A



L = (pole no. - 1) x pin spacing + 8.2 mm



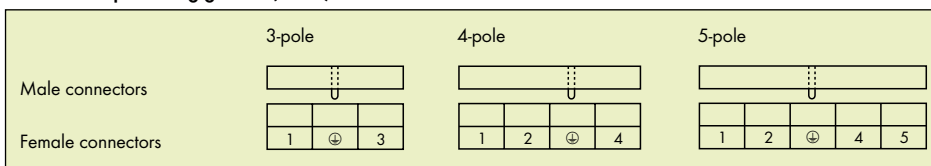
L = (pole no. - 1) x pin spacing + 8.2 mm



L = (pole no. - 1) x pin spacing + 8.2 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male header with 1 x 1 mm straight solder pins,</b> light gray			<b>Male header with 1.2 x 1.2 mm straight solder pins,</b> light gray			<b>Male header for press-in technology*,</b> 0.8 x 1.6 mm press-in pin, light gray		
	without preceding ground contact			without preceding ground contact				
	with preceding ground contact			with preceding ground contact				
2	721-132/001-000	200	2	721-162/001-000	200	2	721-162/100-000	200
3	721-133/001-000	200	3	721-163/001-000	200	3	721-163/100-000	200
4	721-134/001-000	200	4	721-164/001-000	200	4	721-164/100-000	200
5	721-135/001-000	200	5	721-165/001-000	200	5	721-165/100-000	200
6	721-136/001-000	100	6	721-166/001-000	100	6	721-166/100-000	100
7	721-137/001-000	100	7	721-167/001-000	100	7	721-167/100-000	100
8	721-138/001-000	100	8	721-168/001-000	100	8	721-168/100-000	100
9	721-139/001-000	100	9	721-169/001-000	100	9	721-169/100-000	100
10	721-140/001-000	100	10	721-170/001-000	100	10	721-170/100-000	100
11	721-141/001-000	100	11	721-171/001-000	100	11	721-171/100-000	100
12	721-142/001-000	100	12	721-172/001-000	100	12	721-172/100-000	100
13	721-143/001-000	50	13	721-173/001-000	50			
14	721-144/001-000	50	14	721-174/001-000	50			
15	721-145/001-000	50	15	721-175/001-000	50			
16	721-146/001-000	50	16	721-176/001-000	50			
20	721-150/001-000	50	20	721-180/001-000	50			
								For information on press-in tool design, please contact factory.
								* For press-in technology, see page 352.

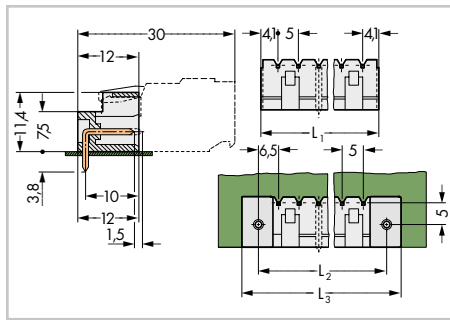
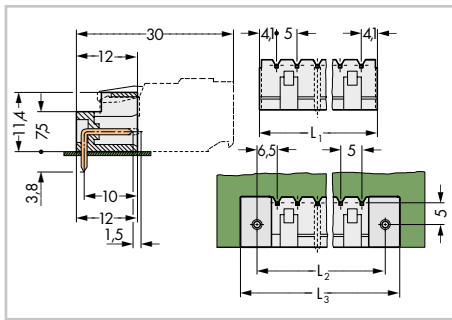
**Position of preceding ground (earth) contact:**



① MCS MIDI male headers with straight solder pins are also available with 3.8 mm pin projection upon request.  
 Replace item no. suffix: .../001-000 with .../046-000.

# Male Headers with Solder Pins MCS MIDI

With 1 x 1 mm angled solder pins Pin spacing: 5 mm / 0.197 in.		With 1.2 x 1.2 mm angled solder pins Pin spacing: 5 mm / 0.197 in.		Press-In Technology
320 V/4 kV/2 12 A	300 V/10 A	320 V/4 kV/2 16 A	300 V/15 A	



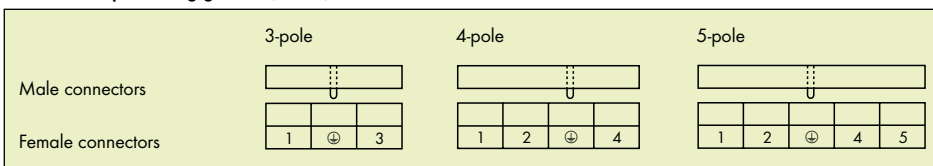
$L_1 = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_2 = L_1 + 5 \text{ mm}$   
 $L_3 = L_2 + 7.4 \text{ mm}$

### Unique features of WAGO press-in technology:

- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Metal-plated hole with optimum diameter
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.03</sub> mm (HAL Sn)
  - 1.0 or 1.45<sup>+0.02</sup><sub>-0.03</sub> mm (Chem. Sn)
- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx 3.2 mm - no unnecessary projection on underside of PCB
- low press-in force required
  - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN EN 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole - reduces wear and tear on PCB and contact points

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Male header with 1 x 1 mm angled solder pins, light gray			Male header with 1.2 x 1.2 mm angled solder pins, light gray		
	without preceding ground contact		without preceding ground contact	with preceding ground contact	
2	721-432/001-000	200	2	721-462/001-000	200
3	721-433/001-000	200	3	721-463/001-000	200
	with preceding ground contact			with preceding ground contact	
3	721-433/001-040	200	3	721-463/001-040	200
4	721-434/001-000	200	4	721-464/001-000	200
	with preceding ground contact			with preceding ground contact	
4	721-434/001-040	200	4	721-464/001-040	200
5	721-435/001-000	200	5	721-465/001-000	200
	with preceding ground contact			with preceding ground contact	
5	721-435/001-040	200	5	721-465/001-040	200
6	721-436/001-000	100	6	721-466/001-000	100
7	721-437/001-000	100	7	721-467/001-000	100
8	721-438/001-000	100	8	721-468/001-000	100
9	721-439/001-000	100	9	721-469/001-000	100
10	721-440/001-000	100	10	721-470/001-000	100
11	721-441/001-000	100	11	721-471/001-000	100
12	721-442/001-000	100	12	721-472/001-000	100
13	721-443/001-000	50	13	721-473/001-000	50
14	721-444/001-000	50	14	721-474/001-000	50
15	721-445/001-000	50	15	721-475/001-000	50
16	721-446/001-000	50	16	721-476/001-000	50
20	721-450/001-000	50	20	721-480/001-000	50

### Position of preceding ground (earth) contact:



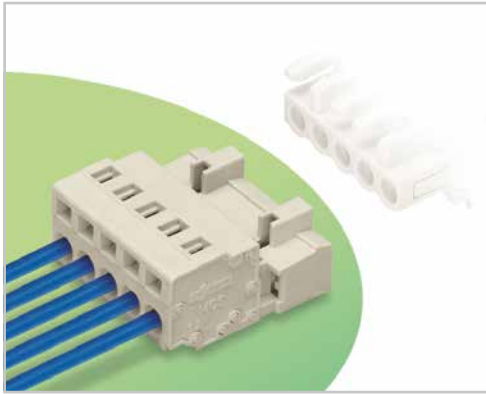
For other lengths, please contact factory.



# Male connectors

## Pin Spacing: 5 mm

### MCS MIDI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Versions available with snap-in mounting feet or fixing flanges for panel or through-panel mounting
- 3 to 5-pole headers available as optional equipment with preceding ground (earth) contact
- 100% protected against mismatching
- With coding elements

**Technical data:**

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	15 A	-	10 A
Nominal current CSA	15 A	-	10 A

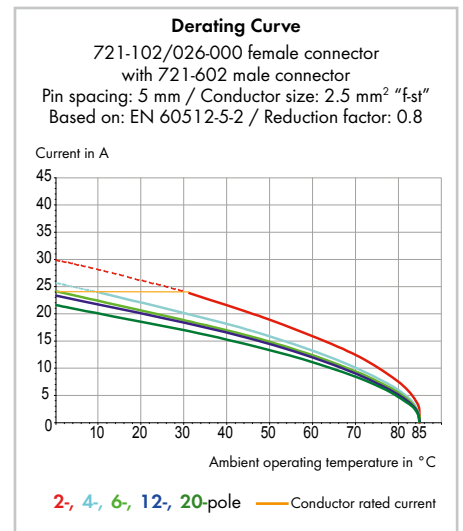
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

**Conductor data:**

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup>	(with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup>	(with uninsulated ferrule)
AWG	28 ... 12	12: THHN, THWN
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.	

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	



**MCS MIDI accessories:**

**Page:**

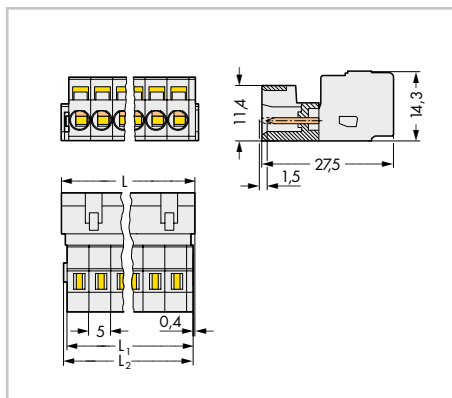
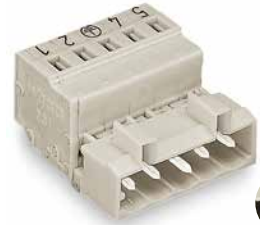
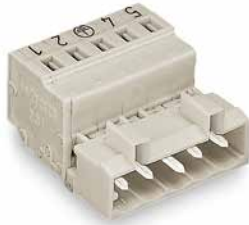
Marking accessories	512
Operating tools	366
Direct marking	362
Comb-style jumper bars	376
Insulation stop	369
Coding keys	368
Screws	377
Strain relief housings	372
Strain relief plates	370

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

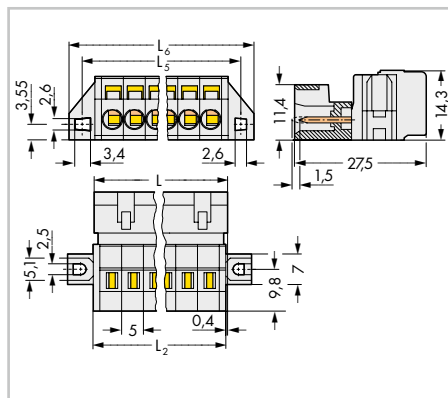
When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Male connectors MCS MIDI

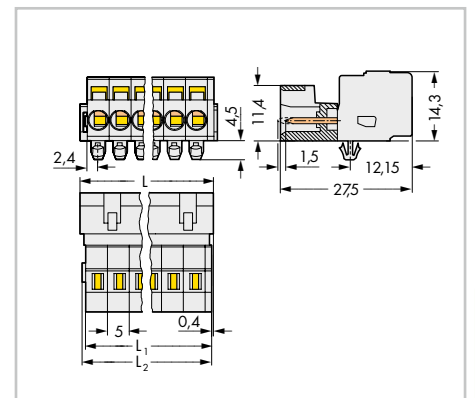
Pin spacing: 5 mm / 0.197 in.		With fixing flanges Pin spacing: 5 mm / 0.197 in.		With snap-in mounting feet Pin spacing: 5 mm / 0.197 in.	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A



L = (pole no. - 1) x pin spacing + 8.2 mm  
L<sub>1</sub> = L - 1.7 mm  
L<sub>2</sub> = L - 1.2 mm



L = (pole no. - 1) x pin spacing + 8.2 mm  
L<sub>2</sub> = L - 0.2 mm  
L<sub>3</sub> = L<sub>2</sub> + 5.8 mm  
L<sub>6</sub> = L<sub>2</sub> + 11.8 mm



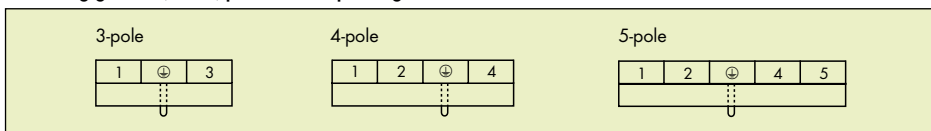
L = (pole no. - 1) x pin spacing + 8.2 mm  
L<sub>1</sub> = L - 1.7 mm  
L<sub>2</sub> = L - 1.2 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Male connector, light gray</b>			<b>Male connector with fixing flanges, light gray</b>			<b>Male connector with snap-in mounting feet, for 0.6 ... 1.2 mm plate thickness, 3.5 mm Ø mounting holes, light gray</b>		
	without preceding ground contact		with preceding ground contact and marking			without preceding ground contact	with preceding ground contact and marking	
2	721-602	100	2	721-602/019-000	100	2	721-602/018-000	100
3	721-603	100	3	721-603/019-000	50	3	721-603/018-000	100
4	721-604	100	4	721-604/019-000	50	4	721-604/018-000	100
5	721-605	50	5	721-605/019-000	50	5	721-605/018-000	50
6	721-606	50	6	721-606/019-000	50	6	721-606/018-000	50
7	721-607	50	7	721-607/019-000	50	7	721-607/018-000	50
8	721-608	50	8	721-608/019-000	50	8	721-608/018-000	50
9	721-609	50	9	721-609/019-000	25	9	721-609/018-000	50
10	721-610	50	10	721-610/019-000	25	10	721-610/018-000	50
11	721-611	25	11	721-611/019-000	25	11	721-611/018-000	25
12	721-612	25	12	721-612/019-000	25	12	721-612/018-000	25
13	721-613	25	13	721-613/019-000	25	13	721-613/018-000	25
14	721-614	25	14	721-614/019-000	25	14	721-614/018-000	25
15	721-615	25	15	721-615/019-000	25	15	721-615/018-000	25
16	721-616	25	16	721-616/019-000	10	16	721-616/018-000	25
20	721-620	10	20	721-620/019-000	10	20	721-620/018-000	10

For cutout dimensions, see page 377, Table 1.

**Accessory** **Page**

Preceding ground (earth) position and printing on the headers:



Mounting adapter for DIN 35 rail, 3 or more poles (209-137) 375

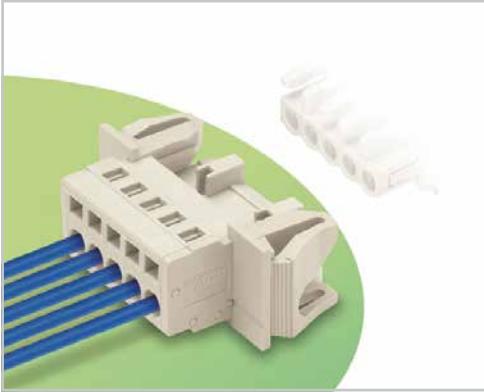
For other lengths, please contact factory.

# 5 Male Connectors with Snap-In Flanges

## Pin Spacing: 5 mm

### MCS MIDI

356



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Versions available with snap-in flanges for through-panel mounting
- 3 to 5-pole headers available as optional equipment with preceding ground (earth) contact
- 100% protected against mismatching
- With coding elements

#### Technical data:

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	15 A	-	10 A
Nominal current CSA	15 A	-	10 A

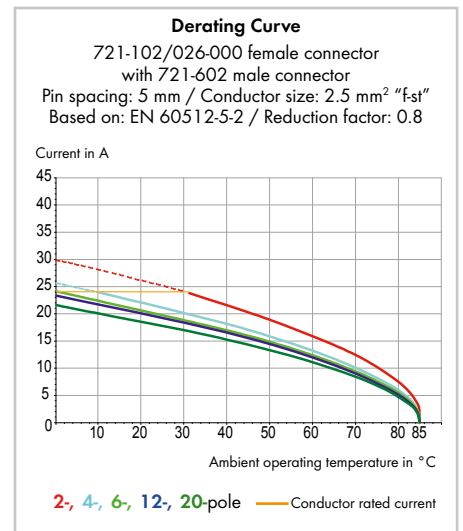
The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

#### Conductor data:

Connection technology	CAGE CLAMP®	
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup>	(with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup>	(with uninsulated ferrule)
AWG	28 ... 12	12: THHN, THWN
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.	

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>c</sub> )
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	



#### MCS MIDI accessories:

#### Page:

Marking accessories	512
Operating tools	366
Direct marking	362
Insulation stop	369
Coding keys	368
Strain relief housings	372
Strain relief plates	370

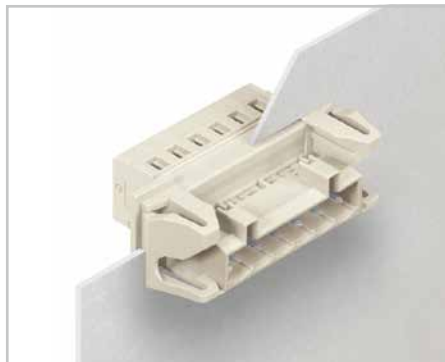
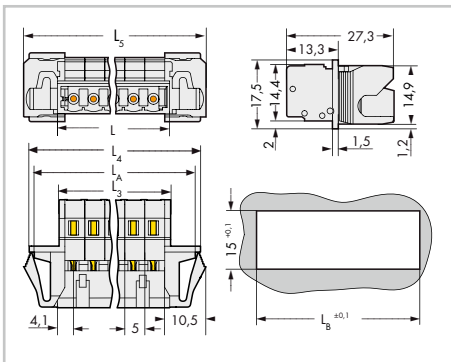
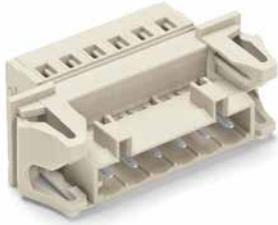
MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984.

When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

# Male Connectors with Snap-In Flanges MCS MIDI

Pin spacing: 5 mm / 0.197 in.

0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 12 A	300 V/15 A

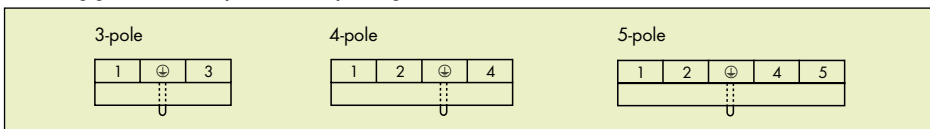


$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_3 = L - 0.2 \text{ mm}$   
 $L_4 = L_3 + 15.2 \text{ mm}$   
 $L_5 = L_3 + 18 \text{ mm}$   
 $L_A = L_3 + 12.6 \text{ mm}$   
 $L_B = L_3 + 13.2 \text{ mm}$

Male connectors with snap-in flanges for feedthrough applications, for 0.5 to 2.5 mm plate thickness.

Pole No.	Item No.	Pack. Unit
<b>Male connector with snap-in flanges, 5 mm pin spacing, light gray</b>		
	<b>without preceding ground contact</b>	<b>with preceding ground contact and marking</b>
2	721-602/114-000	50
3	721-603/114-000	721-603/114-042 50
4	721-604/114-000	721-604/114-042 50
5	721-605/114-000	721-605/114-042 50
6	721-606/114-000	50
7	721-607/114-000	25
8	721-608/114-000	25
9	721-609/114-000	25
10	721-610/114-000	25
11	721-611/114-000	25
12	721-612/114-000	25
13	721-613/114-000	25
14	721-614/114-000	25
15	721-615/114-000	10
16	721-616/114-000	10
20	721-620/114-000	10

Preceding ground (earth) position and printing on the headers:

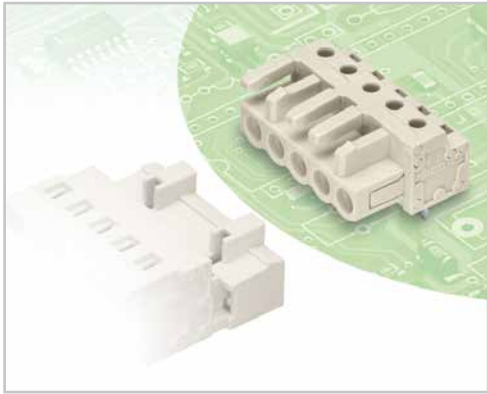


For other lengths, please contact factory.

# Female Connectors with Solder Pins

## Pin Spacing: 5 mm

### MCS MIDI



- Horizontal or vertical PCB mounting via straight or angled solder pins
- For “board-to-board” and “board-to-wire” connections
- PCB outputs are protected against accidental contact
- Easy-to-identify inputs and outputs
- 100% protected against mismatching
- With coding elements

**Technical data:**

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	15 A	-	10 A
Nominal current CSA	15 A	-	10 A

The MCS MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

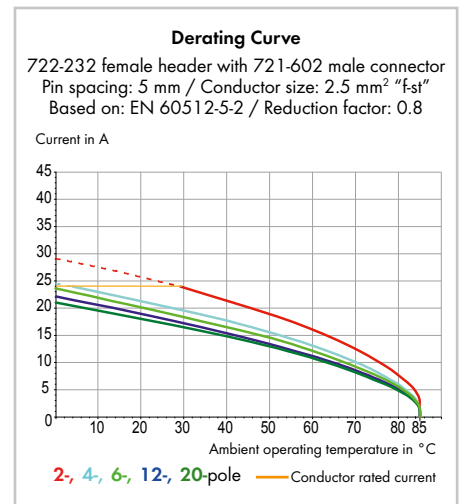
**Solder pin data:**

Solder pin: length/width	5 mm / 0.6 x 1 mm
Solder pin: drilled hole diameter	1.3 <sup>+0.1</sup> mm

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +85 °C
Contact material	Copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”	

MCS - MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.



**MCS MIDI accessories:**

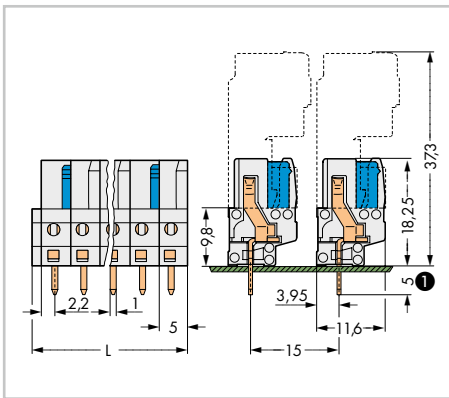
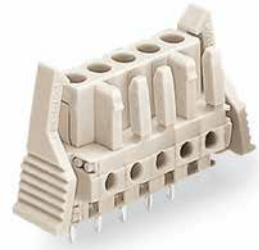
**Page:**

Marking accessories	512
Test plug adapter	374
Test plug	510

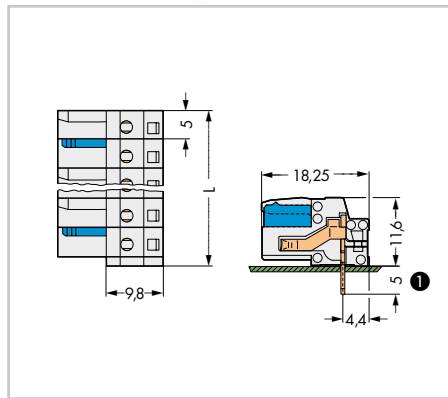


# Female Connectors with Solder Pins MCS MIDI

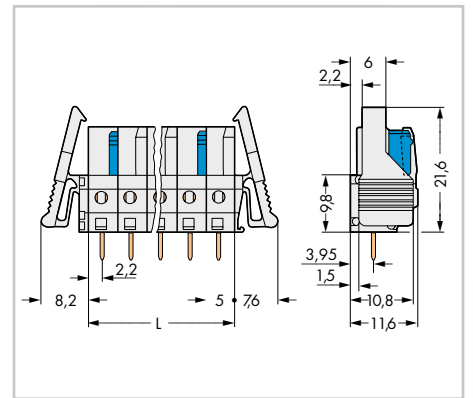
With straight solder pins Pin spacing: 5 mm / 0.197 in.		With angled solder pins Pin spacing: 5 mm / 0.197 in.		With straight solder pins and locking levers Pin spacing: 5 mm / 0.197 in.	
320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A



L = (pole no. x pin spacing) + 1.5 mm



L = (pole no. x pin spacing) + 1.5 mm



L = pole no. x pin spacing

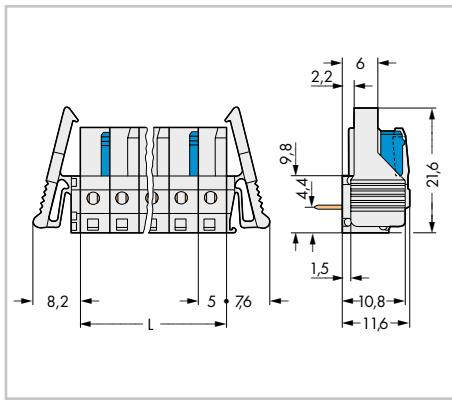
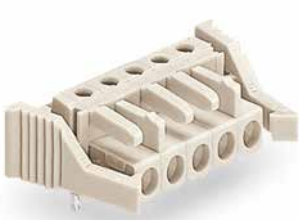
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female header with straight solder pins, light gray			Female header with angled solder pins, light gray			Female header with straight solder pins and locking levers, light gray		
2	722-132	100	2	722-232	100	2	722-132/039-000	100
3	722-133	100	3	722-233	100	3	722-133/039-000	50
4	722-134	100	4	722-234	100	4	722-134/039-000	50
5	722-135	100	5	722-235	100	5	722-135/039-000	50
6	722-136	50	6	722-236	50	6	722-136/039-000	50
7	722-137	50	7	722-237	50	7	722-137/039-000	50
8	722-138	50	8	722-238	50	8	722-138/039-000	50
9	722-139	50	9	722-239	50	9	722-139/039-000	25
10	722-140	50	10	722-240	50	10	722-140/039-000	25
11	722-141	25	11	722-241	25	11	722-141/039-000	25
12	722-142	25	12	722-242	25	12	722-142/039-000	25
13	722-143	25	13	722-243	25	13	722-143/039-000	25
14	722-144	25	14	722-244	25	14	722-144/039-000	25
15	722-145	25	15	722-245	25	15	722-145/039-000	25
16	722-146	25	16	722-246	25	16	722-146/039-000	10
20	722-150	10	20	722-250	10	20	722-150/039-000	10
2-pole female connectors - one latch only								

① MCS MIDI female headers with solder pins are also available with 3.8 mm pin projection upon request.  
Item no. suffix: .../045-000.

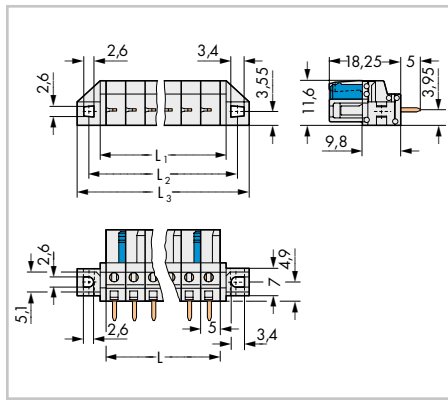
# 5 Female Connectors with Solder Pins MCS MIDI

360

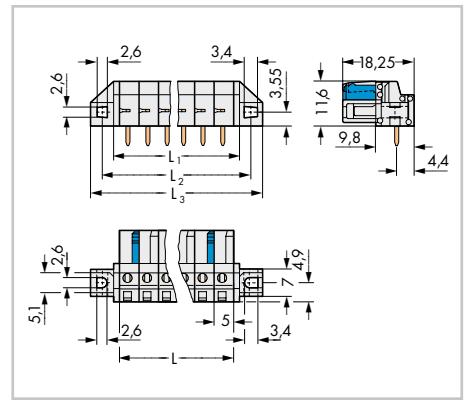
<b>With angled solder pins and locking levers</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		<b>With straight solder pins and fixing flanges</b> <b>Pin spacing: 5 mm / 0.197 in.</b>		<b>With angled solder pins and fixing flanges</b> <b>Pin spacing: 5 mm / 0.197 in.</b>	
320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A



L = pole no. x pin spacing



L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$

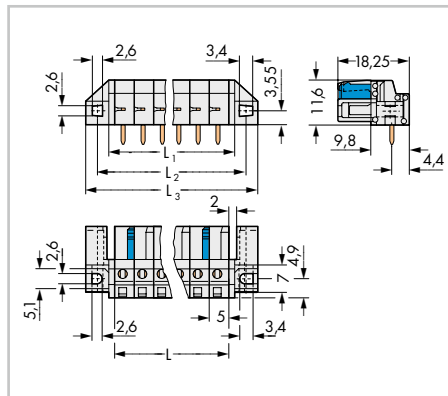
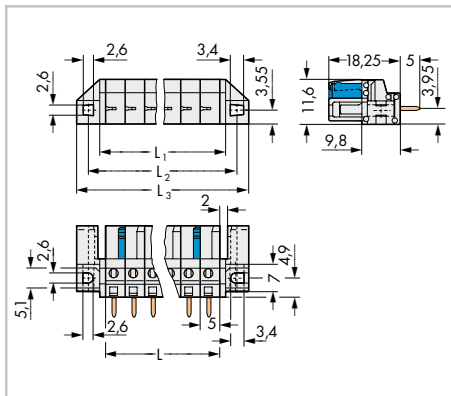
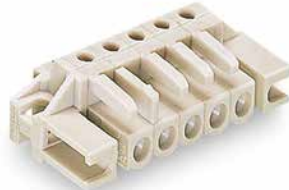
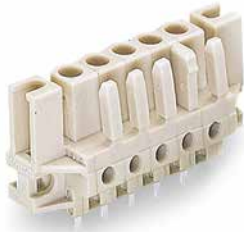


L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female header with angled solder pins and locking levers, light gray			Female header with straight solder pins and fixing flanges, for through-panel mounting, light gray			Female header with angled solder pins and fixing flanges, for through-panel mounting, light gray		
2	722-232/039-000	100	2	722-132/031-000	100	2	722-232/031-000	100
3	722-233/039-000	50	3	722-133/031-000	50	3	722-233/031-000	50
4	722-234/039-000	50	4	722-134/031-000	50	4	722-234/031-000	50
5	722-235/039-000	50	5	722-135/031-000	50	5	722-235/031-000	50
6	722-236/039-000	50	6	722-136/031-000	50	6	722-236/031-000	50
7	722-237/039-000	50	7	722-137/031-000	50	7	722-237/031-000	50
8	722-238/039-000	50	8	722-138/031-000	50	8	722-238/031-000	50
9	722-239/039-000	25	9	722-139/031-000	25	9	722-239/031-000	25
10	722-240/039-000	25	10	722-140/031-000	25	10	722-240/031-000	25
11	722-241/039-000	25	11	722-141/031-000	25	11	722-241/031-000	25
12	722-242/039-000	25	12	722-142/031-000	25	12	722-242/031-000	25
13	722-243/039-000	25	13	722-143/031-000	25	13	722-243/031-000	25
14	722-244/039-000	25	14	722-144/031-000	25	14	722-244/031-000	25
15	722-245/039-000	25	15	722-145/031-000	25	15	722-245/031-000	25
16	722-246/039-000	10	16	722-146/031-000	10	16	722-246/031-000	10
20	722-250/039-000	10	20	722-150/031-000	10	20	722-250/031-000	10
For cutout dimensions, see page 379, Table 3.								
2-pole female connectors - one latch only								

# Female Connectors with Solder Pins MCS MIDI

<b>With straight solder pins and spacers</b> <b>Pin spacing: 5 mm / 0.197 in.</b> 320 V/4 kV/2 12 A      300 V/15 A		<b>With angled solder pins and spacers</b> <b>Pin spacing: 5 mm / 0.197 in.</b> 320 V/4 kV/2 12 A      300 V/15 A	
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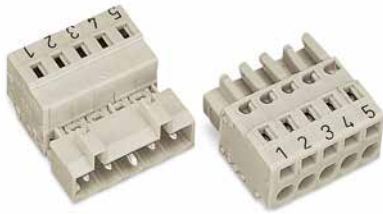


L = pole no. x pin spacing  
 $L_1 = L + 3 \text{ mm}$   
 $L_2 = L + 8.8 \text{ mm}$   
 $L_3 = L + 14.8 \text{ mm}$

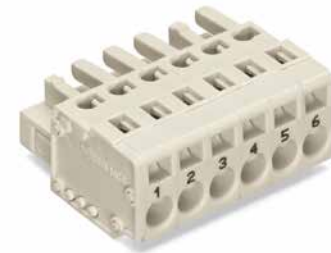
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Female header with straight solder pins and spacers, for flush mounting, light gray			Female header with angled solder pins and spacers, for flush mounting, light gray		
2	722-132/047-000	100	2	722-232/047-000	100
3	722-133/047-000	50	3	722-233/047-000	50
4	722-134/047-000	50	4	722-234/047-000	50
5	722-135/047-000	50	5	722-235/047-000	50
6	722-136/047-000	50	6	722-236/047-000	50
7	722-137/047-000	50	7	722-237/047-000	50
8	722-138/047-000	50	8	722-238/047-000	50
9	722-139/047-000	25	9	722-239/047-000	25
10	722-140/047-000	25	10	722-240/047-000	25
11	722-141/047-000	25	11	722-241/047-000	25
12	722-142/047-000	25	12	722-242/047-000	25
13	722-143/047-000	25	13	722-243/047-000	25
14	722-144/047-000	25	14	722-244/047-000	25
15	722-145/047-000	25	15	722-245/047-000	25
16	722-146/047-000	10	16	722-246/047-000	10
20	722-150/047-000	10	20	722-250/047-000	10
For cutout dimensions, see page 379, Table 3.					
2-pole female connectors - one latch only					

# Accessories Direct Marking MCS MIDI

<p><b>Direct marking</b></p> <p>of male and female connectors for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>	<p><b>Direct marking Pole no. – 1</b></p> <p>of male connectors for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>	<p><b>Direct marking 1 – pole no.</b></p> <p>of female connectors for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>
--	--	--



<p><b>Marking MCS MIDI Classic and MCS MIDI with Protection Against Mismatching</b></p>	<p><b>Marking Perpendicular to Conductor Entry Item No. Suffix: /...-044</b></p>	<p><b>Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047</b></p>
<p>Male and female connectors for conductor connection can be provided with direct marking of poles from 1 - number of poles at the factory.</p> <p>Two standard marking orientations are available:</p> <ol style="list-style-type: none"> <li>1. Marking perpendicular to conductor entry</li> <li>2. Marking parallel to conductor entry</li> </ol> <p>Other custom marking options are available upon request.</p> <p>Direct marking is not suitable for MCS male headers with solder pins. WAGO recommends pole marking on the PCB for these headers.</p> <p>Female headers with solder pins are exposed to aggressive flux agents during wave soldering. Select inkjet marking procedures are available upon request for these items.</p> <p>The marking type is always defined by the second 4-digit block of the item no. suffix for items with standard colors and materials. Example: 721-106/...-xxxx xxxx = Item no. suffix for factory direct marking</p>	<p><b>Ordering examples:</b></p> <p><b>Male connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/000-044</b></p> <p><b>Male connector with fixing flanges,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/019-044</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/019-044/034-000</b></p>	<p><b>Ordering examples:</b></p> <p><b>Female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/026-047</b></p> <p><b>Female connector with locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/037-047</b></p> <p><b>Female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/026-047/034-000</b></p> <p><b>Female connector with locking levers and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/037-047/034-000</b></p>



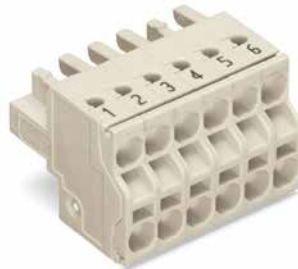
<p><b>Marking Parallel to Conductor Entry Item No. Suffix: /...-9034</b></p>	<p><b>Marking Parallel to Conductor Entry Item No. Suffix: /...-9037</b></p>
<p><b>Ordering examples:</b></p> <p><b>Male connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/000-9034</b></p> <p><b>Male connector with fixing flanges,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/019-9034</b></p> <p><b>Male connector with fixing flanges and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-606/019-9034/034-000</b></p>	<p><b>Ordering examples:</b></p> <p><b>Female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/026-9037</b></p> <p><b>Female connector with locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/037-9037</b></p> <p><b>Female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/026-9037/034-000</b></p> <p><b>Female connector with locking levers and strain relief plate,</b> 3.5 mm pin spacing, 6-pole, light gray <b>721-106/037-9037/034-000</b></p>

# Accessories

## Direct Marking

### MCS MIDI

<p><b>Direct marking</b> <b>1 – pole no.</b></p> <p>of female connectors with push-buttons for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>	<p><b>Direct marking</b> <b>1 – pole no.</b></p> <p>of 2-conductor female connectors for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>	<p><b>Direct marking</b> <b>1 – pole no.</b></p> <p>of angled female connectors for conductor termination</p> <p>Pin spacing: 5/5.08/7.5/7.62 mm</p>
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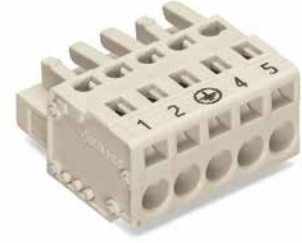
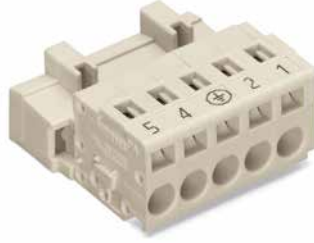
Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047	Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047	Marking Perpendicular to Conductor Entry Item No. Suffix: /...-047
<p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/026-047</b></p>	<p><b>Ordering examples:</b></p> <p><b>2-conductor female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/026-047</b></p>	<p><b>Ordering examples:</b></p> <p><b>Angled female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>722-206/026-047</b></p>
<p><b>Female connector with push-buttons and locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/037-047</b></p>	<p><b>2-conductor female connector with locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/037-047</b></p>	<p><b>Angled female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>722-206/026-047/034-000</b></p>
<p><b>Female connector with push-buttons and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-106/026-047/134-000</b></p>	<p><b>2-conductor female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/026-047/0134-000</b></p>	
<p><b>Female connector with push-buttons, locking levers and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/037-047/134-000</b></p>		



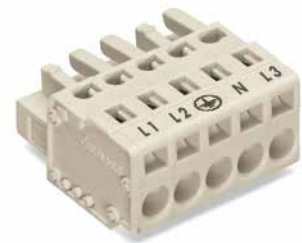
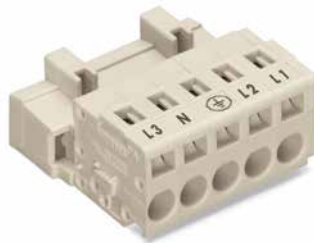
Marking Parallel to Conductor Entry Item No. Suffix: /...-9037	Marking Parallel to Conductor Entry Item No. Suffix: /...-9037	Marking Parallel to Conductor Entry Item No. Suffix: /...-9037
<p><b>Ordering examples:</b></p> <p><b>Female connector with push-buttons,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/026-9037</b></p>	<p><b>Ordering examples:</b></p> <p><b>2-conductor female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/026-9037</b></p>	<p><b>Ordering examples:</b></p> <p><b>Angled female connector,</b> 5 mm pin spacing, 6-pole, light gray <b>722-206/026-9037</b></p>
<p><b>Female connector with push-buttons and locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/037-9037</b></p>	<p><b>2-conductor female connector with locking levers,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/037-9037</b></p>	<p><b>Angled female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>722-206/026-9037/034-000</b></p>
<p><b>Female connector with push-buttons and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/026-9037/134-000</b></p>	<p><b>2-conductor female connector with strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>721-2106/026-9037/0134-000</b></p>	
<p><b>Female connector with push-buttons, locking levers and strain relief plate,</b> 5 mm pin spacing, 6-pole, light gray <b>2721-106/037-9037/0134-000</b></p>		

# Accessories Direct Marking MCS MIDI

<p><b>Direct marking 1 – pole no.</b></p> <p>of angled female connectors for panel mounting</p> <p>Pin spacing: 5/7.5 mm</p>	<p><b>Direct marking Pole assignment</b></p> <p>of 3- to 5-pole male connectors for conductor termination with preceding ground contact</p> <p>100% protected against mismatching</p>	<p><b>Direct marking Pole assignment</b></p> <p>of 3- to 5-pole female connectors for conductor termination, suitable for male connectors with preceding ground contact</p> <p>100% protected against mismatching</p>
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<p><b>Marking Perpendicular to Conductor Entry</b> Item No. Suffix: /... - 047</p> <p><b>Ordering examples:</b></p> <p><b>Angled female connector with fixing flanges, for panel mounting, 5 mm pin spacing, 6-pole, light gray</b> 721-306/031-047</p> <p><b>Angled female connector with snap-in mounting feet, for panel mounting</b> 5 mm pin spacing, 6-pole, gray 721-306/008-047</p>	<p><b>Marking Perpendicular to Conductor Entry</b></p> <p>3- to 5-pole 721 and 723 Series male connectors for conductor termination are available with the following markings:</p> <p>3-pole: 3 - ⊕ - 1 4-pole: 4 - ⊕ - 2 - 1 5-pole: 5 - 4 - ⊕ - 2 - 1</p> <p>Item no. suffix: ... / ... -042</p> <p><b>Ordering example:</b></p> <p><b>Male connector,</b> 5 mm pin spacing, 5-pole, light gray 721-605/000-042</p>	<p><b>Marking Perpendicular to Conductor Entry</b></p> <p>3- to 5-pole 721, 2721, 722 and 723 Series female connectors, suitable for male connectors with preceding ground contact, are available with the following markings:</p> <p>3-pole: 1 - ⊕ - 3 4-pole: 1 - 2 - ⊕ - 4 5-pole: 1 - 2 - ⊕ - 4 - 5</p> <p>Item no. suffix: ... / ... -045</p> <p><b>Ordering example:</b></p> <p><b>Female connector,</b> 5 mm pin spacing, 5-pole, light gray 721-105/026-045</p>
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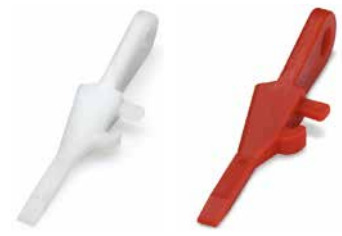


<p><b>Marking Perpendicular to Conductor Entry</b> Item No. Suffix: /. /... - 9037</p> <p><b>Ordering examples:</b></p> <p><b>Angled female connector with fixing flanges for panel mounting</b> 5 mm pin spacing, 6-pole, light gray 721-306/031-9037</p> <p><b>Angled female connector with snap-in mounting feet, for panel mounting</b> 5 mm pin spacing, 6-pole, gray 721-306/008-9037</p>	<p><b>Marking Perpendicular to Conductor Entry</b></p> <p>3-pole: N - ⊕ - L 1 4-pole: L 2 - ⊕ - N - L 1 5-pole: L 3 - N - ⊕ - L 2 - L 1</p> <p>Item no. suffix: ... / ... -041</p> <p><b>Ordering example:</b></p> <p><b>Male connector with snap-in mounting feet,</b> 7.5 mm pin spacing, 5-pole, light gray 723-605/018-041</p> <p><b>“Pole no. – 1” marking with preceding ground contact</b> Item no. suffix: ... / ... -043</p> <p><b>Without marking with preceding ground contact</b> Item no. suffix: ... / ... -040</p>	<p><b>Marking Perpendicular to Conductor Entry</b></p> <p>3-pole: L 1 - ⊕ - N 4-pole: L 1 - N - ⊕ - L 2 5-pole: L 1 - L 2 - ⊕ - N - L 3</p> <p>Item no. suffix: ... / ... -046</p> <p><b>Ordering example:</b></p> <p><b>Female connector,</b> 7.5 mm pin spacing, 5-pole, light gray 721-202/026-046</p> <p><b>“1 – pole no.” marking</b> Item no. suffix: ... / ... -047</p>
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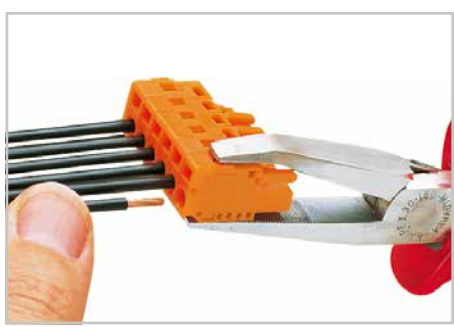


# Accessories Operating Tools MCS MIDI

<b>Operating tool</b> for male and female connectors equipped with CAGE CLAMP®	<b>Operating levers</b> for male and female connectors equipped with CAGE CLAMP®	<b>Operating tools</b> for male and female connectors equipped with CAGE CLAMP®
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Operating tool, 5/5.08 mm and 7.5/7.62 mm pin spacing			Operating lever, 5/5.08 mm and 7.5/7.62 mm pin spacing			Operating tool, 5/5.08 mm and 7.5/7.62 mm pin spacing		
red	210-250	1	white	231-131	100 (4 x 25)	white	231-159	100 (4 x 25)
			red	231-291	100 (4 x 25)	red	231-231	100 (4 x 25)



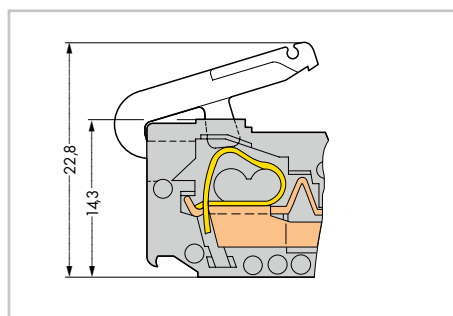
Inserting conductors via operating tool.



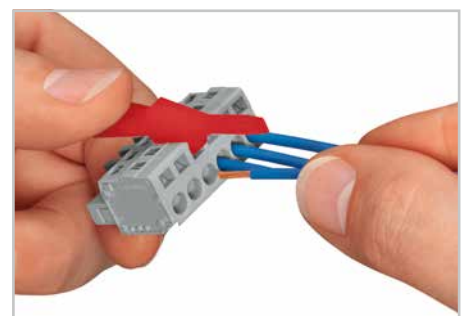
Inserting conductors via operating lever.



Inserting conductors - Operation parallel to conductor entry.



Not suitable for panel mounting with angled female connectors.



Inserting conductors - Operation perpendicular to conductor entry.



# Accessories

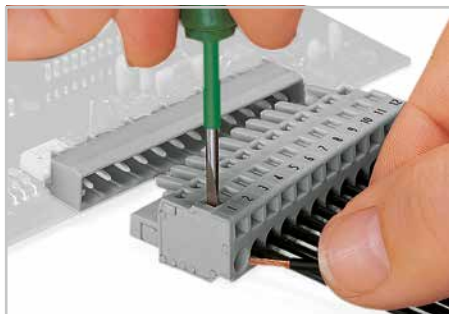
## Operating Tools

### MCS MIDI

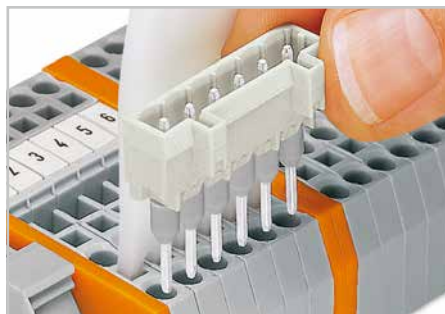
<b>Operating tool</b> with partially insulated shaft Type 1	<b>Operating tools</b> Operation parallel to conductor entry	<b>Operating tool</b> Operation perpendicular to conductor entry
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Item No.	Pack. Unit	Type	Pin Spacing	Item No.	Pack. Unit	Type	Pin Spacing	Item No.	Pack. Unit
<b>Operating tool</b> with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 5/5.08 mm and 7.5/7.62 mm pin spacing		<b>Operating tool</b> , insulated, operation perpendicular to conductor entry, suitable for male and female connectors equipped with CAGE CLAMP® Also suitable for 280 Series rail-mounted terminal blocks				<b>Operating tool</b> , insulated, operation perpendicular to conductor entry, suitable for male and female connectors equipped with CAGE CLAMP®			
<b>210-720</b>	1								
		1-way	5/5.08 mm	<b>209-130</b>	1	2-way	5/5.08 mm	<b>209-132</b>	1
		2-way	5/5.08 mm	<b>280-432</b>	1				
		3-way	5/5.08 mm	<b>280-433</b>	1				
		4-way	5/5.08 mm	<b>280-434</b>	1				
		5-way	5/5.08 mm	<b>280-435</b>	1				
		6-way	5/5.08 mm	<b>280-436</b>	1				
		7-way	5/5.08 mm	<b>280-437</b>	1				
		8-way	5/5.08 mm	<b>280-438</b>	1				
		9-way	5/5.08 mm	<b>280-439</b>	1				
		10-way	5/5.08 mm	<b>280-440</b>	1				

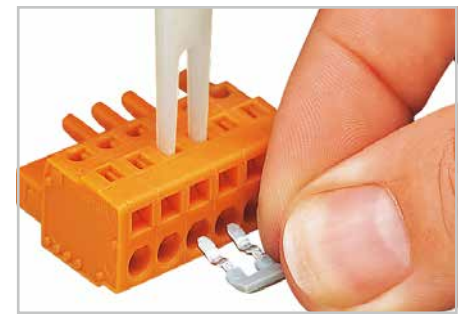


Inserting conductor via 3.5 x 0.5 mm screwdriver – Actuation parallel to conductor entry.

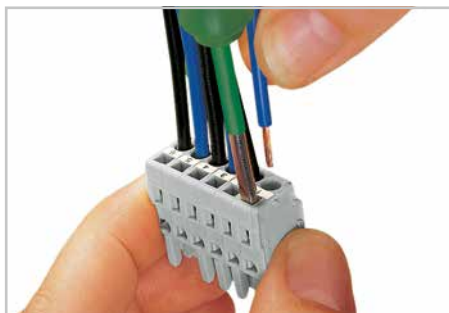


Operating tool used with 280 Series rail-mounted terminal blocks:  
 For inserting male and female connectors with long contact pins into 280 Series rail-mounted terminal blocks (maximum 10-pole for in-the-field assembly).  
 Operating tool used with CAGE CLAMP®-equipped male and female connectors (5/5.08 mm pin spacing):  
 For opening up to 10 CAGE CLAMP® units simultaneously, e.g., when inserting 231-90x comb-style jumper bars.

Wiring male and female connectors should be performed in a suitable mount.



Operating tool for 231-902 comb-style jumper bars.



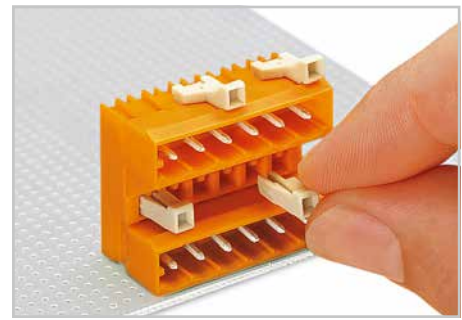
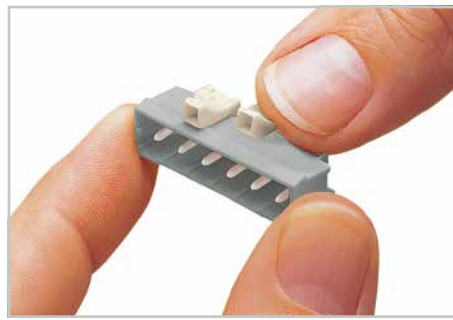
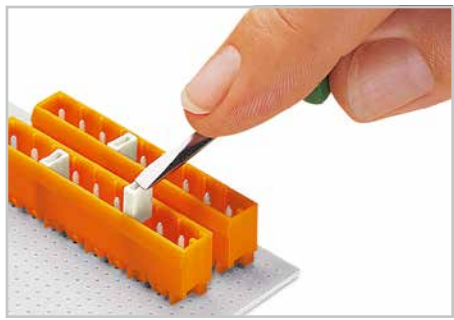
Inserting conductor via 3.5 x 0.5 mm screwdriver – Actuation parallel to conductor entry.

# Accessories Separators, Coding Keys and Coding Pins MCS MIDI

<b>Separators for group formation</b> for male headers	<b>Coding keys</b> for male headers	<b>Coding pins</b> for male headers for double-deck assembly, to be snapped into lower level
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Separator for headers, for group formation</b>			<b>Coding keys for headers, 5/5.08 mm pin spacing</b>			<b>Coding pin for male headers for double-deck assembly, snaps into lower level</b>		
light gray	<b>231-500</b>	200 (2 x 100)	light gray	<b>231-129</b>	100	light gray	<b>231-160</b>	100
			<b>Coding keys for headers, 7.5/7.62 mm pin spacing</b>					
			light gray	<b>231-130</b>	100			



Separators for group formation are inserted directly into the MCS MIDI Classic male headers. Group formation using separators means that at least 1 pole is lost on the header. Female connectors with integrated end plates are available for formation of groups without loss of any poles for pin spacing of 5/5.08 mm. Formation of groups without the loss of any poles is possible without using separators for pin spacing of 7.5/7.62 mm.

Snap-on coding key for male headers and CAGE CLAMP<sup>®</sup>-equipped male connectors. The last pole of male and female connectors with 7.5 mm pin spacing has a width of 5 mm; for 7.62 mm pin spacing, the pole width is 5.08 mm. Always use a 231-129 coding key for coding this pole.

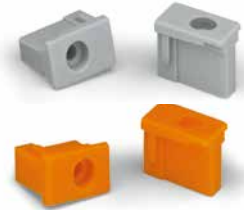
Coding lower male header in combination with male header for double-deck assembly.

# Accessories

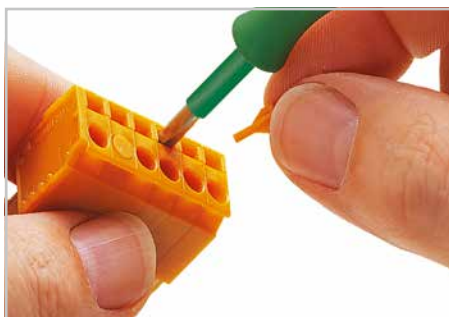
## Lockout Caps, Insulation Stops and Fixing Elements

### MCS MIDI

<b>Lockout caps</b> for male and female connectors equipped with CAGE CLAMP®	<b>Insulation stops</b> for male and female connectors equipped with CAGE CLAMP® or Push-in CAGE CLAMP®	<b>Fixing elements</b> for angled male headers with solder pins
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Color	Item No.	Pack. Unit	Color	Conductor Size	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Lockout cap</b>			<b>Insulation stop, 5/5.08 mm pin spacing</b>			<b>Fixing element</b>			
gray	231-668	500 (5 x 100)	white	0.08 ... 0.2 mm <sup>2</sup> "sol." 0.08 ... 0.14 mm <sup>2</sup> "fst"	231-670	200	gray	231-193	100
orange	231-669	500 (5 x 100)	light gray	0.25 ... 0.5 mm <sup>2</sup>	231-671	200	orange	231-393	100
			dark gray	0.75 ... 1 mm <sup>2</sup>	231-672	200			
			<b>Insulation stop, 7.5/7.62 mm pin spacing</b>			<b>Screws for fixing elements</b>			
			white	0.08 ... 0.2 mm <sup>2</sup> "sol." 0.08 ... 0.14 mm <sup>2</sup> "fst"	231-673	200	<b>Screw with nut</b>		
			light gray	0.25 ... 0.5 mm <sup>2</sup>	231-674	200	M 2 x 12	231-195	100
			dark gray	0.75 ... 1 mm <sup>2</sup>	231-675	200	<b>Tapping screw</b>		
							B 2.2 x 13	231-194	100
							Drilled hole, 1.8 mm Ø		



Sealing unnecessary clamping points in CAGE CLAMP®-equipped male and female connectors (e.g., when doubling the pin spacing to meet clearance and creepage distance requirements, or when higher rated voltage is required). Lockout pins are not suitable for panel-mount, angled female connectors.



Wiring of PLC and microprocessor control systems also employs small or very small fine-stranded conductors. The buckling strength of these conductors is so low that they can bend in the clamp when they come into contact with the stop, meaning the insulation can penetrate into the clamping unit be clamped with the conductor.

This is possible with all of the clamping systems currently on the market and results in time-consuming troubleshooting.

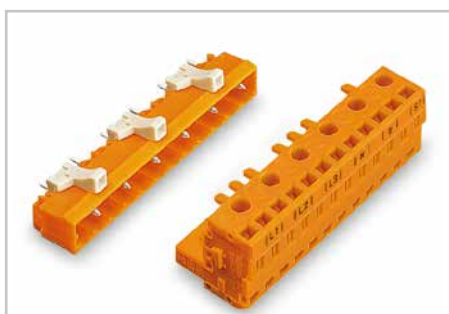
Insulation stop for connectors reliably ensure proper termination. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splaying. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

Insulation stops are available as dividable 5-pole strips for MCS MIDI male and female connectors. Insulation stop usage will not affect the conductor strip lengths for the aforementioned connectors.

Insulation stops are not suitable for panel-mounted female connectors.



Fixing elements enhance connection reliability between male headers with angled solder pins and the PCB. This substantially reduces mechanical stress on both solder pins and joints, particularly when dealing with small lengths and frequent mating cycles.



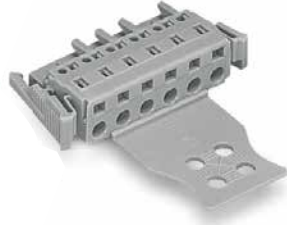
10.16 mm pin spacing available upon request.

# Accessories

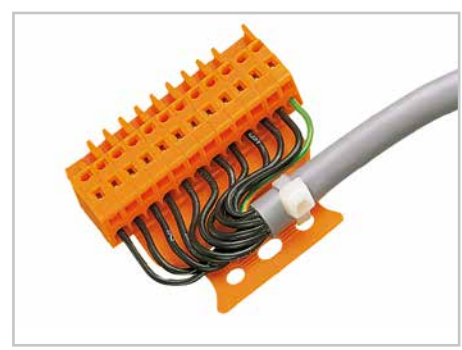
## Strain Relief Plates (Factory-Assembled Only)

### MCS MIDI

<p><b>Strain relief plates, factory-assembled</b> Pin spacing: 5/5.08 mm</p> <p>for male and female connectors equipped with CAGE CLAMP®</p>	<p><b>Strain relief plates, factory-assembled</b> Pin spacing: 7.5/7.62 mm</p> <p>for male and female connectors equipped with CAGE CLAMP®</p>
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Width	Pole No.	Item No.	Width	Pole No.	Item No.
<b>Strain relief plate, pre-assembled gray/orange</b>			<b>Strain relief plate, pre-assembled gray/orange</b>		
11.5 mm	2 ... 3	.../032-000	11.5 mm	2	.../032-000
20 mm	4 ... 5	.../033-000	20 mm	3 ... 5	.../033-000
30 mm	6 ... 9	.../034-000	30 mm	6 ... 7	.../034-000
50 mm	10 ... 24	.../035-000	50 mm	8 ... 16	.../035-000
<b>Ordering example:</b> Male connector with strain relief plate. 5 mm pin spacing, 8-pole, gray: <b>721-608/034-000</b>			<b>Ordering example:</b> Angled female connector with strain relief plate, 7.62 mm pin spacing, 5-pole, orange: <b>732-125/026-000/033-000</b>		
<b>Ordering example:</b> Female connector with strain relief plate, 5 mm pin spacing, 8-pole, gray: <b>231-108/026-000/034-000</b>					



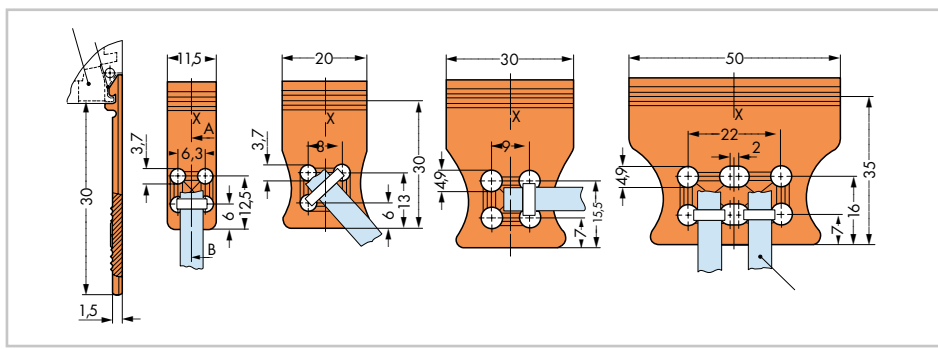
Female connector with strain relief plate, 5.08 mm pin spacing, 12-pole, orange: **231-312/026-000/035-000.**



Female connector with strain relief plate, 5 mm pin spacing, 3-pole, gray: **231-103/026-000/032-000.**

Both CAGE CLAMP®-equipped male and female connectors can be fitted with a strain relief plate. The strain relief plates must be pre-assembled (glued) prior to delivery for connector models equipped with CAGE CLAMP® connection. Four different plate widths are available for the above allocation of the strain relief plates to the specific pin spacing and number of poles. An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." of the male or female connector. Angled female connectors for panel mounting cannot be fitted with strain relief plates.

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann. The width of the cable ties must correspond to the hole dimensions indicated for the strain relief plates.



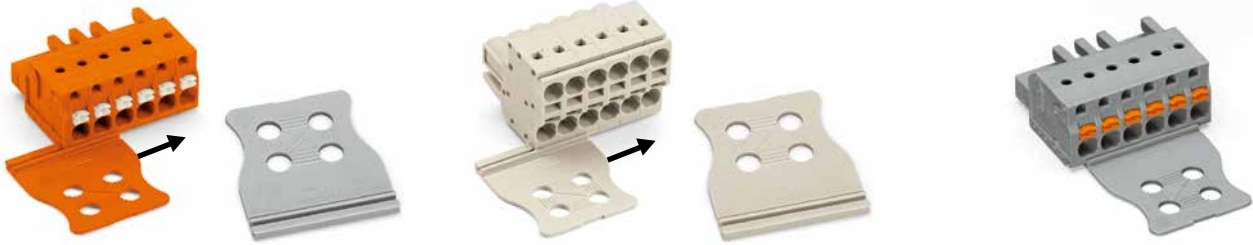
Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

# Accessories

## Strain Relief Plates (for In-The-Field Assembly or Factory-Assembled)

### MCS MIDI

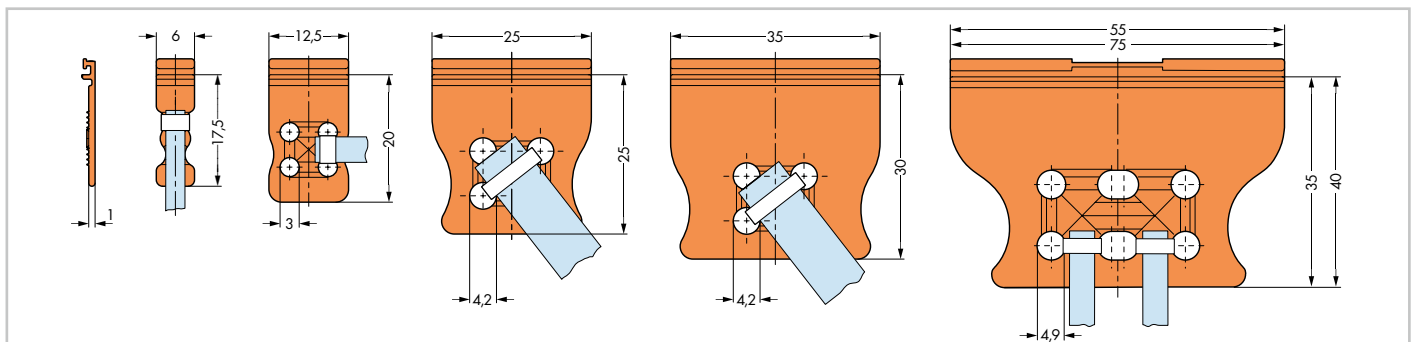
<p><b>Strain relief plates for in-the-field assembly</b> Pin spacing: 5/5.08 mm / 0.197/0.2 in.</p> <p>for female connectors (2721, 2231 Series and 2-cond. 231, 721 Series) equipped with Push-in CAGE CLAMP®</p>	<p><b>Strain relief plates for in-the-field assembly</b> Pin spacing: 7.5/7.62 mm / 0.295/0.3 in.</p> <p>for female connectors (2721, 2231 Series and 2-cond. 231, 721 Series) equipped with Push-in CAGE CLAMP®</p>	<p><b>Strain relief plates, factory-assembled</b></p> <p>for female connectors (2721, 2231 Series and 2-cond. 231, 721 Series) equipped with Push-in CAGE CLAMP®</p>
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Width	Pole No.	Item No.	Pack. Unit	Width	Pole No.	Item No.	Pack. Unit	Width	Item No. Suffixes:
<b>Strain relief plate, light gray</b>				<b>Strain relief plate, light gray</b>				<b>Strain relief plate, pre-assembled</b>	
6 mm	2	734-127	100 (4 x 25)	6 mm		734-127	100 (4 x 25)	6 mm	.../132-000
12.5 mm	3 ... 4	734-128	100 (4 x 25)	12.5 mm	2 ... 3	734-128	100 (4 x 25)	12.5 mm	.../133-000
25 mm	5 ... 7	734-129	100 (4 x 25)	25 mm	4 ... 6	734-129	100 (4 x 25)	25 mm	.../134-000
35 mm	8 ... 11	734-126	100 (4 x 25)	35 mm	7 ... 9	734-126	100 (4 x 25)	35 mm	.../135-000
55 mm	12 ... 16	734-426	50 (2 x 25)	55 mm	10 ... 12	734-426	50 (2 x 25)	55 mm	.../136-000
75 mm	17 ... 24	734-427	50 (2 x 25)	75 mm	13 ... 16	734-427	50 (2 x 25)	75 mm	.../137-000
<b>Strain relief plate, gray</b>				<b>Strain relief plate, gray</b>				<b>Ordering example:</b> 2-conductor female connector with strain relief plate, 5 mm pin spacing, 8-pole, gray: <b>231-2108/026-000/135-000</b>	
6 mm	2	734-327	100 (4 x 25)	6 mm		734-327	100 (4 x 25)	<b>Ordering example:</b> Female connector with push-buttons and strain relief plate, 7.5 mm pin spacing, 8-pole, gray: <b>2231-208/026-000/135-000</b>	
12.5 mm	3 ... 4	734-328	100 (4 x 25)	12.5 mm	2 ... 3	734-328	100 (4 x 25)		
25 mm	5 ... 7	734-329	100 (4 x 25)	25 mm	4 ... 6	734-329	100 (4 x 25)		
35 mm	8 ... 11	734-326	100 (4 x 25)	35 mm	7 ... 9	734-326	100 (4 x 25)		
55 mm	12 ... 16	734-430	50 (2 x 25)	55 mm	10 ... 12	734-430	50 (2 x 25)		
75 mm	17 ... 24	734-431	50 (2 x 25)	75 mm	13 ... 16	734-431	50 (2 x 25)		
<b>Strain relief plate, orange</b>				<b>Strain relief plate, orange</b>				Female connectors with Push-in CAGE CLAMP® can be retrofitted with a strain relief plate or pre-assembled with one at the factory. These strain relief plates are available in six different widths and are allocated to the specific pin spacing and pole number (as shown left). An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of connector (see ordering examples).	
6 mm	2	734-227	100 (4 x 25)	6 mm		734-227	100 (4 x 25)	The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways.	
12.5 mm	3 ... 4	734-228	100 (4 x 25)	12.5 mm	2 ... 3	734-228	100 (4 x 25)		
25 mm	5 ... 7	734-229	100 (4 x 25)	25 mm	4 ... 6	734-229	100 (4 x 25)		
35 mm	8 ... 11	734-226	100 (4 x 25)	35 mm	7 ... 9	734-226	100 (4 x 25)		
55 mm	12 ... 16	734-428	50 (2 x 25)	55 mm	10 ... 12	734-428	50 (2 x 25)		
75 mm	17 ... 24	734-429	50 (2 x 25)	75 mm	13 ... 16	734-429	50 (2 x 25)		

WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.

The width of the cable ties must correspond to the hole dimensions indicated for the strain relief plates.

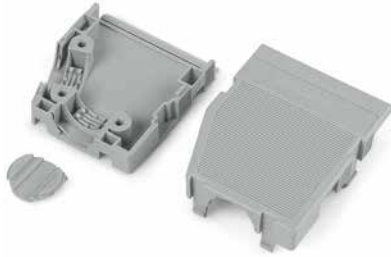


# Accessories

## Strain relief housings

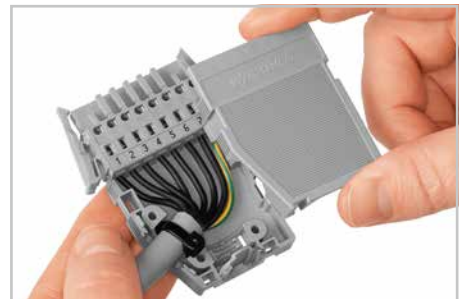
### MCS MIDI

<p><b>Snap-on type strain relief housings</b> Pin Spacing 5 mm/0.197 in.</p> <p>for straight and angled male and female connectors equipped with CAGE CLAMP®</p>	<p><b>Snap-on type strain relief housings</b> Pin spacing: 5.08 mm/0.2 in.</p> <p>for straight and angled male and female connectors equipped with CAGE CLAMP®</p>	
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Snapping the cover into the unused cable outlet.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<p><b>Snap-on type strain relief housing,</b> suitable for 5 mm pin spacing, gray consisting of strain relief support and housing</p>			<p><b>Snap-on type strain relief housing,</b> suitable for 5.08 mm pin spacing, orange consisting of strain relief support and housing</p>		
2	232-602	25	2	232-632	25
3	232-603	25	3	232-633	25
4	232-604	25	4	232-634	25
5	232-605	25	5	232-635	25
6	232-606	25	6	232-636	25
7	232-607	25	7	232-637	25
8	232-608	25	8	232-638	25
9	232-609	25	9	232-639	25
10	232-610	25	10	232-640	25
12	232-612	25	12	232-642	25
			16	232-646	25



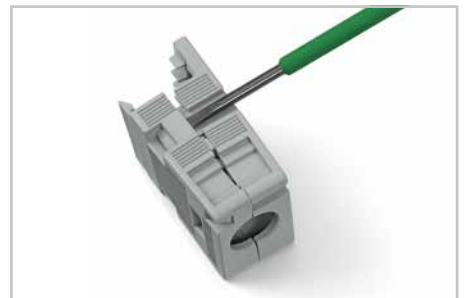
Snapping on the strain relief housing, demonstrated with a female connector with locking levers. Cable exits laterally. Strain relief by cable tie (up to a width of 4 mm).

2- to 3-pole, only suitable for cable ties, 1 cable outlet (rear side), max. 3.6 mm cable tie width  
 4- to 6-pole, suitable for cable clamp, 1 x cable outlet (rear side)  
 7- to 8-pole, suitable for cable clamp, 1 x cable outlet (rear side) and 1 x cable outlet (side), 1 cover (included)  
 9- to 16-pole, suitable for cable clamp, 1 x cable outlet (rear side) and 2 x cable outlets (side), 2 covers (included)

Accessories	Pole No.	Item No.	Pack. Unit
<b>Cable clamp, for strain relief</b>			
	4- to 6-pole	209-177	25
	7 or more poles	209-174	25
<b>Fixing screws, for cable clamp</b>			
	4- to 6-pole	209-176	50
	7 or more poles	209-173	50



Snapping on a strain relief housing, demonstrated with a male connector. Cable exits laterally. Strain relief by cable clamp.



Disassembling a strain relief housing is only possible via operating tool (e.g., 210-719).

#### Strain Relief Housing Dimensions

Pole No.	Max. Cable Diameter		L <sub>4</sub> Pin Spacing		L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>5</sub>
	Pole No.	mm Ø	5	5,08				
2	2	6.0	13	13	59.0	55.5	58.0	41.5
3	3	7.5	18	18	59.0	55.5	58.0	41.5
4	4	9.5	23	23	59.0	55.5	58.0	41.5
5	4 ... 6	9.5	28	28	59.0	55.5	58.0	41.5
6	7 ... 16	14.0	33	33	59.0	55.5	58.0	41.5
7			38	38	71.5	68.0	70.5	54.0
8			43	43	71.5	68.0	70.5	54.0
9			48	48.7	71.5	68.0	70.5	54.0
10			53	53.8	71.5	68.0	70.5	54.0
12			63	64	71.5	68.0	70.5	54.0
16			85	85	71.5	68.0	70.5	54.0

Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

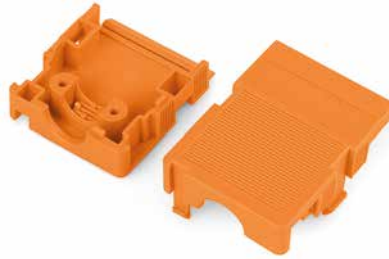
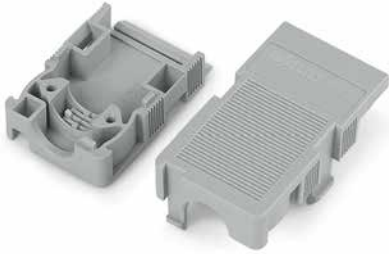
WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.

# Accessories

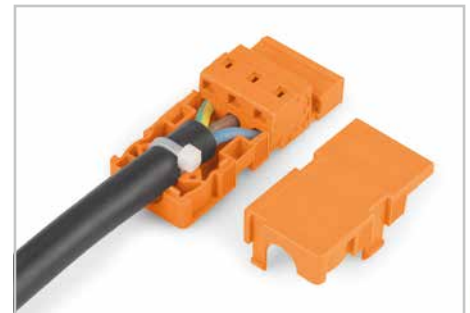
## Strain Relief Housings

### MCS MIDI

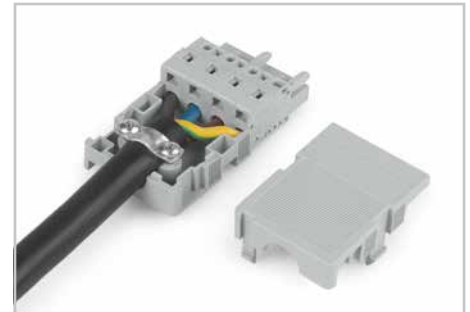
<p><b>Snap-on type strain relief housings</b> Pin spacing: 7.5 mm/0.295 in.</p> <p>for straight and angled male and female connectors equipped with CAGE CLAMP®</p>	<p><b>Snap-on type strain relief housings</b> Pin Spacing: 7.62 mm/0.3 in.</p> <p>for straight and angled male and female connectors equipped with CAGE CLAMP®</p>
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Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Snap-on type strain relief housing, suitable for 7.5 mm pin spacing, gray consisting of strain relief support and housing			Snap-on type strain relief housing, suitable for 7.62 mm pin spacing, gray consisting of strain relief support and strain relief housing		
2	232-662	25	2	232-682	25
3	232-663	25	3	232-683	25
4	232-664	25	4	232-684	25
5	232-665	25	5	232-685	25
7	232-667	25	7	232-687	25
10	232-670	25			



3-pole female connector with strain relief housing.





4-pole male connector with strain relief housing.



Gray strain relief plates are used for light gray 721, 722 and 723 Series CAGE CLAMP®-equipped male and female connectors.

2-pole, only suitable for cable ties, 1 cable outlet (rear side), max. 3.6 mm cable tie width  
 4- to 6-pole, suitable for cable clamp, 1 x cable outlet (rear side)  
 5-pole, suitable for cable clamp, 1 x cable outlet (rear side) and 1 x cable outlet (side), 1 cover (included)  
 7-pole, suitable for cable clamp, 1 x cable outlet (rear side) and 2 x cable outlets (side), 2 covers (included)

Accessories	Pole No.	Item No.	Pack. Unit
<b>Cable clamp, for strain relief</b>			
	3- and 4-pole	209-177	25
	5 or more poles	209-174	25
<b>Fixing screws, for cable clamp</b>			
	3- and 4-pole	209-176	50
	5 or more poles	209-173	50

Strain Relief Housing Dimensions		Pole No.	L <sub>4</sub>		L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>5</sub>
Max. Cable Diameter	Pole No.		Pin Spacing					
		mm Ø	7.5	7.62				
	2	6.0	15.5	15.5	59.0	55.5	58.0	41.5
	3	9.5	23	23	59.0	55.5	58.0	41.5
	4	9.5	30.5	30.5	59.0	55.5	58.0	41.5
	5	14.0	38	38	71.5	68.0	70.5	54.0
	7	14.0	53	53.8	71.5	68.0	70.5	54.0


WAGO does not offer the recommended cable ties and cable binding tools; those are available from suppliers such as Hellermann.

# Accessories

## Test Plug Adapter

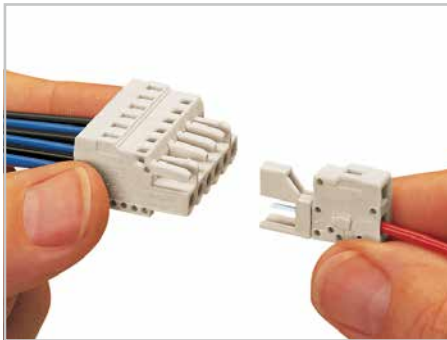
### MCS MIDI

Test plug adapters for female connectors

0.08 ... 2.5 mm<sup>2</sup> | 28 ... 12 AWG  
 320 V/4 kV/2 12 A  
 8 ... 9 mm / 0.33 in



Conductor Size	Color	Item No.	Pack. Unit
<b>Test plug adapter for female connectors, 5/5.08 mm pin spacing</b>			
0.08 ... 2.5 mm <sup>2</sup>	light gray	<b>231-661</b>	100
<b>Test plug adapter for female connectors, 7.5/7.62 mm pin spacing</b>			
0.08 ... 2.5 mm <sup>2</sup>	light gray	<b>231-662</b>	100



Test plug adapter with CAGE CLAMP® connection

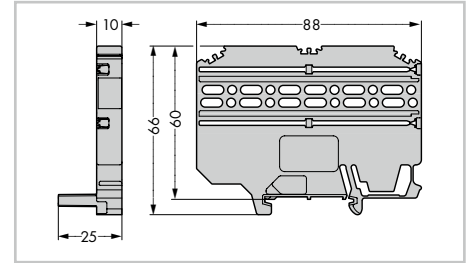


# Accessories

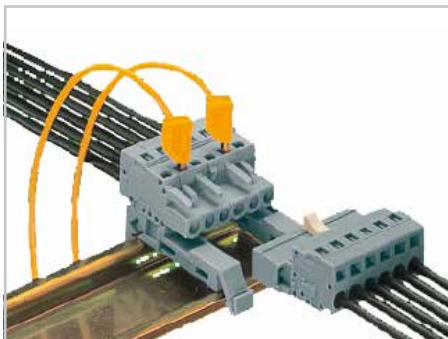
## Mounting Adapters

### MCS MIDI

<p><b>Mounting adapters for DIN 35 rail</b></p> <p>for male and female connectors with snap-in mounting feet</p>	<p><b>Multi mounting adapter for DIN 35 rail</b></p> <p>for male and female connectors with snap-in mounting feet</p>	
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<p><b>Mounting adapter for MCS MIDI male and female connectors, with snap-in mounting feet</b></p>			<p><b>Multi mounting adapter for MCS MIDI male and female connectors, with snap-in mounting feet</b></p>		
gray	209-137	1	gray	209-148	25
<p><b>Mounting adapter for MCS MIDI angled female connectors, with snap-in mounting feet for panel mounting</b></p>					
gray	209-120	1			



Female connector with snap-in mounting feet and 209-137 Mounting Adapter on DIN 35 rail.



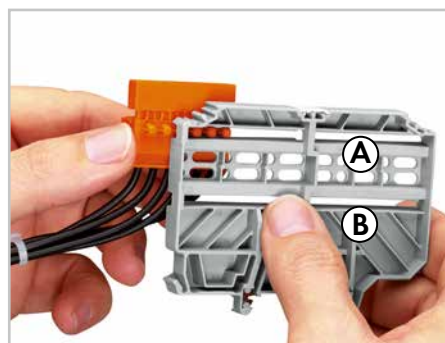
The pluggable male or female connector can also be fitted with a strain relief plate.



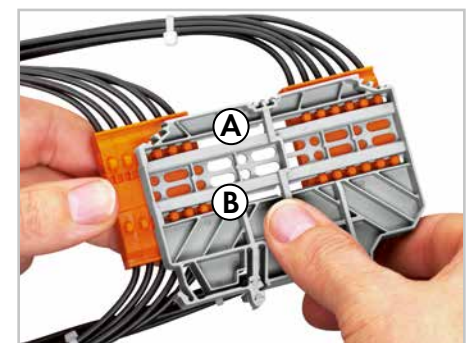
The adapter can be marked either with WSB, miniature WSB or WMB markers.



209-120 Multi Mounting Adapter on DIN 35 rail and angled female connector with snap-in mounting feet for panel mounting.



Both male and female connectors remain pluggable when they are mounted on the multi mounting adapter via its oblong holes or open grooves (A/B).



If a connector is pushed from the side into the open grooves (A/B) of the multi mounting adapter, the plug connection will be reliably protected from unintentional disconnection when mounted.

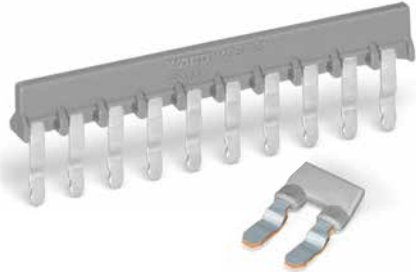
# Accessories

## Comb-Style Jumper Bars

### MCS MIDI

**Comb-style jumper bars**  
**Pin spacing: 5/5.08 mm / 0.197/0.2 in.**  
 for male and female connectors  
 equipped with CAGE CLAMP®  
 320 V/4 kV/2 12/16 A

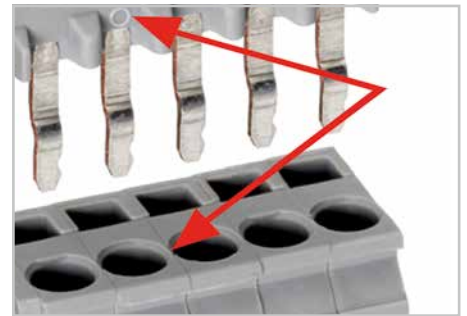
#### Handling



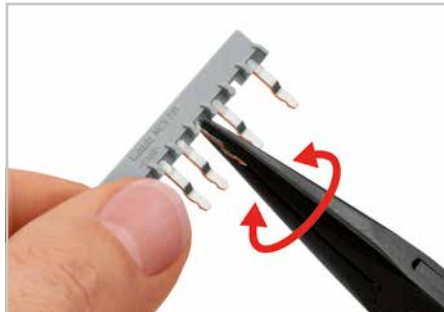
Jumper Type	Item No.	Pack. Unit
<b>Comb-style jumper bar</b> , insulated, for straight/angled male and female connectors equipped with CAGE CLAMP®		
Nominal current		
2-way	12 A	<b>231-902</b> 200 (8 x 25)
3-way	16 A	<b>231-903</b> 100 (4 x 25)
5-way	16 A	<b>231-905</b> 100 (4 x 25)
7-way	16 A	<b>231-907</b> 100 (4 x 25)
10-way	16 A	<b>231-910</b> 100 (4 x 25)
<p><b>Notice:</b>                      Not suitable for female connectors equipped with Push-in CAGE CLAMP® and angled female connectors for panel mounting!</p> <p>Comb-style jumper bar reduces maximum conductor size to 1.5 mm<sup>2</sup>.</p>		



**Notice:** Insert jumper bar according to direction symbols. □ symbol shows direction to operating slot.



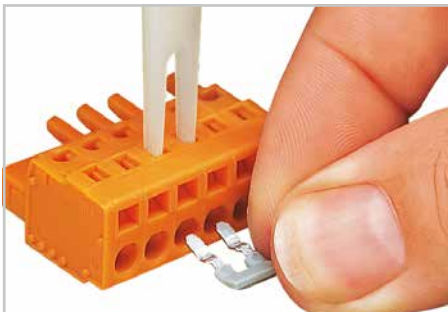
**Notice:** Insert jumper bar according to direction symbols. ○ symbol shows direction to conductor entry.



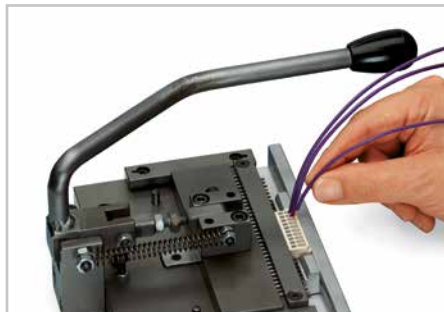
Individual comb-style jumper bars are created by breaking out jumper contacts (starting with 3-way).



Insert comb-style jumper bars via multipole operating tool, with the female or male connector being supported in a suitable holding device.



Commoning a female connector with 231-902 comb-style jumper bar via 2-pole operating tool.



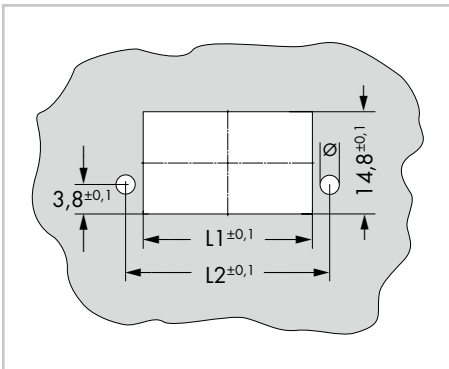
Male or female connectors can be pre-assembled with comb-style jumper bars upon request.



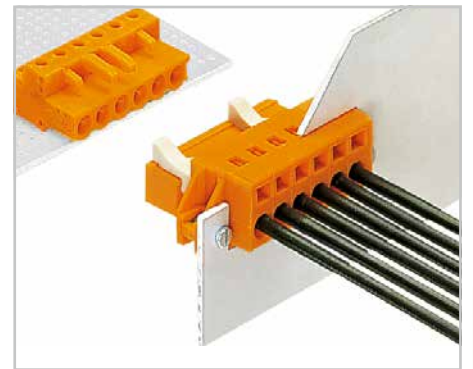
**Notice:** Comb-style jumper bars reduce conductor size to 1.5 mm<sup>2</sup> "s" + "fst".

# Cutout Dimensions MCS MIDI

<b>Cutout</b>		<b>Screws</b>
for 231, 721, 723 and 731 Series male and female connectors with fixing flanges		



Drilled hole Ø: Depends on the type of screw used (see fixing screws).

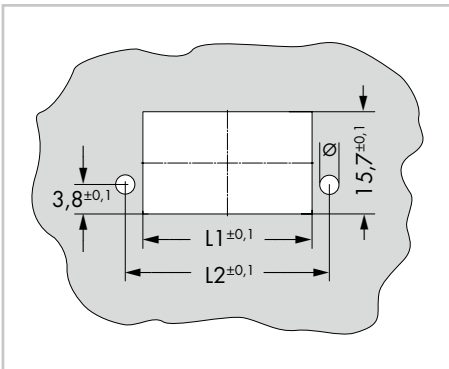


M 2.5 x 10 screws with nuts (e.g., for fixing flanges)

**Table 1:**

Pole No.	Pin Spacing: 5 mm		Pin spacing: 5.08 mm		Pin spacing: 7.5 mm		Pin Spacing: 7.62 mm		Dimensions	Item No.	Pack. Unit
	L1	L2	L1	L2	L1	L2	L1	L2			
2	13.4	18.4	13.6	18.6	15.9	20.9	16.0	21.0	<b>Self-tapping screws</b> for 1.8 mm $\pm 0.1$ mm Ø mounting hole		
3	18.4	23.4	18.6	23.6	23.4	28.4	23.6	28.6			
4	23.4	28.4	23.7	28.7	30.9	35.9	31.3	36.3			
5	28.4	33.4	28.8	33.8	38.4	43.4	38.9	43.9			
6	33.5	38.3	34.0	38.8	46.0	50.8	46.6	51.4	B 2.2 x 9.5 mm	<b>209-147</b>	200 ( 2 x 100 )
7	38.5	43.3	39.1	43.9	53.5	58.3	54.2	59.0			
8	43.5	48.3	44.1	48.9	61.0	65.8	61.8	66.6	B 2.2 x 13 mm	<b>231-194</b>	200 ( 2 x 100 )
9	48.5	53.3	49.2	54.0	68.5	73.3	69.5	74.3			
10	53.5	58.3	54.3	59.1	76.0	80.8	77.1	81.9	<b>Screws with nuts</b> for 2.5 mm $\pm 0.1$ mm Ø mounting hole		
11	58.5	63.3	59.4	64.2	83.5	88.3	84.7	89.5			
12	63.5	68.3	64.5	69.3	91.0	95.8	92.3	97.1			
13	68.6	73.2	69.6	74.2	98.6	103.2	100.0	104.6			
14	73.6	78.2	74.7	79.3	106.1	110.7	107.7	112.3	M 2 x 12 mm	<b>231-195</b>	200 ( 2 x 100 )
15	78.6	83.2	79.8	84.4	113.6	118.2	115.3	119.9			
16	83.6	88.2	84.9	89.5	121.1	125.7	122.9	127.5			
17	88.6	93.2	90.0	94.6	128.6	133.2	130.5	135.1			
18	93.6	98.2	95.0	99.6	136.1	140.7	138.1	142.7	<b>Screws with nuts</b> for 3.0 mm $\pm 0.1$ mm Ø mounting hole		
19	98.7	103.1	100.2	104.6	143.7	148.1	145.9	150.3			
20	103.7	108.1	105.3	109.7	151.2	155.6	153.5	157.9			
21	108.7	113.1	110.4	114.8	158.7	163.1	161.1	165.5			
22	113.7	118.1	115.5	119.9	166.2	170.6	168.7	173.1	M 2.5 x 10 mm	<b>231-295</b>	200 ( 2 x 100 )
23	118.7	123.1	120.5	124.9	173.7	178.1	176.3	180.7			
24	123.7	128.1	125.6	130.0	181.2	185.6	184.0	188.4			

<b>Cutout</b>		<b>Screws</b>
for 2721 and 2231 Series female connectors with fixing flanges		



Drilled hole Ø: Depends on the type of screw used (see fixing screws).



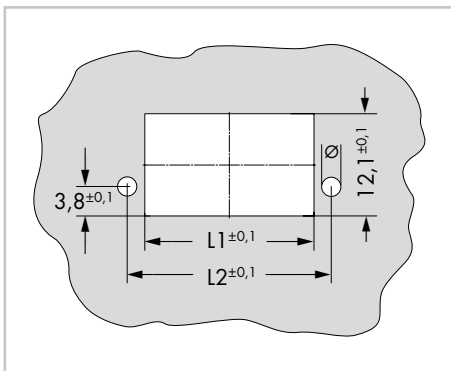
M 2.5 x 10 screws with nuts (e.g., for fixing flanges)

Table 2:

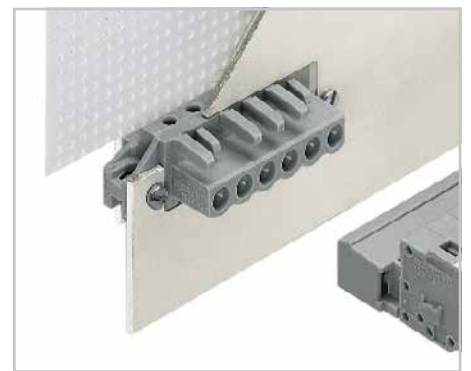
Pole No.	Pin Spacing: 5 mm		Pin spacing: 5.08 mm		Pin spacing: 7.5 mm		Pin Spacing: 7.62 mm		Dimensions	Item No.	Pack. Unit
	L1	L2	L1	L2	L1	L2	L1	L2			
2	13.2	18.4	13.4	18.6	15.7	20.9	15.8	21.0	<b>Self-tapping screws</b> for 1.8 mm $\pm 0.1$ mm Ø mounting hole		
3	18.2	23.4	18.4	23.6	23.2	28.4	23.4	28.6			
4	23.2	28.4	23.5	28.7	30.7	35.9	31.1	36.3			
5	28.2	33.4	28.6	33.8	38.2	43.4	38.7	43.9			
6	33.4	38.3	33.9	38.8	45.9	50.8	46.5	51.4	B 2.2 x 9.5 mm	<b>209-147</b>	200 ( 2 x 100 )
7	38.4	43.3	39.0	43.9	53.4	58.3	54.1	59.0			
8	43.4	48.3	44.0	48.9	60.9	65.8	61.7	66.6	B 2.2 x 13 mm	<b>231-194</b>	200 ( 2 x 100 )
9	48.4	53.3	49.1	54.0	68.4	73.3	69.4	74.3			
10	53.4	58.3	54.2	59.1	75.9	80.8	77.0	81.9	<b>Screws with nuts</b> for 2.5 mm $\pm 0.1$ mm Ø mounting hole		
11	58.4	63.3	59.3	64.2	83.4	88.3	84.6	89.5			
12	63.4	68.3	64.4	69.3	90.9	95.8	92.2	97.1			
13	68.6	73.2	69.6	74.2	98.6	103.2	100.0	104.6			
14	73.6	78.2	74.7	79.3	106.1	110.7	107.7	112.3	M 2 x 12 mm	<b>231-195</b>	200 ( 2 x 100 )
15	78.6	83.2	79.8	84.4	113.6	118.2	115.3	119.9			
16	83.6	88.2	84.9	89.5	121.1	125.7	122.9	127.5			
17	88.6	93.2	90.0	94.6	128.6	133.2	130.5	135.1			
18	93.6	98.2	95.0	99.6	136.1	140.7	138.1	142.7	<b>Screws with nuts</b> for 3.0 mm $\pm 0.1$ mm Ø mounting hole		
19	98.8	103.1	100.3	104.6	143.8	148.1	146.0	150.3			
20	103.8	108.1	105.4	109.7	151.3	155.6	153.6	157.9			
21	108.8	113.1	110.5	114.8	158.8	163.1	161.2	165.5			
22	113.8	118.1	115.6	119.9	166.3	170.6	168.8	173.1	M 2.5 x 10 mm	<b>231-295</b>	200 ( 2 x 100 )
23	118.8	123.1	120.6	124.9	173.8	178.1	176.4	180.7			
24	123.8	128.1	125.7	130.0	181.3	185.6	184.1	188.4			

# Cutout Dimensions MCS MIDI

<b>Cutout</b>  for 232 and 722 Series female headers with solder pins and fixing flanges		<b>Screws</b>
--	--	---------------



Drilled hole Ø: Depends on the type of screw used (see fixing screws).



M 2.5 x 10 screws with nuts (e.g., for fixing flanges)

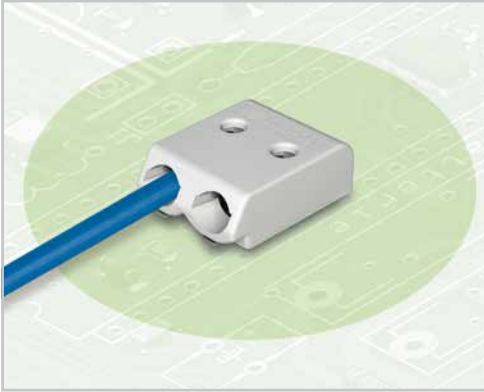
**Table 3:**

Pole No.	Pin Spacing: 5 mm		Pin spacing: 5.08 mm		Pin spacing: 7.5 mm		Pin Spacing: 7.62 mm		Dimensions	Item No.	Pack. Unit
	L1	L2	L1	L2	L1	L2	L1	L2			
2	13.4	18.4	13.6	18.6	15.9	20.9	16.0	21.0	<b>Self-tapping screws</b> for 1.8 mm ±0.1 mm Ø mounting hole		
3	18.4	23.4	18.6	23.6	23.4	28.4	23.6	28.6			
4	23.4	28.4	23.7	28.7	30.9	35.9	31.3	36.3			
5	28.4	33.4	28.8	33.8	38.4	43.4	38.9	43.9			
6	33.5	38.3	34.0	38.8	46.0	50.8	46.6	51.4	B 2.2 x 9.5 mm	<b>209-147</b>	200 ( 2 x 100 )
7	38.5	43.3	39.1	43.9	53.5	58.3	54.2	59.0			
8	43.5	48.3	44.1	48.9	61.0	65.8	61.8	66.6	B 2.2 x 13 mm	<b>231-194</b>	200 ( 2 x 100 )
9	48.5	53.3	49.2	54.0	68.5	73.3	69.5	74.3			
10	53.5	58.3	54.3	59.1	76.0	80.8	77.1	81.9	<b>Screws with nuts</b> for 2.5 mm ±0.1 mm Ø mounting hole		
11	58.5	63.3	59.4	64.2	83.5	88.3	84.7	89.5			
12	63.5	68.3	64.5	69.3	91.0	95.8	92.3	97.1			
13	68.6	73.2	69.6	74.2	98.6	103.2	100.0	104.6			
14	73.6	78.2	74.7	79.3	106.1	110.7	107.7	112.3	M 2 x 12 mm	<b>231-195</b>	200 ( 2 x 100 )
15	78.6	83.2	79.8	84.4	113.6	118.2	115.3	119.9			
16	83.6	88.2	84.9	89.5	121.1	125.7	122.9	127.5			
17	88.6	93.2	90.0	94.6	128.6	133.2	130.5	135.1			
18	93.6	98.2	95.0	99.6	136.1	140.7	138.1	142.7	<b>Screws with nuts</b> for 3.0 mm ±0.1 mm Ø mounting hole		
19	98.7	103.1	100.2	104.6	143.7	148.1	145.9	150.3			
20	103.7	108.1	105.3	109.7	151.2	155.6	153.5	157.9			
21	108.7	113.1	110.4	114.8	158.7	163.1	161.1	165.5			
22	113.7	118.1	115.5	119.9	166.2	170.6	168.7	173.1	M 2.5 x 10 mm	<b>231-295</b>	200 ( 2 x 100 )
23	118.7	123.1	120.5	124.9	173.7	178.1	176.3	180.7			
24	123.7	128.1	125.6	130.0	181.2	185.6	184.0	188.4			



	Serie	Seite
	<b>PCB Terminal Strips with Push-Buttons, CAGE CLAMP®S</b>	2059 382
		2060 384
		2061 394
		250 398
		235 410
		805 414
	804 420	
	<b>Modular PCB Terminal Blocks and Strips with Screwdriver Actuation, PUSH WIRE®</b>	744 422
		251 424
		235 426
		253 430
	<b>Modular PCB Terminal Blocks and Strips with Push-Buttons, PUSH WIRE®</b>	735 432
		235 436
	<b>Modular PCB Terminal Blocks and Strips with Screwdriver Actuation, CAGE CLAMP®</b>	236 440
	<b>Modular PCB Terminal Blocks and Strips with Push-Buttons, CAGE CLAMP®</b>	256 446

## SMD PCB Terminal Blocks, 0.5 mm<sup>2</sup> Pin Spacing: 3 mm 2059 Series



- SMD PCB terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid conductors
- Easy conductor removal, e.g., via operating tool
- Just 2.7 mm high
- Side-by-side arrangement without pole loss
- Available in tape-and-reel packaging for automated assembly

### Technical data:

Pin Spacing	3 mm 0.118 in.				
Ratings per	IEC/EN 60664-1				
Overvoltage category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	63 V	160 V	320 V		
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV		
Nominal current	3 A	3 A	3 A		
Approvals per	UL 1977				
Rated voltage, 1-pole	600 V				
Rated voltage, 2 or more poles	250 V				
Nominal current UL	3 A				

### Conductor data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.14 ... 0.34 mm <sup>2</sup>
AWG	26 ... 22 "sol."
Strip length	4 ... 5.5 mm / 0.16 ... 0.22 in.
Conductor entry angle	0° to PCB
Conductor size: solid	0.5 mm <sup>2</sup>
AWG	20 "sol."
Note (0.5 mm <sup>2</sup> /AWG 20 conductor size)	No reconnection of smaller conductor cross-sections
Strip length	6 ... 7.5 mm / 0.24 ... 0.3 in

### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA GF)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

### 2059 Series accessories:

### Page:

Operating tool (206-859)	499
Operating tool (2059-189)	499

### Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

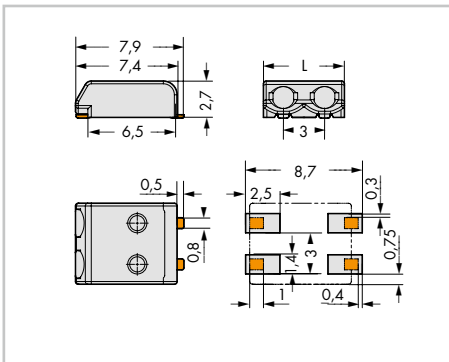
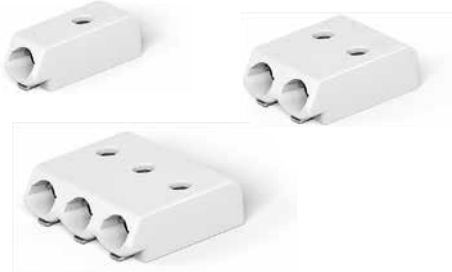
Recommendation for stencil: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

\*For 26 AWG "sol." conductors that are not rigid enough, the clamping unit must be opened using an operating tool.

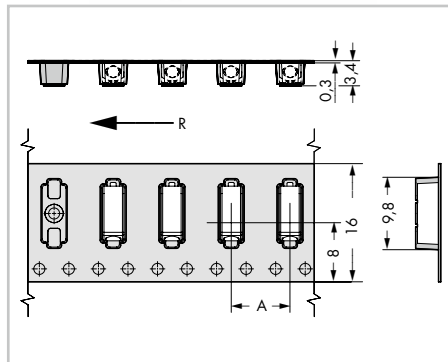


Pin spacing: 3 mm / 0.118 in.

0.14 ... 0.5mm<sup>2</sup> "sol." | 26 ... 20 AWG "sol."  
160 V/2.5 kV/2 3 A



L = (pole no. x pin spacing) - 0.1 mm



R = Feed direction  
A = 8 mm (1-pole)  
A = 12 mm (2- and 3-pole)

Pole No.	Item No.	Pack. Unit
<b>SMD PCB terminal block in tape-and-reel packaging, white *</b>		
1	2059-301/998-403	31800 (12 x 2650)
2	2059-302/998-403	21000 (12 x 1750)
3	2059-303/998-403	21000 (12 x 1750)
Reel diameter: 330 mm		



Inserting solid conductors via push-in termination.



Easy conductor removal, e.g., via 206-859 operating tool.

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.



- SMD PCB terminal blocks with Push-in CAGE CLAMP® and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly
- For THR version, see page 388.

#### Technical data:

Pin Spacing	4 mm 0.157 in.				
Ratings per	IEC/EN 60664-1				
Overtoltage category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	63 V	160 V	320 V		
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV		
Nominal current	9 A	9 A	9 A		
Approvals per	UL 1977				
Rated voltage, 1-pole	600 V				
Rated voltage, 2 or more poles	320 V				
Nominal current UL	9 A				

#### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 18
Strip length	7 ... 9 mm / 0.28 ... 0.35 in.
Conductor entry angle	0° to PCB

#### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA GF)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

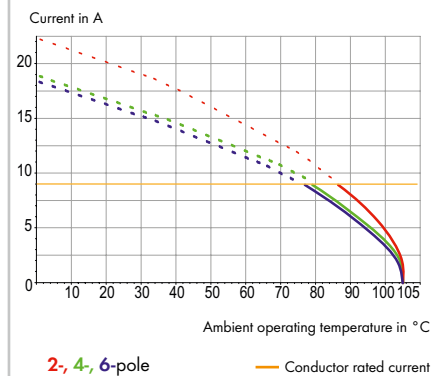
#### Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

#### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

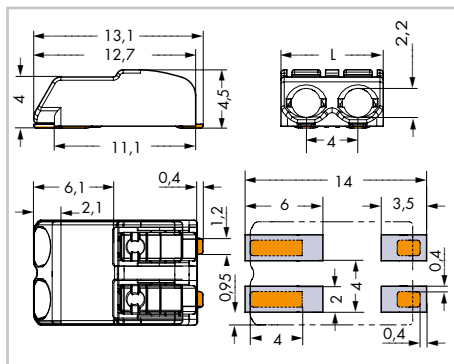


#### 2060 Series accessories:

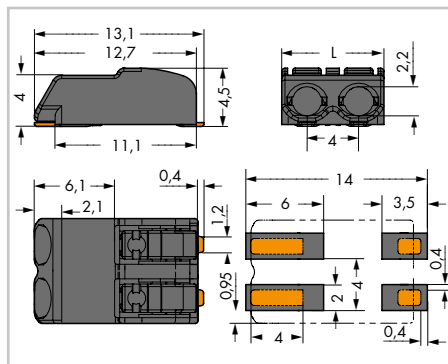
#### Page:

Operating tool (206-860)	499
Operating tool (2060-189)	499

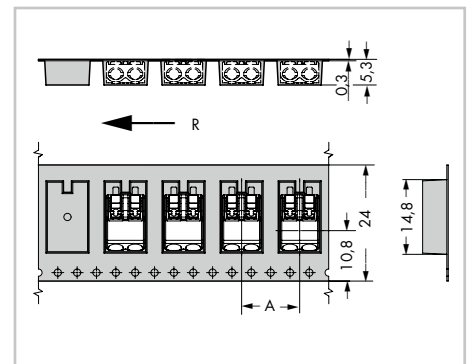
<b>Pin spacing: 4 mm / 0.157 in.</b>		<b>Pin spacing: 4 mm / 0.157 in.</b>		
0.2 ... 0.75 mm <sup>2</sup>	24 ... 18 AWG	0.2 ... 0.75 mm <sup>2</sup>	24 ... 18 AWG	
160 V/2.5 kV/2 9 A		160 V/2.5 kV/2 9 A		



L = (pole no. x pin spacing) - 0.1 mm



L = (pole no. x pin spacing) - 0.1 mm



R = Feed direction  
A = (pole no. x pin spacing) + 4 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>SMD PCB terminal block with push-buttons in tape-and-reel packaging, white*</b>			<b>SMD PCB terminal blocks with push-buttons in tape-and-reel packaging, black</b>		
1	2060-451/998-404	13500 (9 x 1500)	1	2060-471/998-404	13500 (9 x 1500)
2	2060-452/998-404	9000 (9 x 1000)	2	2060-472/998-404	9000 (9 x 1000)
3	2060-453/998-404	6750 (9 x 750)	3	2060-473/998-404	6750 (9 x 750)
Reel diameter: 330 mm			Reel diameter: 330 mm		



Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).



PCB terminal blocks can be arranged side-by-side without loss of poles.

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.



- SMD PCB terminal blocks with Push-in CAGE CLAMP® and push-buttons
- 8 mm pin spacing version for higher rated voltages
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Height of just 4.5 mm minimizes on-board LED shadowing
- Available in tape-and-reel packaging for automated assembly
- For THR version, see page 390.

#### Technical data:

Pin Spacing	8 mm 0.314 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	400 V	630 V	1000 V
Rated surge voltage	6 kV	6 kV	6 kV
Nominal current	9 A	9 A	9 A
Approvals per	UL 1977		
Rated voltage	600 V		
Nominal current UL	9 A		

#### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 18
Strip length	7 ... 9 mm / 0.28 ... 0.35 in.
Conductor entry angle	0° to PCB

#### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA GF)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

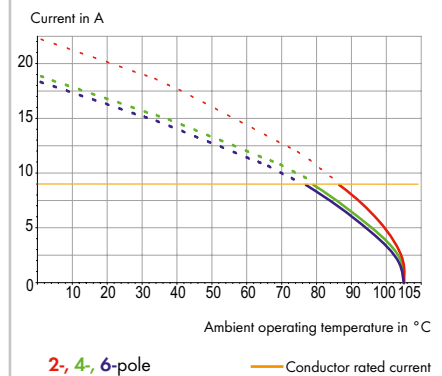
#### Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150 µm. Pattern layout identical to solder pad layout.

#### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



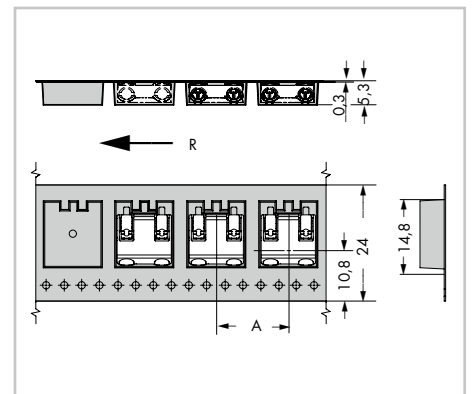
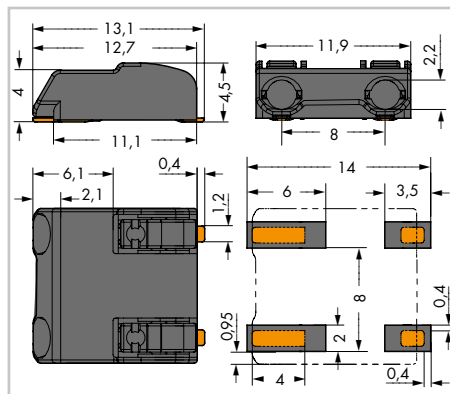
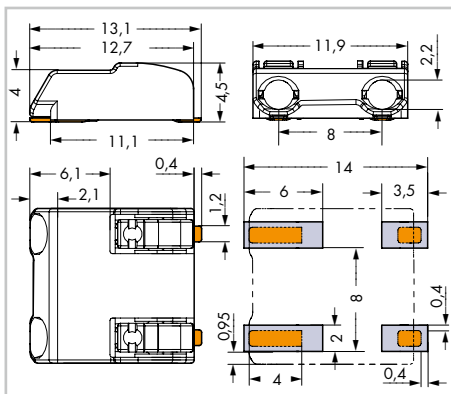
#### 2060 Series accessories:

#### Page:

Operating tool (206-860)	499
Operating tool (2060-189)	499

# SMD PCB Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> **PUSH-IN CAGE CLAMP®**

<b>Pin spacing: 8 mm / 0.314 in.</b>		<b>Pin spacing: 8 mm / 0.314 in.</b>		
0.2 ... 0.75 mm <sup>2</sup>	24 ... 18 AWG	0.2 ... 0.75 mm <sup>2</sup>	24 ... 18 AWG	
630 V/6 kV/2 9 A	600 V / 9 A	630 V/6 kV/2 9 A	600 V / 9 A	



R = Feed direction  
A + 16 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>SMD PCB terminal block with push-buttons in tape-and-reel packaging, white*</b>			<b>SMD PCB terminal blocks with push-buttons in tape-and-reel packaging, black*</b>		
2	<b>2060-852/998-404</b>	6750 (9 x 750)	2	<b>2060-872/998-404</b>	6750 (9 x 750)
Reel diameter: 330 mm			Reel diameter: 330 mm		



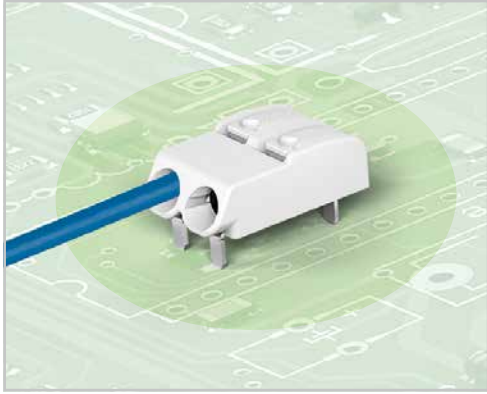
Inserting solid conductors via push-in termination. (Picture shows 2060 Series)



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

## THR PCB Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> Pin Spacing: 4 mm 2060 Series



- THR PCB terminal blocks with Push-in CAGE CLAMP® and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly
- Also suitable for wave soldering

### Technical data:

Pin Spacing	4 mm 0.157 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	63 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	9 A	9 A	9 A
Approvals per	UL 1977		
Rating voltage, 1-pole	600 V*		
Rating voltage, 2 or more poles	250 V*		
Nominal current UL	9 A*		

### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2–0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.2–0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.25–0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25–0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24–18
Strip length	6–7 mm / 0.24–0.28 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	2.4 mm / 1.2 x 0.75 mm
Solder pin: metal-plated hole	1.5 <sup>+0.1</sup> mm Ø
Outer diameter of metal-plated PCB hole	min. 2.4 mm

### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA-GF)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

### Application notes:

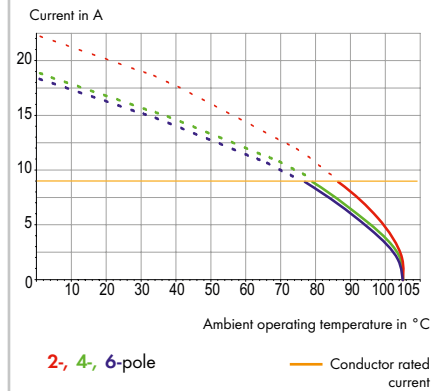
Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150 µm.

The stencil hole diameter is identical to the outer diameter of the metal-plated PCB hole.

### Current-Carrying Capacity Curve

Pin spacing: 4 mm / Conductor size: 0.75 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

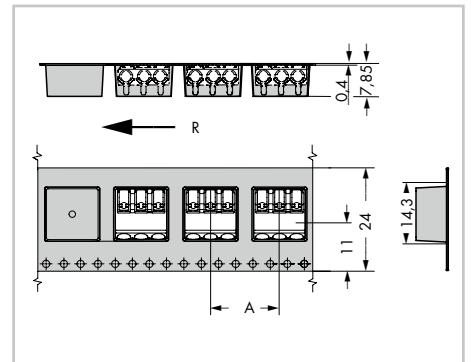
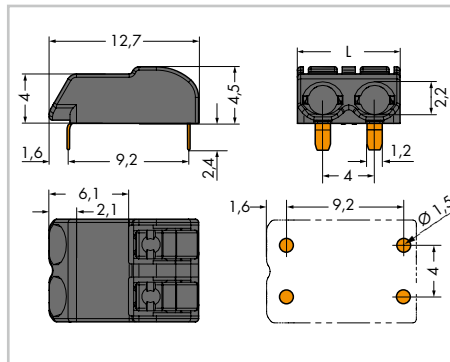
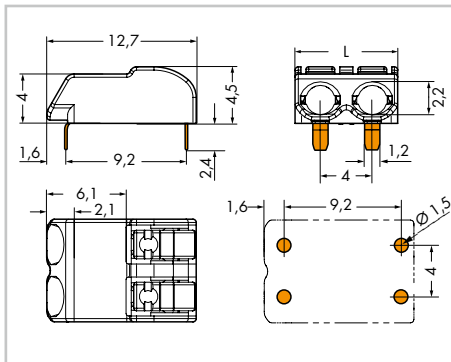


### 2060 Series accessories:

### Page:

Operating tool (206-860)	499
Operating tool (2060-189)	499

Pin spacing: 4 mm / 0.157 in.		Pin spacing: 4 mm / 0.157 in.		
0.2-0.75 mm <sup>2</sup>	24-18 AWG	0.2-0.75 mm <sup>2</sup>	24-18 AWG	
160 V/2.5 kV/2 9 A		160 V/2.5 kV/2 9 A		



L = (pole no. x pin spacing) - 0.1 mm

R = Feed direction  
A = (pole no. x pin spacing) + 4 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
THR PCB terminal blocks with push-buttons in tape-and-reel packaging, white*			THR PCB terminal blocks with push-buttons in tape-and-reel packaging, black		
1	2060-1451/998-404	10800 (9 x 1200)	1	2060-1471/998-404	10800 (9 x 1200)
2	2060-1452/998-404	6750 (9 x 750)	2	2060-1472/998-404	6750 (9 x 750)
3	2060-1453/998-404	4950 (9 x 550)	3	2060-1473/998-404	4950 (9 x 550)
Reel diameter: 330 mm			Reel diameter: 330 mm		



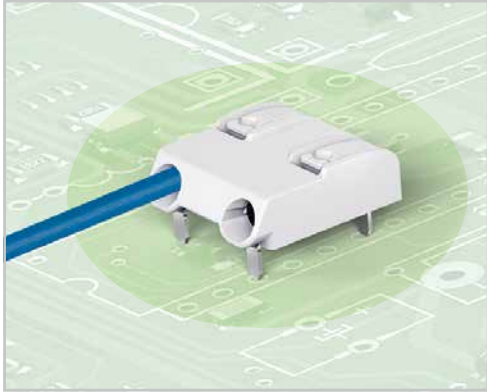
Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

# THR PCB Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup> Pin Spacing: 8 mm 2060 Series



- THR PCB terminal blocks with Push-in CAGE CLAMP® and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm high
- Available in tape-and-reel packaging for automated assembly
- Also suitable for wave soldering

### Technische Daten

Rastermaß	8 mm 0.314 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	400 V	630 V	1000 V
Rated surge voltage	6 kV	6 kV	6 kV
Nominal current	9 A	9 A	9 A
Approvals per	UL 1977		
Rating voltage	600 V*		
Nominal current UL	9 A*		

### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2-0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.2-0.75 mm <sup>2</sup>
Conductor size: fine-stranded	0.25-0.34 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25-0.34 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24-18
Strip length	6-7 mm / 0.24-0.28 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	2.4 mm / 1.2 x 0.75 mm
Solder pin: metal-plated hole	1.5 <sup>+0.1</sup> mm Ø
Outer diameter of metal-plated PCB hole	min. 2.4 mm

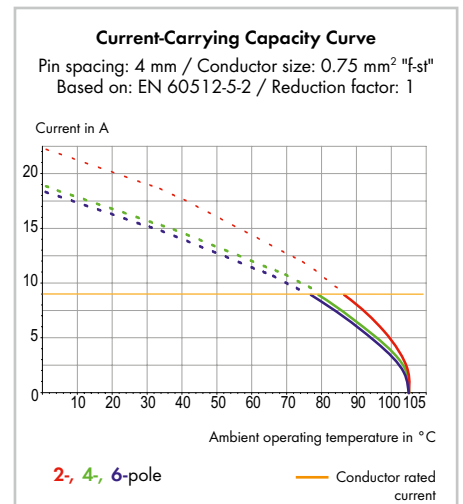
### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA-GF)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

### Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150 µm.  
The stencil hole diameter is identical to the outer diameter of the metal-plated PCB hole.



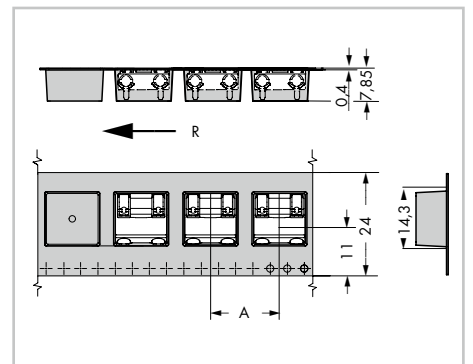
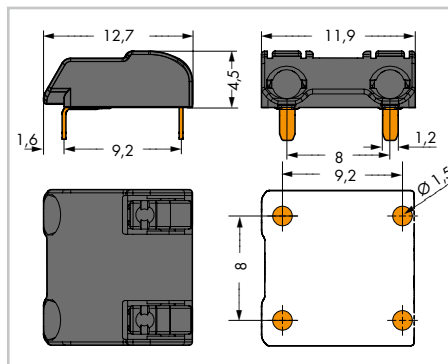
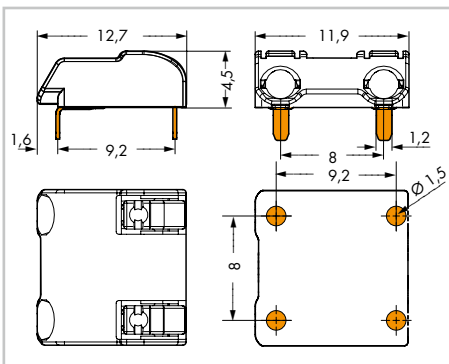
### 2060 Series accessories:

Page:

Operating tool	499



Pin spacing: 8 mm / 0.314 in.		Pin spacing: 8 mm / 0.314 in.		
0.2-0.75 mm <sup>2</sup>	24-18 AWG	0.2-0.75 mm <sup>2</sup>	24-18 AWG	
630 V/6 kV/2 9 A		630 V/6 kV/2 9 A		



R = Feed direction  
A + 16 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
THR PCB terminal blocks with push-buttons in tape-and-reel packaging, white*			THR PCB terminal blocks with push-buttons in tape-and-reel packaging, black		
2	2060-1852/998-404	4950 (9 x 550)	2	2060-1872/998-404	4950 (9 x 550)
Reel diameter: 330 mm			Reel diameter: 330 mm		



Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

## Board-to-Board Links for SMD PCB Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup>, Pin Spacing: 4 mm, 8 mm 2060 Series



- Board-to-board link simplifies in-line assembly of LED modules
- Easy push-in termination and disconnection without push-button actuation

### Technical data:

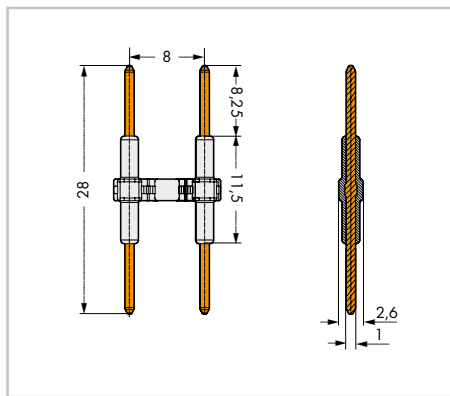
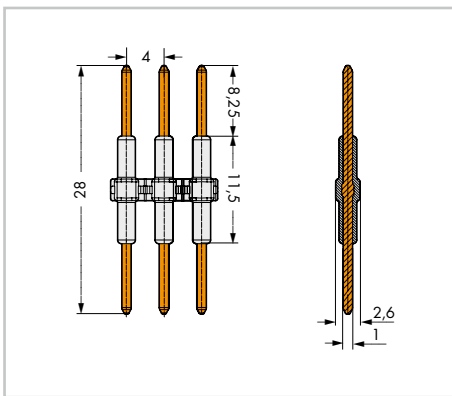
Pin Spacing	4 mm 0.157 in.			8 mm 0.314 in.			
	IEC/EN 60664-1			IEC/EN 60664-1			
Ratings per	III	III	II	III	III	II	
Overvoltage category	3	2	2	3	2	2	
Pollution degree	3	2	2	3	2	2	
Rated voltage	63 V	160 V	320 V	400 V	630 V	1000 V	
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	6 kV	6 kV	6 kV	
Nominal current	9 A	9 A	9 A	9 A	9 A	9 A	
Approvals per	UL/CSA*			UL/CSA*			
Rated voltage	250 V			600 V			
Nominal current UL	9 A			9 A			

### Material data:

Material group	I
Insulating material	Polyamide 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	Silver-plated

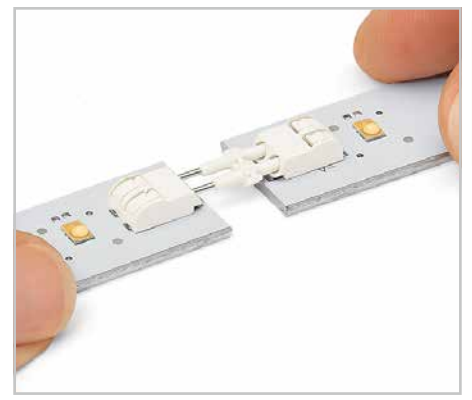
# Board-to-Board Links for SMD PCB Terminal Blocks with Push-Buttons, 0.75 mm<sup>2</sup>

Pin spacing: 4 mm / 0.157 in.		Pin spacing: 8 mm / 0.314 in.	
160 V/2.5 kV/2 9 A	250 V/9 A	630 V/6 kV/2 9 A	600 V/9 A

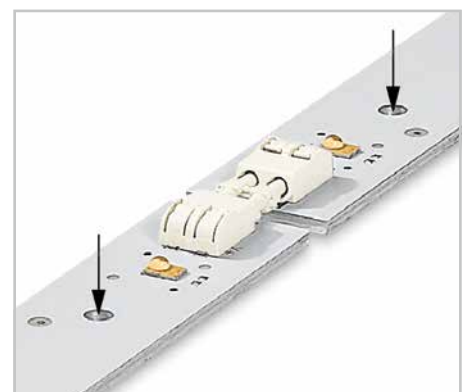
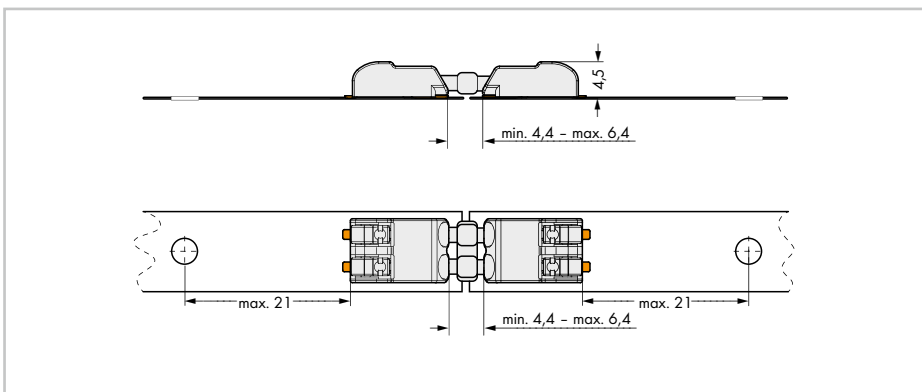


Inserting board-to-board link into terminal block.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Board-to-board link for SMD PCB terminal blocks with push-buttons, white			Board-to-board link for SMD PCB terminal blocks with push-buttons, white		
1	2060-951/028-000	1500			
2	2060-952/028-000	500	2	2060-962/028-000	375
3	2060-953/028-000	375			
4	2060-954/028-000	250			



Assembly: Place PCBs on a flat surface and insert links into terminal blocks on adjoining PCBs. Disassembly: Pull PCBs apart. (max. 10 connections/disconnections)



The PCBs must be secured (see figure left).

## SMD PCB Terminal Blocks with Push-Buttons, 1.5 mm<sup>2</sup> Pin Spacing: 6 mm 2061 Series



- SMD PCB terminal blocks with Push-in CAGE CLAMP® and push-buttons
- Just 5.6 mm high
- Push-in termination of solid and ferruled conductors
- Push-buttons for easy connection and removal of all conductor types
- Available in tape-and-reel packaging for automated assembly

### Technical data:

Pole No.	1 pole			2 and 3 pole		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	250 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A
Approvals per	UL			UL		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	600 V	-	600 V	600 V	-	600 V
Nominal current UL	10 A	-	5 A	10 A	-	10 A

### Conductor data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 0.75 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.5 ... 0.75 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 16
Strip length	7 ... 10 mm / 0.28 ... 0.39 in.
Conductor entry angle	0° to PCB

### Material data:

Material group	I
Insulating material	Glass-fiber-reinforced polyphthalamide (PPA GF)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Contact material	Copper alloy
Contact plating	tin-plated

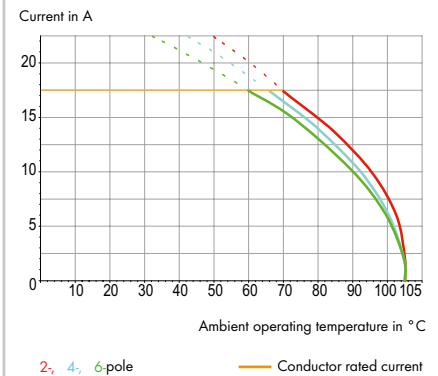
### Application notes:

Suitable for lead-free, reflow-soldering profiles acc. to DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to customer specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), it is recommended that trial runs are conducted to ensure product and process compatibility under actual manufacturing conditions.

Recommendation for stencil: Material thickness, 150 µm. Stencil layout identical to pad layout.

### Current-Carrying Capacity Curve

Pin spacing: 6 mm / Conductor size 1.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

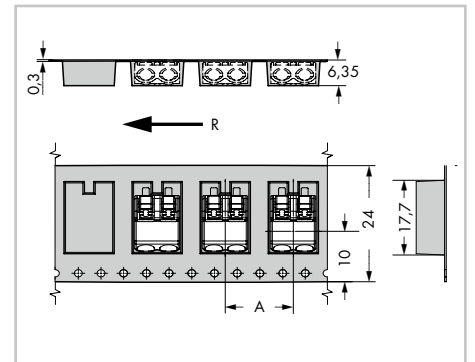
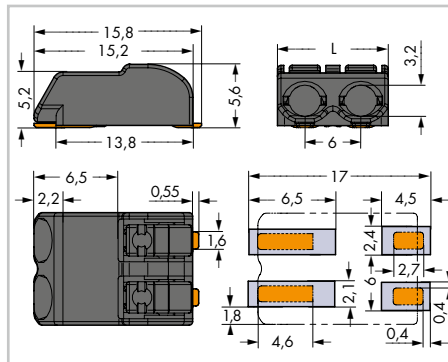
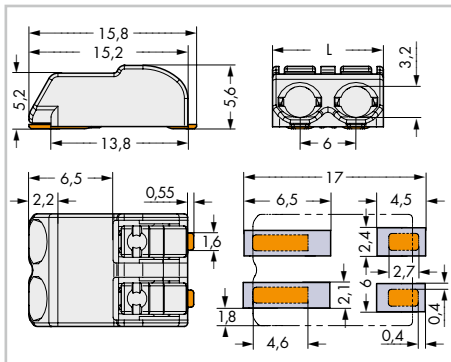


### 2061 Series accessories:

### Page:

Operating tool (206-861)	499
Operating tool (2061-189)	499

<b>Pin spacing: 6 mm / 0.24 in.</b>  0.5 ... 1.5 mm <sup>2</sup>   20 ... 16 AWG 320 V/4 kV/2 17.5 A		<b>Pin spacing: 6 mm / 0.24 in.</b>  0.5 ... 1.5 mm <sup>2</sup>   20 ... 16 AWG 320 V/4 kV/2 17.5 A	
---	--	---	--



L = (pole no. x pin spacing) - 0.3 mm

R = Feed direction  
 A = 12 mm (1-pole)  
 A = 16 mm (2-pole)  
 A = 24 mm (3-pole)

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>SMD PCB terminal block with push-buttons in tape-and-reel packaging, white*</b>			<b>SMD PCB terminal blocks with push-buttons in tape-and-reel packaging, black</b>		
1	2061-601/998-404	8100 (9 x 900)	1	2061-621/998-404	8100 (9 x 900)
2	2061-602/998-404	6300 (9 x 700)	2	2061-622/998-404	6300 (9 x 700)
3	2061-603/998-404	4050 (9 x 450)	3	2061-623/998-404	4050 (9 x 450)
Reel diameter: 330 mm			Reel diameter: 330 mm		



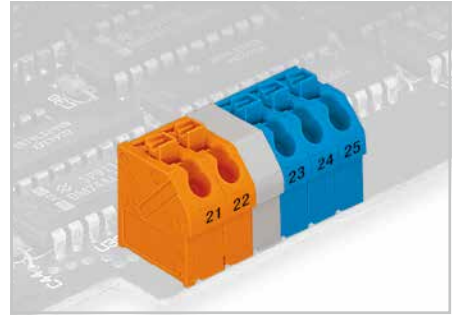
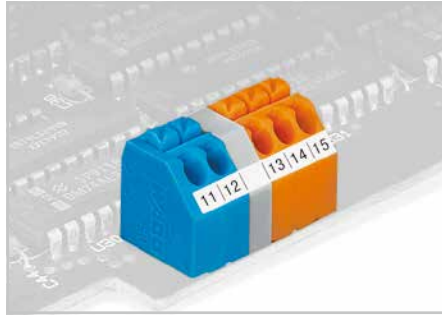
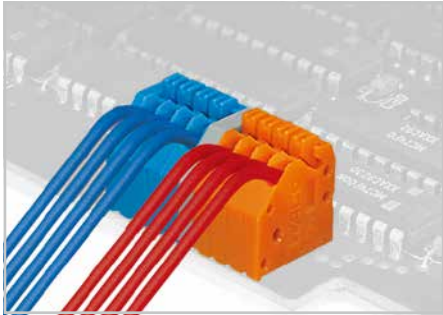
Inserting solid conductors via push-in termination.



Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-861 operating tool).

\* Depending on reflow soldering temperatures and times, color deviations may occur for white connectors. These deviations will have no impact on functionality.

# System Description and Handling, 250 and 235 Series



Marking using self-adhesive strips or direct marking. Mixed-color PCB terminal strips (with or without spacer) are available upon request.

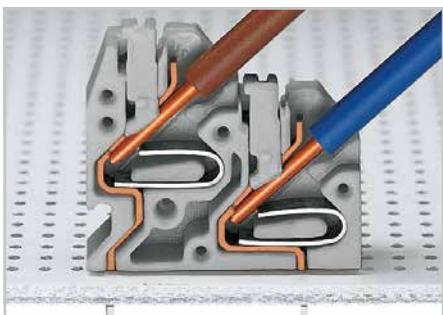
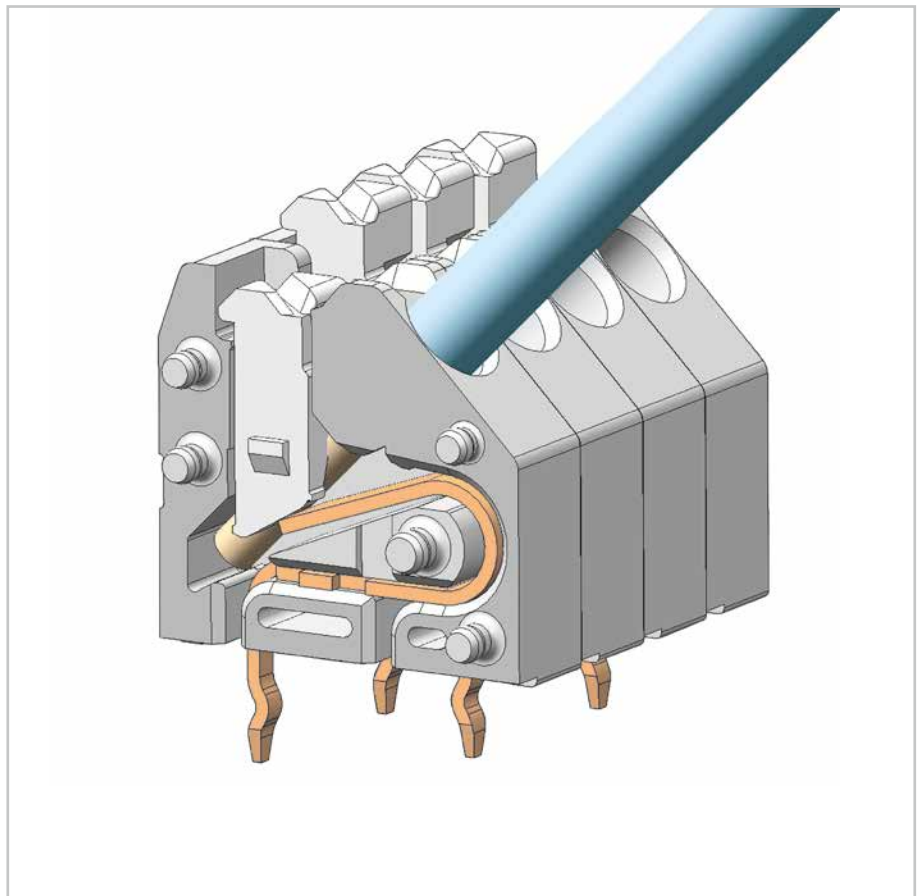
## 250 Series



Space-saving wiring, 250 Series – 5 mm pin spacing.



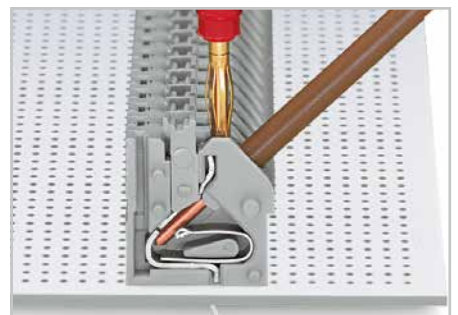
Inserting solid conductors via push-in termination. Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.



Space-saving wiring Push-in termination of solid conductors.



Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 to 3.5 mm pin spacing.



Testing with 2 mm Ø test plug, touch contact with current bar, 250 Series – 5 mm pin spacing.

**Push-in CAGE CLAMP® for 250 and 235 Series terminates the following copper conductors:\***



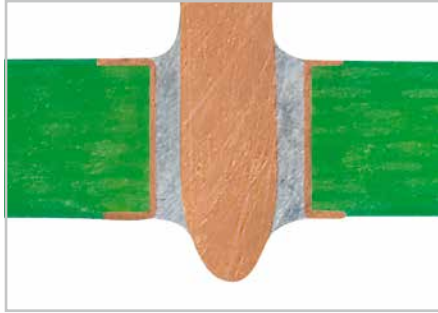
solid



fine-stranded, also with tinned single strands

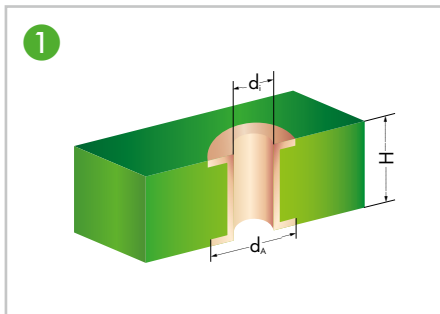
\* For aluminum conductors, see page 511.

# THR Soldering Process (Through-Hole Reflow)

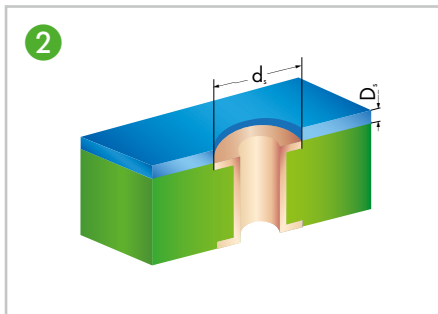


By using high-temperature resistant plastic and a streamlined pin design, the WAGO Through-Hole Reflow headers and PCB terminal blocks meet requirements for SMT process capability while maintaining necessary stability. The headers and THR PCB terminal blocks are simply pushed into the solder paste-filled PCB holes and then soldered along with the SMT components via reflow soldering. The previous wave soldering process is no longer necessary. The result is a perfect connection - both mechanically and electrically.

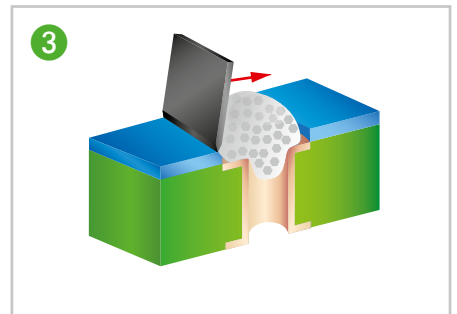
Terminal strips with additional suction pad in tape-and-reel packaging according to IEC 60286-3.



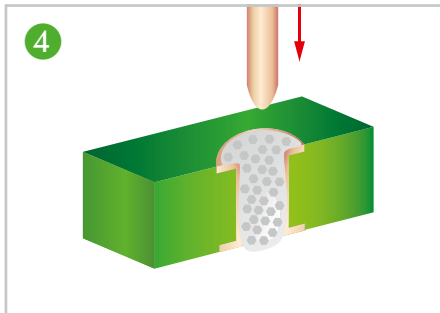
Metal-plated PCB hole



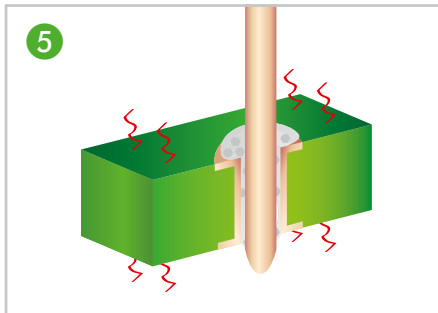
SMD positioning pattern



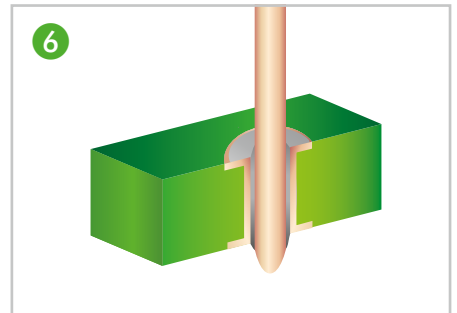
Application of solder paste



Component assembly automatic/by hand



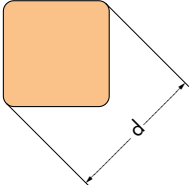
Reflow soldering process



THR soldering joint

Series	d <sub>i</sub> (mm)	d <sub>A</sub> (mm)	H(mm)	d <sub>s</sub> (mm)	D <sub>s</sub> (μm)	d(mm)	L(mm)
236	1.1 <sup>+0.1</sup>	2.2	< 2	2.1	150	0.9	3.6
250	1.1 <sup>+0.1</sup>	2.0	< 2	1.9	150	0.9	3.6

WAGO recommends a temperature profile that adheres to EN 61760-1 and the use of forced convection ovens for processing THR components.



- d<sub>i</sub>: Inner diameter of metal-plated PCB hole
- d<sub>A</sub>: Outer diameter of metal-plated PCB bore hole\*
- H: PCB thickness
- d<sub>s</sub>: Pattern hole diameter
- D<sub>s</sub>: Pattern thickness
- d: Pin diagonal
- L: Pin length

\* When laying out the metal-plated bore holes, the clearance and creepage distance requirements - as specified in the equipment standards - must be considered.



fine-stranded, tip-bonded

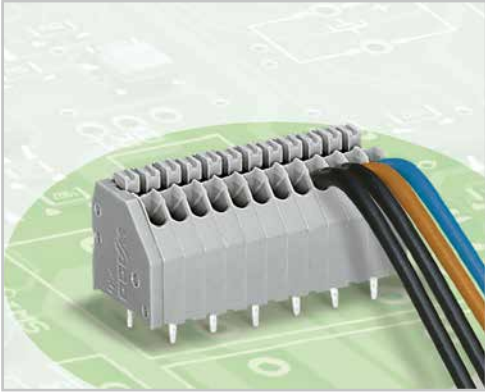


fine-stranded, with ferrules (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

## PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing: 2.5 mm, 2.54 mm 250 Series



- Compact PCB terminal strips with push-buttons
- Push-in termination of solid conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- PCB terminal strips also available with spacers upon request

### Technical data:

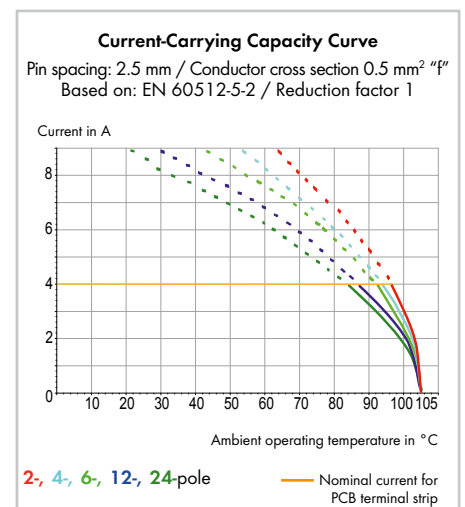
Pin Spacing	2.5 mm 0.098 in.			2.54 mm 0.1 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	4 A	4 A	4 A	4 A	4 A	4 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	2 A	-	2 A	2 A	-	2 A

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.14 ... 0.5 mm <sup>2</sup> (0.4 ... 0.8 mm Ø)
Conductor size: fine-stranded	0.2 ... 0.5 mm <sup>2</sup>
AWG	24 ... 20 [26 "sol."]
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1.1 <sup>-0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Copper alloy
Contact plating	tin-plated



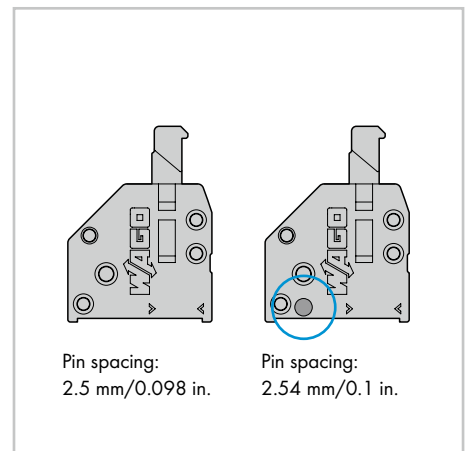
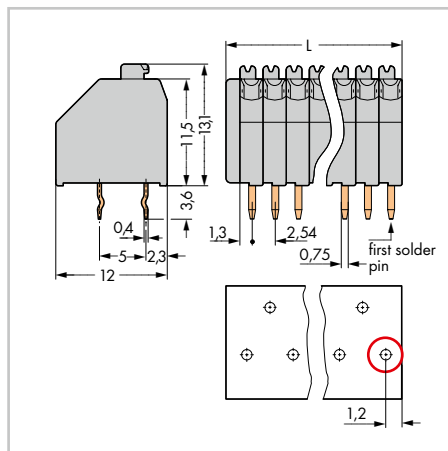
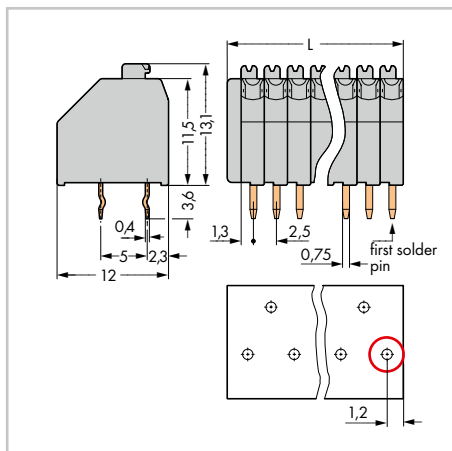
### 250 Series accessories:

### Page:

Marking accessories	512
Operating tools	496
Test pin	510



Pin spacing: 2.5 mm / 0.098 in.		Pin spacing: 2.54 mm / 0.1 in.	
0.2 ... 0.5 mm <sup>2</sup>	24 ... 20 AWG	0.2 ... 0.5 mm <sup>2</sup>	24 ... 20 AWG
160 V/2.5 kV/2 4 A	300 V/5 A	160 V/2.5 kV/2 4 A	300 V/5 A

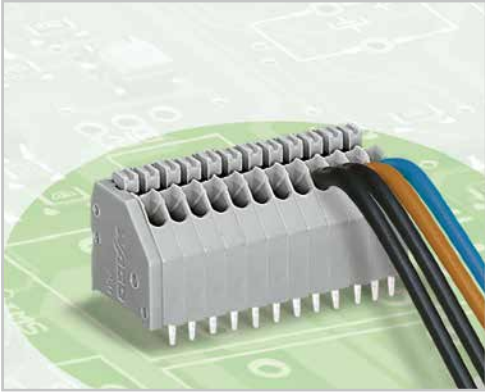


L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

A groove at the back of the PCB terminal strip differentiates between the two pin spacings.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	PCB terminal strips in other colors are available upon request (depending on quantity required):
PCB terminal strip with push-buttons 1 solder pin/pole, staggered, gray			PCB terminal strip with push-buttons 1 solder pin/pole, staggered, gray			
2	250-402	720 (4 x 180)	2	250-1402	720 (4 x 180)	● black
3	250-403	520 (4 x 130)	3	250-1403	520 (4 x 130)	● red
4	250-404	400 (4 x 100)	4	250-1404	400 (4 x 100)	● blue
5	250-405	340 (4 x 85)	5	250-1405	340 (4 x 85)	○ light gray
6	250-406	280 (4 x 70)	6	250-1406	280 (4 x 70)	● orange
7	250-407	240 (4 x 60)	7	250-1407	240 (4 x 60)	● green
8	250-408	220 (4 x 55)	8	250-1408	200 (4 x 50)	● violet
9	250-409	200 (4 x 50)	9	250-1409	180 (4 x 45)	○ white
10	250-410	180 (4 x 45)	10	250-1410	160 (4 x 40)	
11	250-411	160 (4 x 40)	11	250-1411	160 (4 x 40)	
12	250-412	140 (4 x 35)	12	250-1412	140 (4 x 35)	
13	250-413	140 (4 x 35)	13	250-1413	120 (4 x 30)	
14	250-414	120 (4 x 30)	14	250-1414	120 (4 x 30)	
15	250-415	120 (4 x 30)	15	250-1415	120 (4 x 30)	
16	250-416	100 (4 x 25)	16	250-1416	100 (4 x 25)	
17	250-417	100 (4 x 25)	17	250-1417	100 (4 x 25)	
18	250-418	80 (4 x 20)	18	250-1418	100 (4 x 25)	
19	250-419	80 (4 x 20)	19	250-1419	80 (4 x 20)	
20	250-420	80 (4 x 20)	20	250-1420	80 (4 x 20)	
21	250-421	80 (4 x 20)	21	250-1421	80 (4 x 20)	
22	250-422	80 (4 x 20)	22	250-1422	80 (4 x 20)	
23	250-423	80 (4 x 20)	23	250-1423	60 (4 x 15)	
24	250-424	60 (4 x 15)	24	250-1424	60 (4 x 15)	

# PCB Terminal Blocks with Push-Buttons, 0.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side Pin Spacing: 2.5 mm 250 Series



- Compact PCB terminal blocks with push-buttons
- Version with in-line solder pins
- Push-in termination of solid conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- PCB terminal blocks also available with spacers upon request

## Technical data:

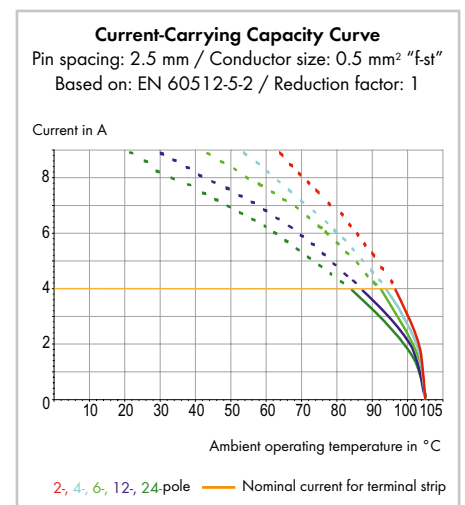
Pin Spacing	2.5 mm 0.098 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	100 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	4 A	4 A	4 A
Approvals per	UL/CSA		
Use group UL1059	B	C	D
Rated voltage	-	-	-
Nominal current UL	-	-	-
Nominal current CSA	-	-	-

## Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.14 ... 0.5 mm <sup>2</sup> (0.4 ... 0.8 mm Ø)
Conductor size: fine-stranded	0.2 ... 0.5 mm <sup>2</sup>
AWG	24 ... 20 [26 "sol."]
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1.1 <sup>-0.1</sup> mm

## Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Copper alloy
Contact plating	tin-plated



## 250 Series accessories:

## Page:

Marking accessories	512
Operating tools	496
Test pin	510

# PCB Terminal Blocks with Push-Buttons, 0.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side

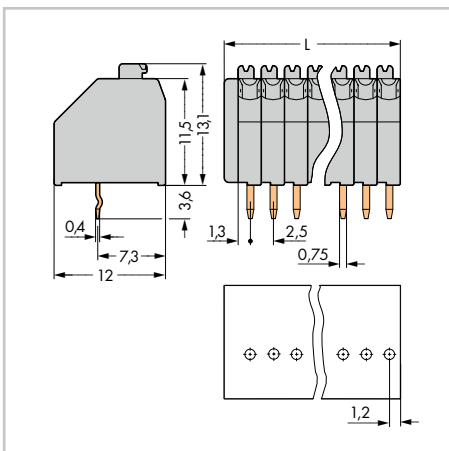
PUSH-IN CAGE CLAMP®

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Pin spacing: 2.5 mm / 0.098 in.

0.2 ... 0.5 mm<sup>2</sup> | 24 ... 20 AWG  
160 V/2.5 kV/2 4 A



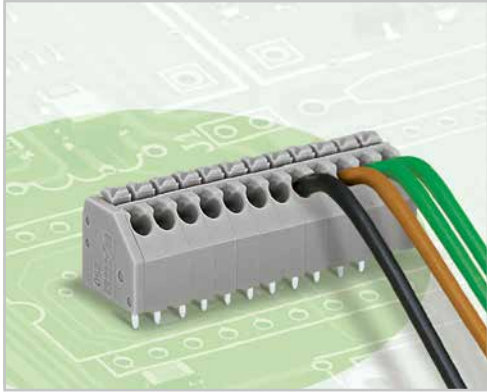
$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

Pole No.	Item No.	Pack. Unit	PCB terminal strips in other colors are available upon request (depending on quantity required):
PCB terminal block with push-buttons, 1 in-line solder pin/pole, front side, test slots for 2 mm Ø test plug, gray			
2	250-302	720 (4 x 180)	● black
3	250-303	520 (4 x 130)	● red
4	250-304	400 (4 x 100)	● blue
5	250-305	340 (4 x 85)	○ light gray
6	250-306	280 (4 x 70)	● orange
7	250-307	240 (4 x 60)	● green
8	250-308	220 (4 x 55)	● violet
9	250-309	200 (4 x 50)	○ white
10	250-310	180 (4 x 45)	
11	250-311	160 (4 x 40)	
12	250-312	140 (4 x 35)	
13	250-313	140 (4 x 35)	
14	250-314	120 (4 x 30)	
15	250-315	120 (4 x 30)	
16	250-316	100 (4 x 25)	
17	250-317	100 (4 x 25)	
18	250-318	80 (4 x 20)	
19	250-319	80 (4 x 20)	
20	250-320	80 (4 x 20)	
21	250-321	80 (4 x 20)	
22	250-322	80 (4 x 20)	
23	250-323	80 (4 x 20)	
24	250-324	60 (4 x 15)	

6

Other pole numbers, direct marking, PCB terminal strips with spacers, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

# PCB Terminal Strips with Push-buttons 1.5 mm<sup>2</sup> Pin Spacing: 3.5 mm 250 Series



- Compact PCB terminal strips with push-buttons
- Simple, push-in terminations of solid and ferruled conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- PCB terminal strips also available with spacers upon request

**Technical data:**

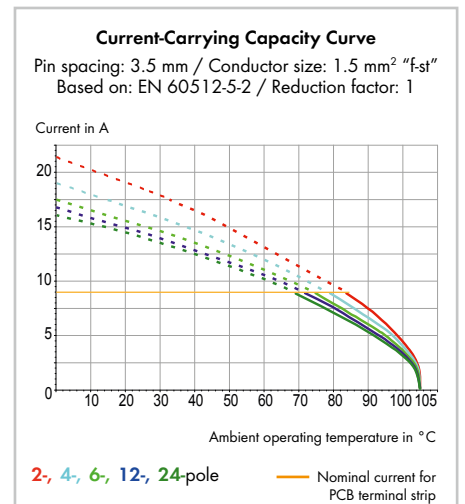
Pin Spacing	1 front solder pin/pole 3.5 mm / 0.138 in.			1 solder pin/pole, staggered, 3.5 mm/0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II
Overvoltage category	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	250 V	320 V	630 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	8 A	8 A	8 A	8 A	8 A	8 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

**Conductor and solder pin data:**

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Copper alloy
Contact plating	tin-plated

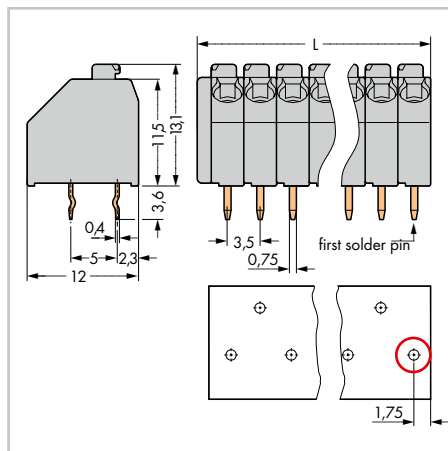
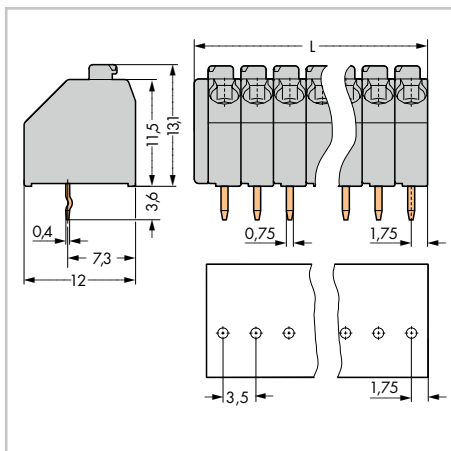
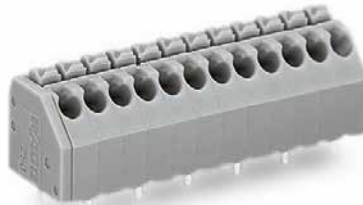


**250 Series accessories:**

**Page:**

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1 in-line solder pin/pole Pin spacing: 3.5 mm / 0.138 in.		1 solder pin/pole staggered Pin spacing: 3.5 mm / 0.138 in.	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
160 V/2.5 kV/2 8 A	300 V/5 A	320 V/4 kV/2 8 A	300 V/5 A



L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	PCB terminal strips in other colors are available upon request (depending on quantity required):
<b>PCB terminal strip with push-buttons 1 in-line solder pin/pole, gray</b>			<b>PCB terminal strip with push-buttons 1 solder pin/pole, staggered, gray</b>			
2	250-102	560 (4 x 140)	2	250-202	560 (4 x 140)	● yellow
3	250-103	400 (4 x 100)	3	250-203	400 (4 x 100)	● black
4	250-104	300 (4 x 75)	4	250-204	300 (4 x 75)	● red
5	250-105	240 (4 x 60)	5	250-205	240 (4 x 60)	● blue
6	250-106	200 (4 x 50)	6	250-206	200 (4 x 50)	○ light gray
7	250-107	180 (4 x 45)	7	250-207	180 (4 x 45)	● orange
8	250-108	160 (4 x 40)	8	250-208	160 (4 x 40)	● brown
9	250-109	140 (4 x 35)	9	250-209	140 (4 x 35)	● light green
10	250-110	120 (4 x 30)	10	250-210	120 (4 x 30)	● green
11	250-111	120 (4 x 30)	11	250-211	120 (4 x 30)	● violet
12	250-112	100 (4 x 25)	12	250-212	100 (4 x 25)	○ white
13	250-113	100 (4 x 25)	13	250-213	100 (4 x 25)	● pink
14	250-114	80 (4 x 20)	14	250-214	80 (4 x 20)	
15	250-115	80 (4 x 20)	15	250-215	80 (4 x 20)	
16	250-116	80 (4 x 20)	16	250-216	80 (4 x 20)	
17	250-117	80 (4 x 20)	17	250-217	80 (4 x 20)	
18	250-118	60 (4 x 15)	18	250-218	60 (4 x 15)	
19	250-119	60 (4 x 15)	19	250-219	60 (4 x 15)	
20	250-120	60 (4 x 15)	20	250-220	60 (4 x 15)	
21	250-121	60 (4 x 15)	21	250-221	60 (4 x 15)	
22	250-122	60 (4 x 15)	22	250-222	60 (4 x 15)	
23	250-123	60 (4 x 15)	23	250-223	60 (4 x 15)	
24	250-124	40 (4 x 10)	24	250-224	40 (4 x 10)	

# PCB Terminal Strips with Push-Buttons 0.5 mm<sup>2</sup> and 1.5 mm<sup>2</sup> THR (Through-Hole Reflow\*), Pin Spacing: 2.5 mm, 3.5 mm 250 Series



- Cost-effective integration of high-temperature resistant PCB THR terminal strips into SMT reflow soldering processes
- Versions with suction pads are available in tape-and-reel packaging for automated assembly
- Simple, push-in terminations of solid and ferruled conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring

## Technical data:

Pin Spacing	2.5 mm 0.098 in.			3.5 mm 0.138 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	160 V	160 V	250 V	200 V	320 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	4 kV	4 kV	4 kV
Nominal current	4 A	4 A	4 A	8 A	8 A	8 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	5 A	-	5 A	5 A	-	5 A
Nominal current CSA	2 A	-	2 A	10 A	-	10 A

## Conductor and solder pin data 2.5 mm

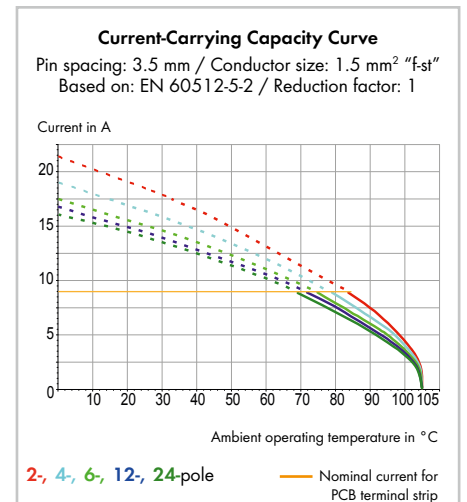
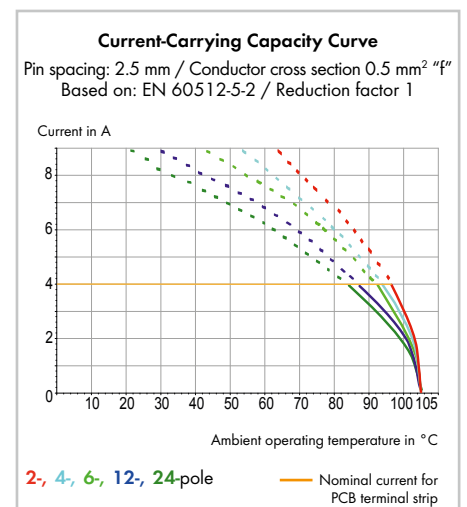
Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.14 ... 0.5 mm <sup>2</sup> (0.4 ... 0.8 mm Ø)
Conductor size: fine-stranded	0.2 ... 0.5 mm <sup>2</sup>
AWG	24 ... 20 [26 "sol."]
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.75 mm
Solder pin: metal-plated hole	1 <sup>+0.1</sup> mm Ø

## Conductor and solder pin data for 3.5 mm version:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	2.4 mm / 0.4 x 0.75 mm
Solder pin: metal-plated hole	1 <sup>+0.1</sup> mm Ø

## Material data:

Material group	III a
Insulating material	Nylon 46 (PA 46)
Flammability class per UL 94	V2
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Copper alloy
Contact plating	tin-plated



## 250 Series accessories:

## Page:

Marking accessories	512
Operating tools	496
Test pin	512

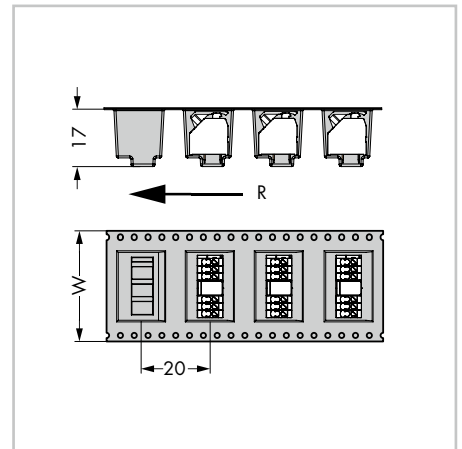
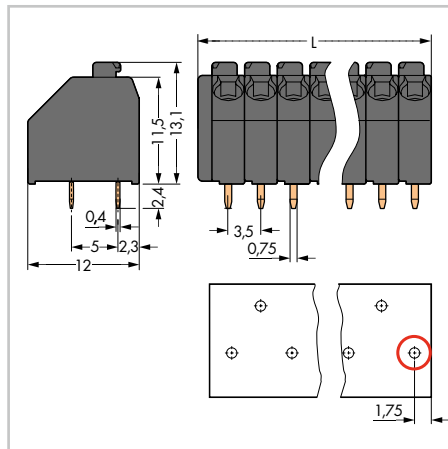
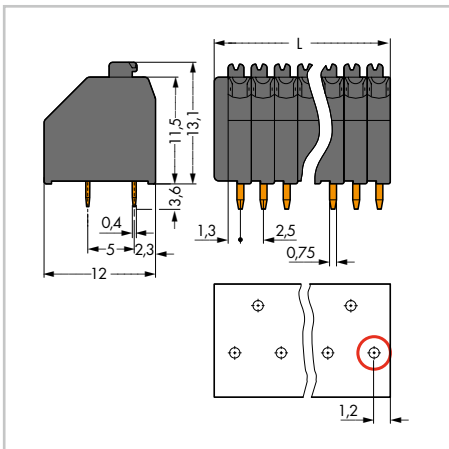
# PCB Terminal Strips with Push-Buttons 0.5 mm<sup>2</sup> and 1.5 mm<sup>2</sup>, THR

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Pin spacing: 2.5 mm / 0.098 in.		Pin spacing: 3.5 mm / 0.138 in.		PCB terminal strips in tape-and-reel packaging Pin spacing: 3.5 mm	
0.2 ... 0.5 mm <sup>2</sup> 160 V/2.5 kV/2 4 A	24 ... 20 AWG 300 V/5 A	0.2 ... 1.5 mm <sup>2</sup> 320 V/4 kV/2 8 A	24 ... 16 AWG 300 V/5 A	0.2 ... 1.5 mm <sup>2</sup> 320 V/4 kV/2 8 A	24 ... 16 AWG 300 V/5 A



L = (pole no. x pin spacing) + 1.5 mm  
 ⊙ first solder pin, right front side

W = Tape width  
 R = Feed direction

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
PCB terminal strip with push-buttons, 1 staggered solder pin/pole, black			PCB terminal strip with push-buttons, 1 staggered solder pin/pole, black			PCB terminal strip with additional suction pads, in tape-and-reel packaging acc. to IEC 60286-3, 3.5 mm pin spacing		
								(mm)
2	250-402/350-604	720 (4 x 180)	2	250-202/353-604	560 (4 x 140)	2	250-202/353-604/997-404	24
3	250-403/350-604	520 (4 x 130)	3	250-203/353-604	400 (4 x 100)	3	250-203/353-604/997-404	24
4	250-404/350-604	400 (4 x 100)	4	250-204/353-604	300 (4 x 75)	4	250-204/353-604/997-405	32
5	250-405/350-604	340 (4 x 85)	5	250-205/353-604	240 (4 x 60)	5	250-205/353-604/997-405	32
6	250-406/350-604	280 (4 x 70)	6	250-206/353-604	200 (4 x 50)	6	250-206/353-604/997-406	44
7	250-407/350-604	240 (4 x 60)	7	250-207/353-604	180 (4 x 45)	7	250-207/353-604/997-406	44
8	250-408/350-604	220 (4 x 55)	8	250-208/353-604	160 (4 x 40)	8	250-208/353-604/997-406	44
						330 mm reel diameter, 160 pieces per reel		

Other pole numbers and direct marking are available upon request (depending on quantity required).

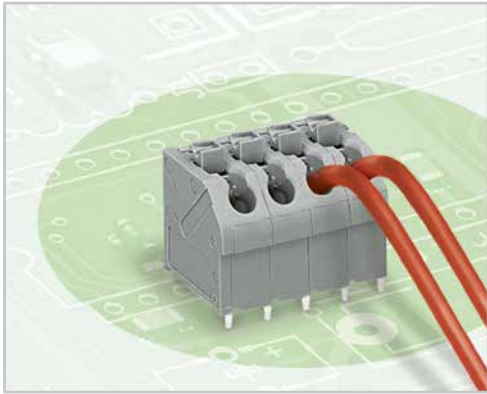


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# PCB Terminal Strips with Push-buttons 1.5 mm<sup>2</sup>

## Pin Spacing: 5 mm, 7.5 mm

### 250 Series



- Compact PCB terminal strips with push-buttons
- Simple, push-in terminations of solid and ferruled conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring

#### Technical data:

Pin Spacing	5 mm 0.197 in.			7.5 mm 0.295 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	500 V	630 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV
Nominal current	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	2 A	-	2 A	2 A	-	2 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

#### Conductor and solder pin data:

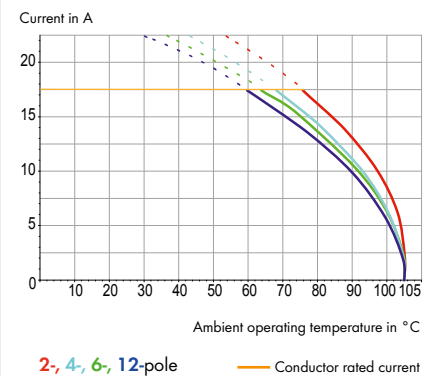
Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 mm <sup>2</sup> /20 AWG (I max. 2 A)
Conductor size: fine-stranded	0.75 ... 1.5 mm <sup>2</sup> (I max. 4 A)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 16 (20 ... 14 "sol.")
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.2 <sup>-0.1</sup> mm

#### Material data:

Material group	I
Insulating material	Polyamide 46 (PA 46)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

#### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 1.5 mm<sup>2</sup> "sol."  
Based on: EN 60512-5-2 / Reduction factor: 1



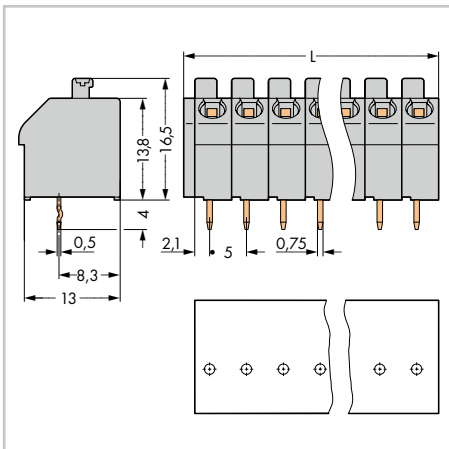
#### 250 Series accessories:

#### Page:

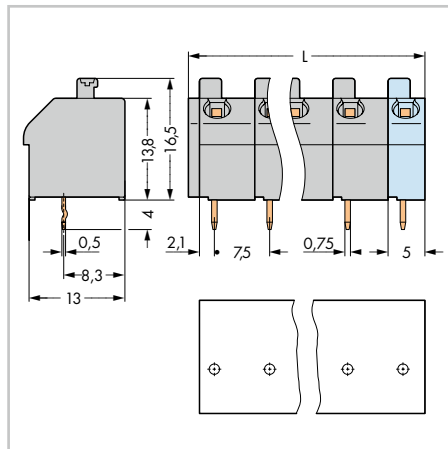
Marking accessories	510
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Test pin	512



Pin spacing: 5 mm / 0.197 in.		Pin spacing: 7.5 mm / 0.295 in.	
0.5 ... 1.5 mm <sup>2</sup>	20 ... 16 AWG	0.5 ... 1.5 mm <sup>2</sup>	20 ... 16 AWG
320 V/4 kV/2 17.5 A	300 V/2 A	630 V/6 kV/2 17.5 A	300 V/2 A



$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



$$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>PCB terminal strip with push-buttons</b>			<b>PCB terminal strip with push-buttons</b>		
<b>1 in-line solder pin/pole, gray</b>			<b>1 in-line solder pin/pole, gray</b>		
2	250-502	400 (4 x 100)	2	250-602	340 (4 x 85)
3	250-503	280 (4 x 70)	3	250-603	200 (4 x 50)
4	250-504	220 (4 x 55)	4	250-604	160 (4 x 40)
5	250-505	180 (4 x 45)	5	250-605	120 (4 x 30)
6	250-506	140 (4 x 35)	6	250-606	100 (4 x 25)
7	250-507	120 (4 x 30)	7	250-607	80 (4 x 20)
8	250-508	100 (4 x 25)	8	250-608	80 (4 x 20)
9	250-509	100 (4 x 25)	9	250-609	60 (4 x 15)
10	250-510	80 (4 x 20)	10	250-610	60 (4 x 15)
11	250-511	80 (4 x 20)	11	250-611	40 (4 x 10)
12	250-512	60 (4 x 15)	12	250-612	40 (4 x 10)
13	250-513	60 (4 x 15)			
14	250-514	60 (4 x 15)			
15	250-515	60 (4 x 15)			
16	250-516	40 (4 x 10)			

PCB terminal strips in other colors are available upon request (depending on quantity required):

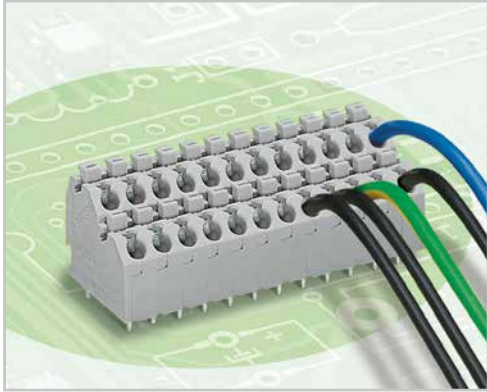
● yellow
● red
● blue
○ light gray
● orange
● brown
● light green
○ white

Other pole numbers, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

# Double-Deck PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup>

## Pin Spacing: 5 mm

### 250 Series



- Space-saving, double-deck PCB terminal strips with push-buttons
- Simple, push-in terminations of solid and ferruled conductors
- Push-button operation for connecting of fine-stranded conductors and removing of conductors
- 45° conductor entry angle provides easy, space-saving wiring

#### Technical data:

Pin Spacing	5 mm 0.197 in.		
	IEC/EN 60664-1		
Ratings per	III	III	II
Overvoltage category	3	2	2
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	10 A	10 A	10 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	10 A	-	10 A
Nominal current CSA	10 A	-	10 A

#### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 mm <sup>2</sup> /20 AWG (I max. 2 A)
Conductor size: fine-stranded	0.75 ... 1.5 mm <sup>2</sup> (I max. 4 A)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 16 (20 ... 14 "sol.")
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.2 <sup>-0.1</sup> mm

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

#### 250 Series accessories:

#### Page:

Marking accessories	510
Operating tools	496
Test pin	512

# Double-Deck PCB Terminal Strips with Push-Buttons 1.5 mm<sup>2</sup>

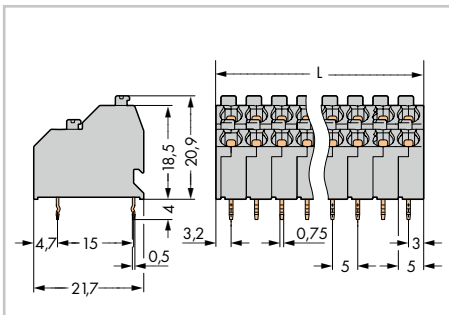
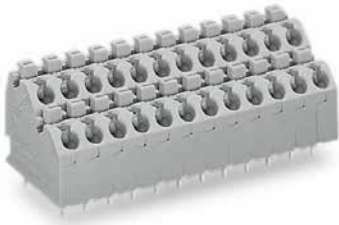
PUSH-IN CAGE CLAMP®

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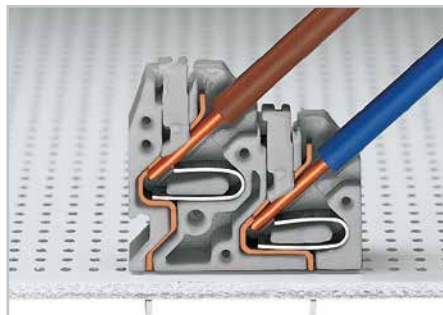
409

Pin spacing: 5 mm / 0.197 in.

0.5 ... 1.5 mm <sup>2</sup>	20 ... 16 AWG
320 V/4 kV/2 10 A	300 V/10 A



$L = (\text{pole no.} \times \text{pin spacing}) + 1.2 \text{ mm}$



Space-saving wiring  
Inserting solid conductors via push-in termination.

Pole No.	Item No.	Pack. Unit
<b>Double-deck PCB terminal strip with push-buttons, 2 in-line solder pins, gray</b>		
2 x 2	250-702	264 (4 x 66)
3 x 2	250-703	180 (4 x 45)
4 x 2	250-704	132 (4 x 33)
6 x 2	250-706	84 (4 x 21)
8 x 2	250-708	72 (4 x 18)
10 x 2	250-710	48 (4 x 12)
12 x 2	250-712	48 (4 x 12)
16 x 2	250-716	36 (4 x 9)
24 x 2	250-724	24 (4 x 6)



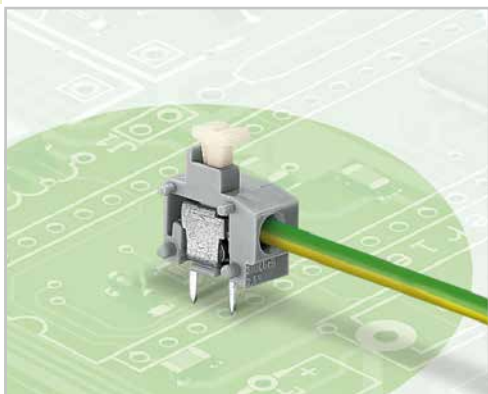
Testing with 2 mm Ø test plug, touch contact with current bar.

PCB terminal strips in other colors are available upon request (depending on quantity required):

- blue
- orange

6

## Modular PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Modular PCB terminal blocks with push-buttons for custom PCB terminal strip assemblies
- Simple, push-in terminations of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series without push-buttons, see page 426

### Technical data:

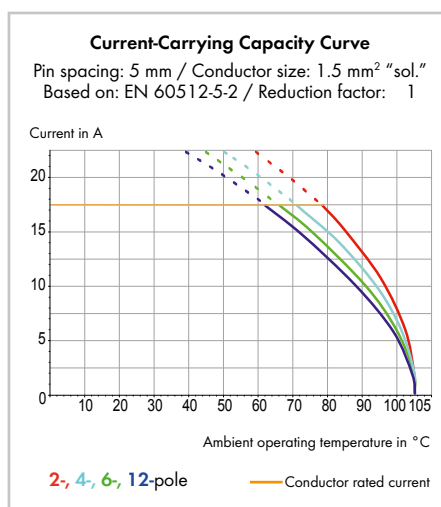
Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	15 A	-	-	15 A	-	-	15 A	-	-

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.5 mm <sup>2</sup> (I max. 2 A)
Conductor size: fine-stranded	0.75 ... 1.5 mm <sup>2</sup> (I max. 6 A)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 14
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated



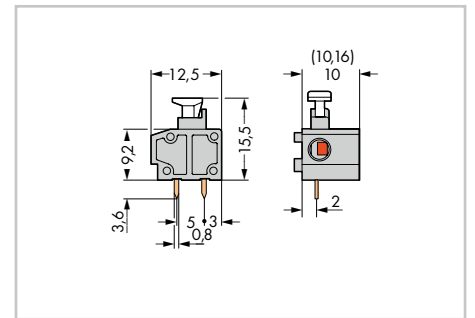
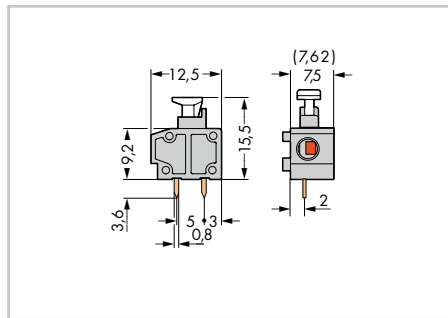
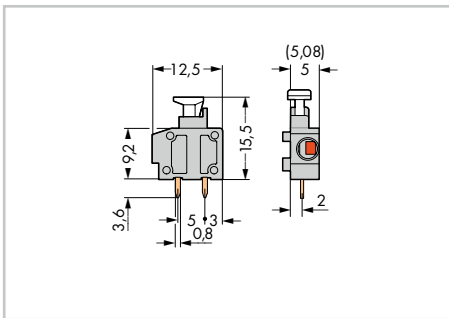
### 235 Series accessories:

### Page:


Marking accessories	510
Operating tools	496

# Modular PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> **PUSH-IN CAGE CLAMP®**

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG	0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG	0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG
320 V/4 kV/2 17.5 A	300 V/10 A	630 V/6 kV/2 17.5 A	300 V/10 A	1000 V/8 kV/2 17.5 A	300 V/10 A



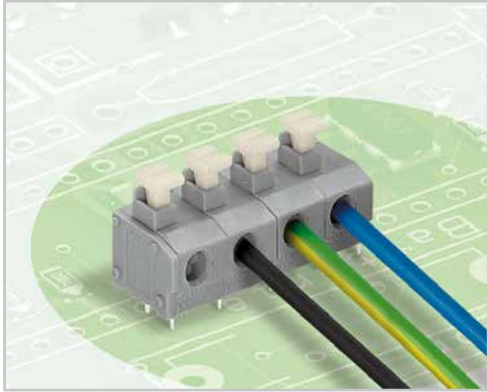
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Modular PCB terminal strip with push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal strip with push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal strip with push-button, 2 solder pins/pole</b>		
gray	235-401/331-000	800 (8 x 100)	gray	235-501/331-000	600 (6 x 100)	gray	235-801/331-000	400 (4 x 100)
red	235-740/331-000	800 (8 x 100)	dark gray	235-752/331-000	600 (6 x 100)	dark gray	235-762/331-000	400 (4 x 100)
yellow	235-741/331-000	800 (8 x 100)	light gray	235-753/331-000	600 (6 x 100)	light gray	235-763/331-000	400 (4 x 100)
dark gray	235-742/331-000	800 (8 x 100)	blue	235-754/331-000	600 (6 x 100)	blue	235-764/331-000	400 (4 x 100)
light gray	235-743/331-000	800 (8 x 100)	white	235-755/331-000	600 (6 x 100)	white	235-765/331-000	400 (4 x 100)
blue	235-744/331-000	800 (8 x 100)	orange	235-756/331-000	600 (6 x 100)	orange	235-766/331-000	400 (4 x 100)
white	235-745/331-000	800 (8 x 100)	light green	235-757/331-000	600 (6 x 100)	light green	235-767/331-000	400 (4 x 100)
orange	235-746/331-000	800 (8 x 100)	black	235-758/331-000	600 (6 x 100)	black	235-768/331-000	400 (4 x 100)
light green	235-747/331-000	800 (8 x 100)						
black	235-748/331-000	800 (8 x 100)						
violet	235-749/331-000	800 (8 x 100)						
			① Suitable for Ex i applications			① Suitable for Ex i applications		

Accessory	Item No.	Pack. Unit
<b>Spacer for modular PCB terminal blocks</b> doubles pin spacing, gray		
	235-701	100

Color	Item No.	Pack. Unit
gray	235-100	100
dark gray	235-200	100
light gray	235-300	100
blue	235-400	100
black	235-500	100
yellow	235-550	100
orange	235-600	100
violet	235-650	100
light green	235-700	100
red	235-800	100
white	235-850	100

Other colors are available upon request (depending on quantity required).

## PCB Terminal Strips with Push-buttons 1.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- PCB terminal strips with push-buttons
- Simple, push-in terminations of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series without push-buttons, see page 428

### Technical data:

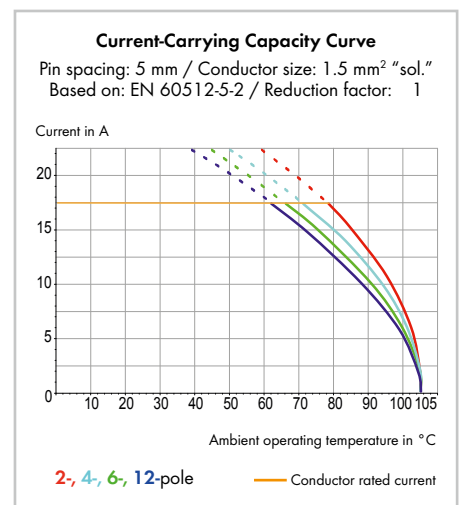
Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A	17.5A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	15 A	-	-	15 A	-	-	15 A	-	-

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 0.5 mm <sup>2</sup> (I max. 2 A)
Conductor size: fine-stranded	0.75 ... 1.5 mm <sup>2</sup> (I max. 6 A)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 14
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated

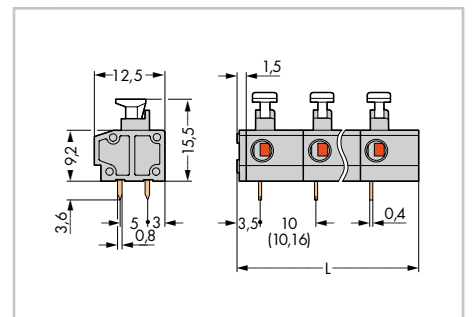
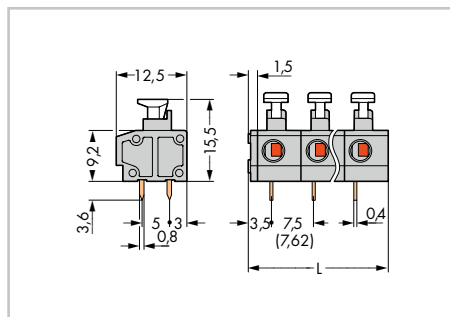
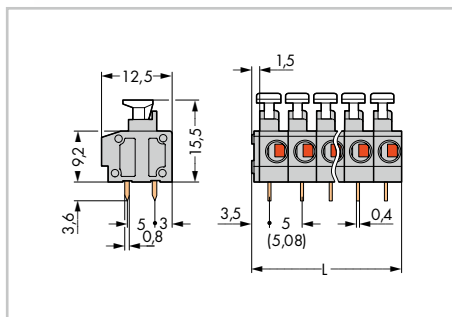
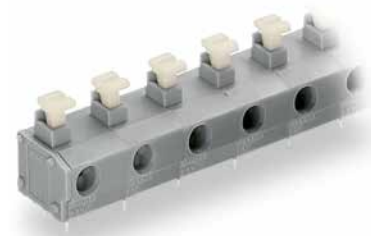
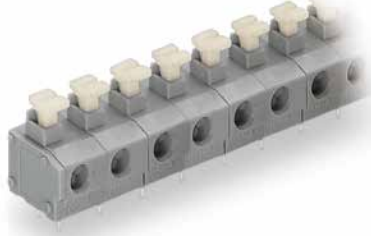
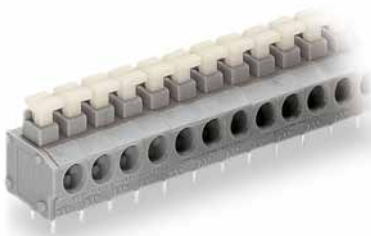


### 235 Series accessories:

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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG	0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG	0.5 ... 1.5 mm <sup>2</sup>	20 ... 14 AWG
320 V/4 kV/2 17.5 A	300 V/10 A	630 V/6 kV/2 17.5 A	300 V/10 A	1000 V/8 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

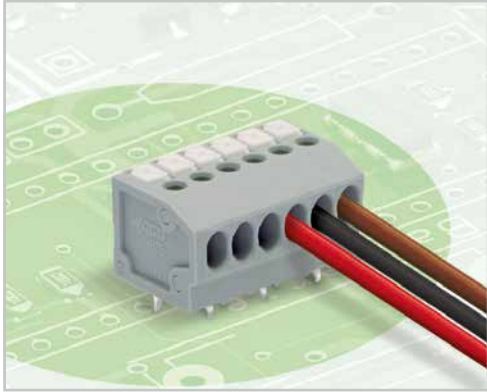
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
PCB terminal strip with push-buttons, 2 solder pins/pole, gray			PCB terminal strip with push-buttons, 2 solder pins/pole, gray			PCB terminal strip with push-buttons, 2 solder pins/pole, gray		
2	235-402/331-000	420 (4 x 105)	2	235-502/331-000	280 (4 x 70)	2	235-802/331-000	220 (4 x 55)
3	235-403/331-000	280 (4 x 70)	3	235-503/331-000	200 (4 x 50)	3	235-803/331-000	140 (4 x 35)
4	235-404/331-000	220 (4 x 55)	4	235-504/331-000	140 (4 x 35)	4	235-804/331-000	120 (4 x 30)
5	235-405/331-000	180 (4 x 45)	5	235-505/331-000	120 (4 x 30)	5	235-805/331-000	80 (4 x 20)
6	235-406/331-000	140 (4 x 35)	6	235-506/331-000	100 (4 x 25)	6	235-806/331-000	80 (4 x 20)
7	235-407/331-000	120 (4 x 30)	7	235-507/331-000	80 (4 x 20)	7	235-807/331-000	60 (4 x 15)
8	235-408/331-000	100 (4 x 25)	8	235-508/331-000	60 (4 x 15)	8	235-808/331-000	40 (4 x 10)
9	235-409/331-000	100 (4 x 25)	9	235-509/331-000	60 (4 x 15)	9	235-809/331-000	40 (4 x 10)
10	235-410/331-000	80 (4 x 20)	10	235-510/331-000	60 (4 x 15)	10	235-810/331-000	40 (4 x 10)
12	235-412/331-000	60 (4 x 15)	12	235-512/331-000	40 (4 x 10)	12	235-812/331-000	40 (4 x 10)
16	235-416/331-000	60 (4 x 15)	16	235-516/331-000	40 (4 x 10)	16	235-816/331-000	20 (4 x 5)
24	235-424/331-000	40 (4 x 10)	24	235-524/331-000	20 (4 x 5)	24	235-824/331-000	20 (4 x 5)
36	235-436/331-000	20 (4 x 5)						
48	235-448/331-000	20 (4 x 5)						

PCB terminal strips in other colors are available upon request (depending on quantity required):

● yellow
● black
● red
● blue
● dark gray
○ light gray
● orange
● light green
● violet
○ white
● Suitable for Ex i applications (only for 7.5/7.62mm and 10/10.16mm pin spacing)



## PCB Terminal Strips with Push-buttons 1.5 mm<sup>2</sup> Pin Spacing: 3.5 mm 805 Series



- PCB terminal strips with push-button actuated Push-in CAGE CLAMP®
- Simple, push-in terminations of solid and ferruled conductors
- Flush-mount push-buttons that close with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation
- Versions with/without test slots and spacers
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

### Technical data:

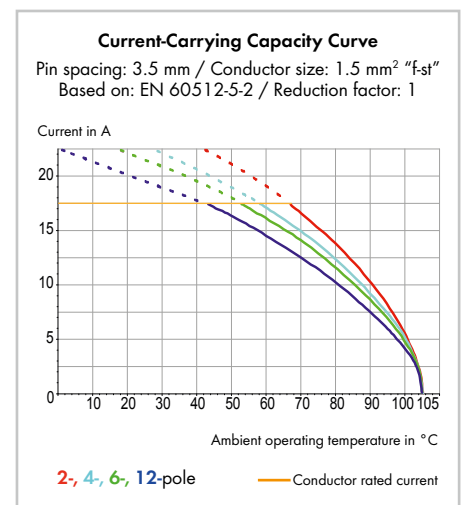
Pin Spacing	3.5 mm 0.138 in.				
Ratings per	IEC/EN 60664-1				
Overtension category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	250 V	320 V	630 V		
Rated surge voltage	4 kV	4 kV	4 kV		
Nominal current	17.5A	17.5A	17.5A		
Approvals per	UL/CSA				
Use group UL 1059	B	C	D		
Rated voltage	300 V	150 V	300 V		
Nominal current UL	10 A	10 A	10 A		
Nominal current CSA	-	-	-		

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.2 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated



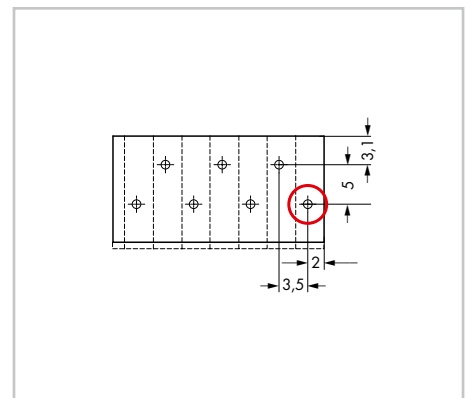
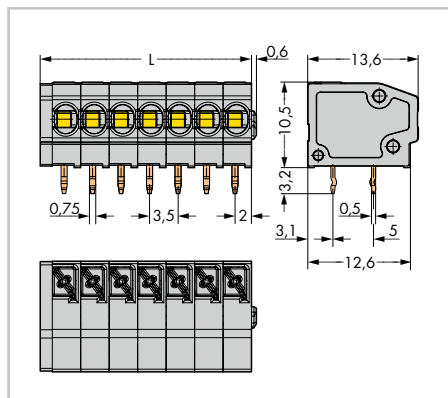
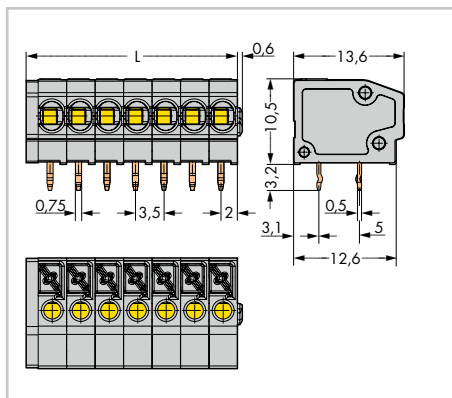
### 805 Series accessories:

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Test plug	510



<b>With test slots</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>Pin spacing: 3.5 mm / 0.138 in.</b>	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
320 V/4 kV/2 17.5 A	300 V/10 A	320 V/4 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm  
 ○ first solder pin, right front side

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>PCB terminal strip with push-buttons and test slots for 2 mm Ø test plug, gray</b>			<b>PCB terminal strip with push-buttons, gray</b>		
2	805-102	580 (4 x 145)	2	805-302	580 (4 x 145)
3	805-103	420 (4 x 105)	3	805-303	420 (4 x 105)
4	805-104	320 (4 x 80)	4	805-304	320 (4 x 80)
5	805-105	260 (4 x 65)	5	805-305	260 (4 x 65)
6	805-106	220 (4 x 55)	6	805-306	220 (4 x 55)
7	805-107	180 (4 x 45)	7	805-307	180 (4 x 45)
8	805-108	160 (4 x 40)	8	805-308	160 (4 x 40)
9	805-109	140 (4 x 35)	9	805-309	140 (4 x 35)
10	805-110	120 (4 x 30)	10	805-310	120 (4 x 30)
11	805-111	100 (4 x 25)	11	805-311	100 (4 x 25)
12	805-112	100 (4 x 25)	12	805-312	100 (4 x 25)
13	805-113	100 (4 x 25)	13	805-313	100 (4 x 25)
14	805-114	100 (4 x 25)	14	805-314	100 (4 x 25)
15	805-115	80 (4 x 20)	15	805-315	80 (4 x 20)
16	805-116	80 (4 x 20)	16	805-316	80 (4 x 20)
17	805-117	80 (4 x 20)	17	805-317	80 (4 x 20)
18	805-118	60 (4 x 15)	18	805-318	60 (4 x 15)
19	805-119	60 (4 x 15)	19	805-319	60 (4 x 15)
20	805-120	60 (4 x 15)	20	805-320	60 (4 x 15)
21	805-121	60 (4 x 15)	21	805-321	60 (4 x 15)
22	805-122	60 (4 x 15)	22	805-322	60 (4 x 15)
23	805-123	60 (4 x 15)	23	805-323	60 (4 x 15)
24	805-124	40 (4 x 10)	24	805-324	40 (4 x 10)

PCB terminal strips in other colors are available upon request (depending on quantity required):

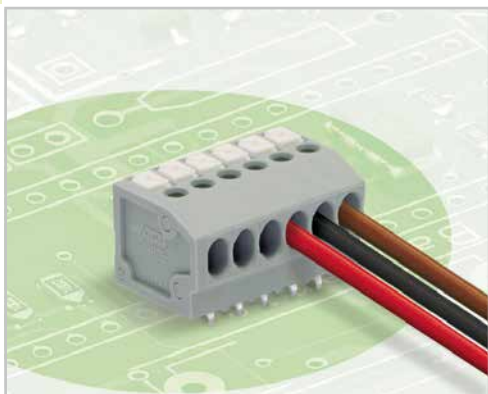
● blue
● orange

Other pole numbers and direct marking are available upon request (depending on quantity required).

# PCB Terminal Blocks with Push-Buttons, 1.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side

## Pin spacing: 3.5 mm

### 805 Series



- PCB terminal blocks with with push-button actuated Push-in CAGE CLAMP®
- Version with in-line solder pins
- Simple, push-in terminations of solid and ferruled conductors
- Flush-mount push-buttons that close with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation
- Versions with/without test slots and spacers
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

#### Technical data:

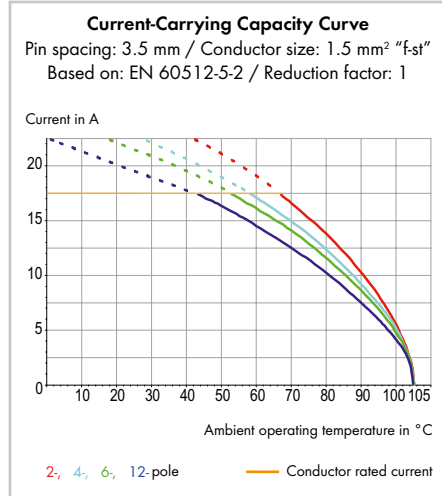
Pin Spacing	3.5 mm 0.138 in.		
Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Nominal current	17.5A	17.5A	17.5A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	-	-	-
Nominal current UL	-	-	-
Nominal current CSA	-	-	-

#### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.2 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated



#### 805 Series accessories:

#### Page:

Marking accessories	512
Operating tools	496
Test plug	510

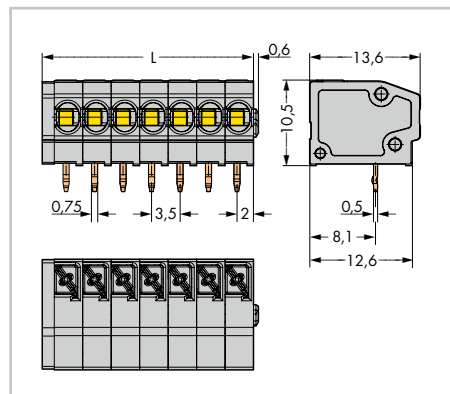
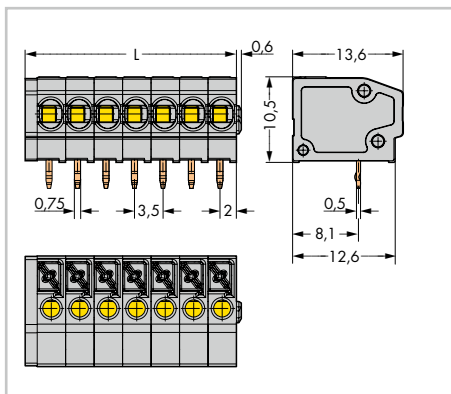
# PCB Terminal Blocks with Push-Buttons, 1.5 mm<sup>2</sup>, 1 In-Line Solder Pin/Pole, Front Side

PUSH-IN CAGE CLAMP®

6

417

<b>With test slots</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>Pin spacing: 3.5 mm / 0.138 in.</b>	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
160 V/2.5 kV/2 17.5 A	300 V/10 A	160 V/2.5 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
PCB terminal block with push-buttons, 1 in-line solder pin/pole, front side, test slots for 2 mm Ø test plug, gray			PCB terminal block with push-buttons, 1 in-line solder pin/pole, front side, test slots for 2 mm Ø test plug, gray		
2	805-152	600 (4 x 150)	2	805-352	600 (4 x 150)
3	805-153	420 (4 x 105)	3	805-353	420 (4 x 105)
4	805-154	320 (4 x 80)	4	805-354	300 (4 x 75)
5	805-155	260 (4 x 65)	5	805-355	260 (4 x 65)
6	805-156	220 (4 x 55)	6	805-356	220 (4 x 55)
7	805-157	180 (4 x 45)	7	805-357	180 (4 x 45)
8	805-158	160 (4 x 40)	8	805-358	160 (4 x 40)
9	805-159	140 (4 x 35)	9	805-359	140 (4 x 35)
10	805-160	120 (4 x 30)	10	805-360	120 (4 x 30)
11	805-161	100 (4 x 25)	11	805-361	100 (4 x 25)
12	805-162	100 (4 x 25)	12	805-362	100 (4 x 25)
13	805-163	100 (4 x 25)	13	805-363	100 (4 x 25)
14	805-164	100 (4 x 25)	14	805-364	100 (4 x 25)
15	805-165	80 (4 x 20)	15	805-365	80 (4 x 20)
16	805-166	80 (4 x 20)	16	805-366	80 (4 x 20)
17	805-167	80 (4 x 20)	17	805-367	80 (4 x 20)
18	805-168	60 (4 x 15)	18	805-368	60 (4 x 15)
19	805-169	60 (4 x 15)	19	805-369	60 (4 x 15)
20	805-170	60 (4 x 15)	20	805-370	60 (4 x 15)
21	805-171	60 (4 x 15)	21	805-371	60 (4 x 15)
22	805-172	60 (4 x 15)	22	805-372	60 (4 x 15)
23	805-173	60 (4 x 15)	23	805-373	60 (4 x 15)
24	805-174	40 (4 x 10)	24	805-374	40 (4 x 10)

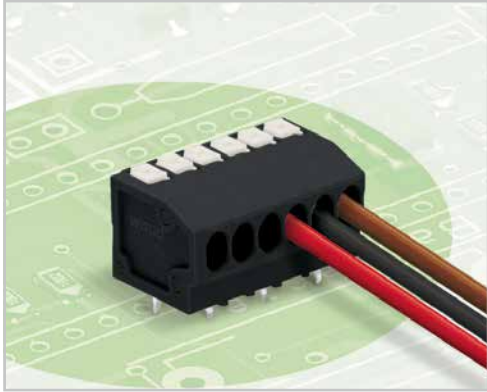
PCB terminal strips in other colors are available upon request (depending on quantity required):

● blue
● orange

Other pole numbers and direct marking are available upon request (depending on quantity required).

6

## THR\* PCB Terminal Blocks with Push-Buttons, 1.5 mm<sup>2</sup> Pin spacing: 3.5 mm 805 Series



- THR\* PCB terminal blocks with with push-button actuated Push-in CAGE CLAMP®
- Simple, push-in terminations of solid and ferruled conductors
- Flush-mount push-buttons that close with minimal force for convenient termination/removal of fine-stranded conductors
- Convenient, tool-free operation

### Technical data:

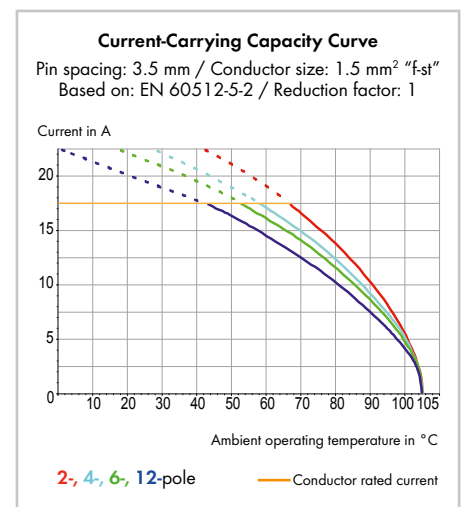
Pin Spacing	3.5 mm 0.138 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	200 V	320 V	320 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	17.5A	17.5A	17.5A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	-	-	-
Nominal current UL	-	-	-
Nominal current CSA	-	-	-

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.2 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	24 ... 16
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.9 mm
Solder pin: metal-plated hole	1.1 <sup>+0.1</sup> mm Ø

### Material data:

Material group	III a
Insulating material	Nylon 46 (PA 46)
Flammability rating per UL 94	V2
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

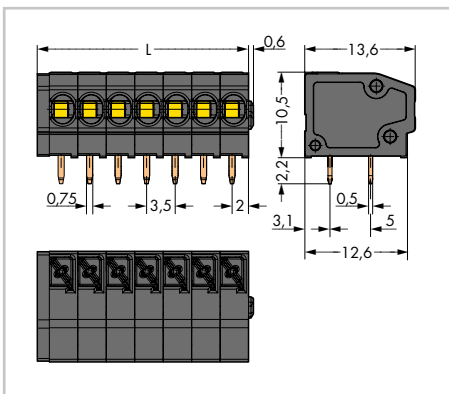


### 805 Series accessories:

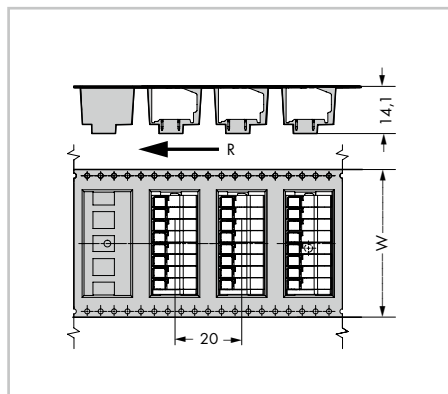
### Page:

Marking accessories	512
Operating tools	496
Test plug	510

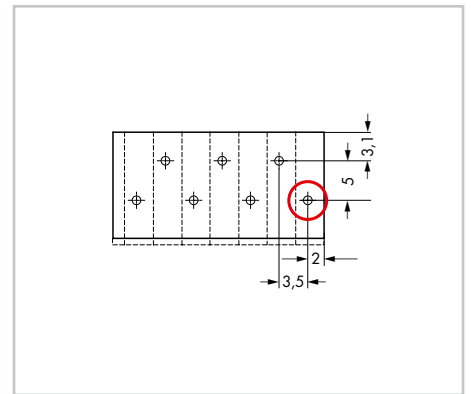
<b>Pin spacing: 3.5 mm / 0.138 in.</b>		<b>PCB terminal strips in tape-and-reel packaging</b> <b>Pin spacing: 3.5 mm / 0.138 in.</b>	
0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG	0.2 ... 1.5 mm <sup>2</sup>	24 ... 16 AWG
320 V/4 kV/2 17.5 A	300 V/10 A	320 V/4 kV/2 17.5 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

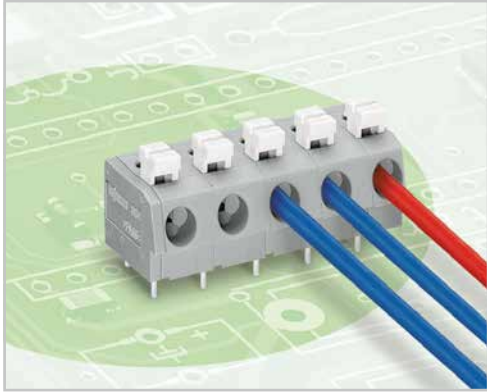


R = Feed direction  
W = Tape width



Pole No.	Item No.	PU/SPU	Pole No.	Item No.	W
THR* PCB terminal block with push-buttons, black			THR* PCB terminal block with push-buttons, in tape-and-reel packaging acc. to IEC 60286-3, black		
					(mm)
2	805-302/200-604	600 (4 x 150)	2	805-302/200-604/997-404	24
3	805-303/200-604	420 (4 x 105)	3	805-303/200-604/997-405	32
4	805-304/200-604	300 (4 x 75)	4	805-304/200-604/997-405	32
5	805-305/200-604	260 (4 x 65)	5	805-305/200-604/997-405	32
6	805-306/200-604	220 (4 x 55)	6	805-306/200-604/997-406	44
7	805-307/200-604	180 (4 x 45)	7	805-307/200-604/997-406	44
8	805-308/200-604	160 (4 x 40)	8	805-308/200-604/997-406	44
330 mm reel diameter, 160 pieces per reel					

## PCB Terminal Strips with Push-buttons 2.5 mm<sup>2</sup> Pin Spacing: 5 mm, 7.5 mm 804 Series



- PCB terminal strips with push-button actuated Push-in CAGE CLAMP®
- Simple, push-in terminations of solid and ferruled conductors
- A large conductor entry accommodates conductors with a cross section up to 12 AWG with an insulation diameter up to 4.2 mm
- PCB terminal strips with spacers to increase pin spacing
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

### Technical data:

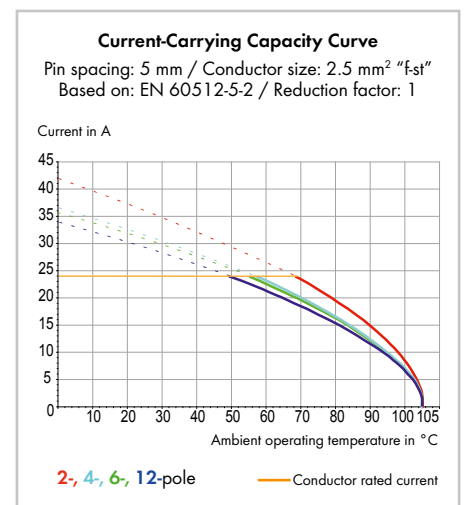
Pin Spacing	5 mm 0.197 in.			7.5 mm 0.295 in.		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A

### Conductor and solder pin data:

Connection technology	Push-in CAGE CLAMP®
Conductor size: solid	0.25 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 2.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 12
Strip length	10 ... 11 mm / 0.39 ... 0.43 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.8 x 0.6 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

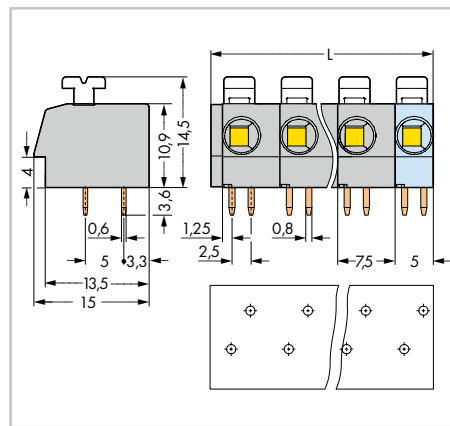
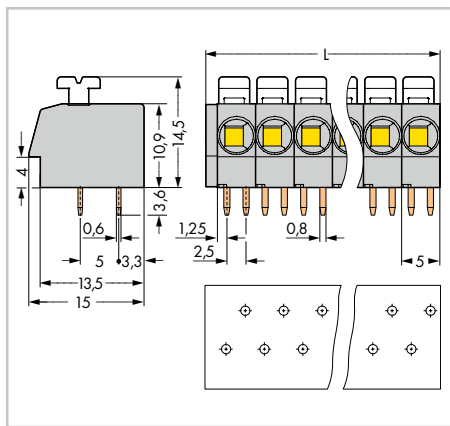
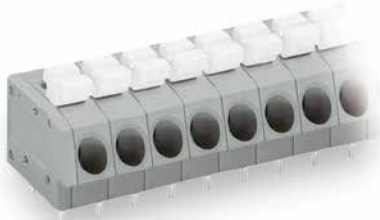


### 804 Series accessories:

### Page:

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Pin spacing: 5 mm / 0.197 in.		Pin spacing: 7.5 mm / 0.295 in.	
0.25 ... 2.5 mm <sup>2</sup>	20 ... 12 AWG	0.25 ... 2.5 mm <sup>2</sup>	20 ... 12 AWG
320 V/4 kV/2 24 A	300 V/10 A	320 V/4 kV/2 24 A	300 V/10 A



L = (pole no. x pin spacing) + 1.5 mm

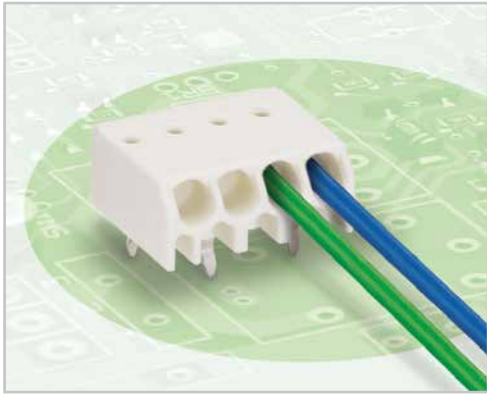
L = (pole no. - 1) x pin spacing + 5 mm + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
PCB terminal strip with push-buttons, 2 staggered solder pins/pole, gray			PCB terminal strip with push-buttons, 2 staggered solder pins/pole, gray		
2	804-102	420 (4 x 105)	2	804-302	340 (4 x 85)
3	804-103	300 (4 x 75)	3	804-303	220 (4 x 55)
4	804-104	220 (4 x 55)	4	804-304	160 (4 x 40)
5	804-105	180 (4 x 45)	5	804-305	120 (4 x 30)
6	804-106	140 (4 x 35)	6	804-306	100 (4 x 25)
7	804-107	120 (4 x 30)	7	804-307	80 (4 x 20)
8	804-108	100 (4 x 25)	8	804-308	80 (4 x 20)
9	804-109	100 (4 x 25)	9	804-309	60 (4 x 15)
10	804-110	80 (4 x 20)	10	804-310	60 (4 x 15)
11	804-111	80 (4 x 20)	11	804-311	60 (4 x 15)
12	804-112	80 (4 x 20)	12	804-312	40 (4 x 10)
13	804-113	60 (4 x 15)			
14	804-114	60 (4 x 15)			
15	804-115	60 (4 x 15)			
16	804-116	60 (4 x 15)			

PCB terminal strips in other colors are available upon request (depending on quantity required):

● red
● blue
● orange
● light green
● pink
● Suitable for Ex i applications

## PCB Terminal Blocks 1.5 mm<sup>2</sup> Pin Spacing: 3.5 mm 744 Series



- PCB terminal blocks with PUSH WIRE® connection
- Push-in termination of solid conductors – low insertion forces
- Just 6.6 mm high
- Conductor removal via disconnection tool or by twist & pull

### Technical data:

Pin Spacing	3.5 mm 0.138 in.		
Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	250 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	2 A	2 A	2 A
Approvals per	UL/CSA		
Use group UL1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	2 A	-	2 A
Nominal current CSA	-	-	-

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
AWG	20 ... 16 "sol."
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.5 mm / 0.35 x 0.9 mm
Solder pin: drilled hole diameter	1.1 <sup>-0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Copper alloy
Contact plating	tin-plated

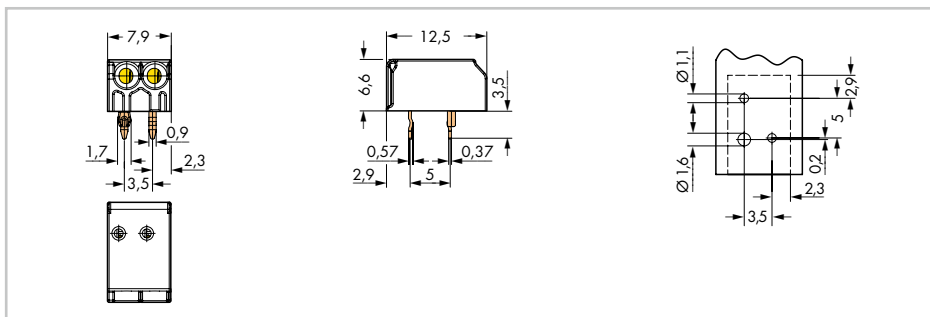
### 744 Series accessory:

### Page:

Disconnect tool	502



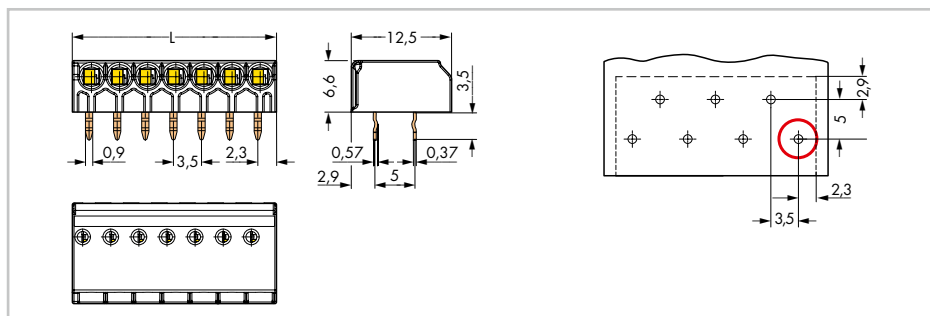
<b>Pin spacing: 3.5 mm / 0.138 in.</b>	
0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."
320 V/4 kV/2 A	300 V/2 A



2-pole version with additional anti-rotating pin



Inserting solid conductor via push-in termination.



For 3 poles and more, L = (pole no. x pin spacing) + 0.9 mm  
 ○ first solder pin, right front side



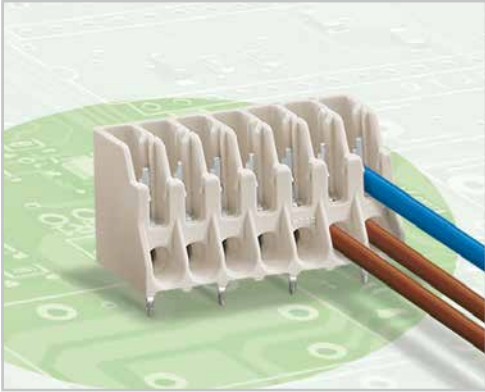
Removing conductor via 1.0 mm Ø disconnection tool. (206-841)

Pole No.	Item No.	Pack. Unit
<b>PCB terminal block with disconnecting slots, white</b>		
2	744-392	1500
3	744-303	1000
4	744-304	800
6	744-306	500
7	744-307	300
8	744-308	300
10	744-310	200

## Combi PCB Terminal Blocks with PUSH WIRE® and FIT CLAMP® Connections

### Pin Spacing: 3.5 mm

### 251 Series



- Compact Combi PCB terminal blocks ideal for automated wiring in the lighting industry
- Low conductor insertion forces
- PUSH WIRE® and FIT CLAMP® connections suitable for automated wiring systems

#### Technical data:

#### "251 high" version:

#### "251 mini" version:

Pin Spacing	3.5 mm/0.138 in. 0.5 ... 1.5 mm <sup>2</sup> "sol."			3.5 mm/0.138 in. 0.5 ... 1 mm <sup>2</sup> "sol."		
	IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	2 A	2 A	2 A	6 A	6 A	6 A
Approvals per	UL/CSA			UL/CSA		
Use group UL1059	B	C	D	B	C	D
Rated voltage	-	-	-	300 V	-	300 V
Nominal current UL	-	-	-	4 A	-	4 A
Nominal current CSA	-	-	-	-	-	-

#### Conductor and solder pin data for "251 high" version:

Connection technology	<b>PUSH WIRE®</b>
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
AWG	20 ... 16 "sol."
Strip length	7.5 ... 8.5 mm / 0.29 ... 0.32 in.
Conductor entry angle	0° to PCB
Connection technology	<b>FIT CLAMP®</b> (IDC connection)
Conductor size: solid	0.5 mm <sup>2</sup> (PVC insulation, simple)
Conductor size: fine-stranded	0.75 mm <sup>2</sup> (PVC insulation, simple)
Solder pin: length/width	3.6 mm / 0.75 x 0.5 mm
Solder pin: drilled hole diameter	1.2 <sup>-0.1</sup> mm

#### Conductor and solder pin data for "251 mini" version:

Connection technology	<b>PUSH WIRE®</b>
Conductor size: solid	0.5 ... 1 mm <sup>2</sup> for 1 mm <sup>2</sup> "sol." max. insulation diameter 2.5 mm
AWG	20 ... 18 "sol."
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry angle	0° to PCB
Connection technology	<b>FIT CLAMP®</b> (IDC connection)
Conductor size: solid	0.5 mm <sup>2</sup> (PVC insulation, simple)
Conductor size: fine-stranded	0.75 mm <sup>2</sup> (PVC insulation, simple)
Solder pin: length/width	3.2 mm / 0.75 x 0.5 mm
Solder pin: drilled hole diameter	1.1 <sup>-0.1</sup> mm

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome-nickel spring steel (CrNi) (only "251 mini" version)
Contact material	Copper alloy
Contact plating	tin-plated

#### 251 Series accessories:

#### Page:

Operating tool	497
Disconnect tool	502

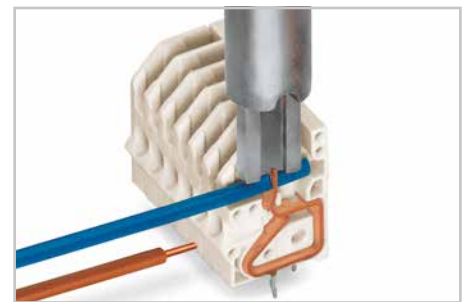
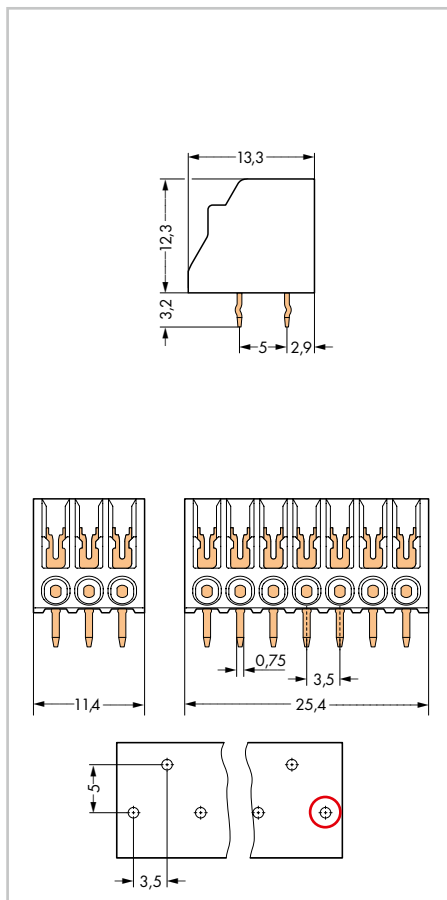
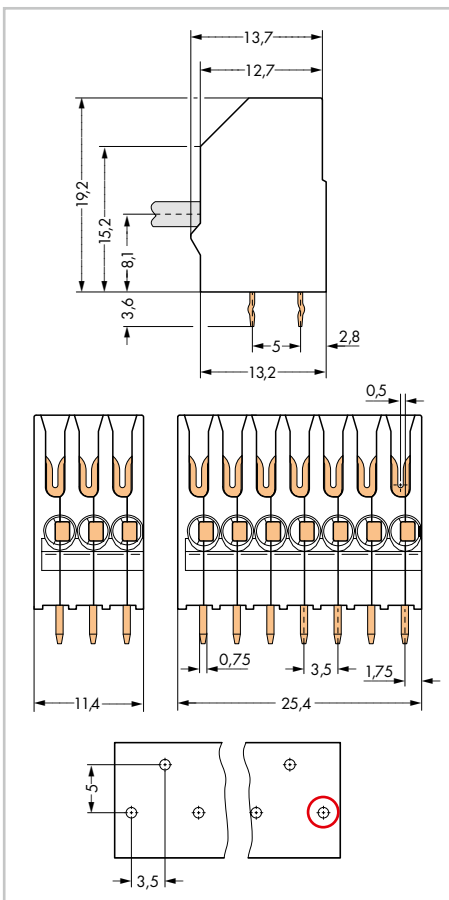
# Combi PCB Terminal Blocks with PUSH WIRE® and FIT CLAMP® Connections

FIT CLAMP®  
PUSH WIRE®

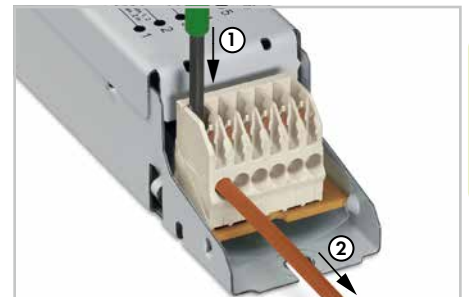
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425

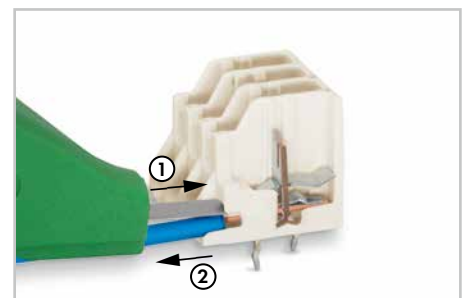
"251 high" version:		"251 mini" version:		Handling
Pin spacing: 3.5 mm / 0.138 in.		Pin spacing: 3.5 mm / 0.138 in.		
0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."	0.5 ... 1 mm <sup>2</sup> "sol."	20 ... 18 AWG "sol."	
320 V/4 kV/2 A		320 V/4 kV/2 A	300 V/4 A	



Conductor termination - "251 high" and "251 mini"  
PUSH WIRE® = Simply push in conductor.  
FIT CLAMP® (IDC) = Insert conductor via 206-831 operating tool.



Conductor removal - "251 high"  
PUSH WIRE®: Open spring via 2.5 x 0.4 mm screwdriver (1) and pull out conductor (2).  
FIT CLAMP® (IDC): Pull up vertically on conductor to remove it (10 x reconnection possible when used properly. Before re-using, cut off old contact point from conductor)



Conductor removal - "251 mini"  
PUSH WIRE®: Twist conductor and pull out, or fully insert 206-830 disconnection tool over the conductor (1) and pull it out (2).  
FIT CLAMP® (IDC): Pull up vertically on conductor to remove it (10 x reconnection possible when used properly. Before re-using, cut off old contact point from conductor)

L = (pole no. x pin spacing) + 0.9 mm

○ Starting point (first solder pin), right front side

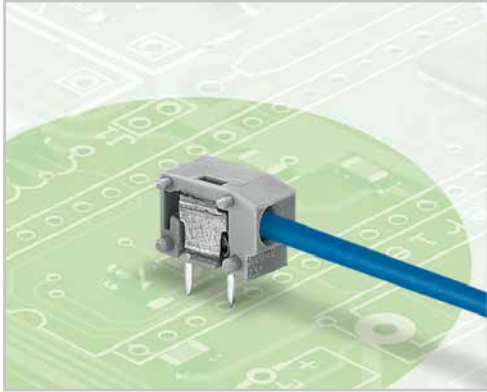
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Combi PCB terminal block, "251 high" version, with PUSH WIRE® and FIT CLAMP® connections, white			Combi PCB terminal block, "251 mini" version, with PUSH WIRE® and FIT CLAMP® connections, white		
2	251-102	600 (4 x 150)	3	251-303	420 (4 x 105)
3	251-103	420 (4 x 105)	4	251-304	320 (4 x 80)
4	251-104	320 (4 x 80)	6	251-306	200 (4 x 50)
5	251-105	260 (4 x 65)	7	251-307	180 (4 x 45)
6	251-106	220 (4 x 55)	8	251-308	160 (4 x 40)
7	251-107	180 (4 x 45)	10	251-310	120 (4 x 30)

Other pole numbers and direct marking are available upon request (depending on quantity required).

WAGO®

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## Modular PCB Terminal Blocks 2.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Low-profile modular PCB terminal blocks with screwdriver-actuated PUSH WIRE® termination for custom PCB terminal strip assemblies
- Push-in termination of solid conductors
- Double solder pins for high mechanical stability
- Conductor removal via screwdriver (2.5 mm x 0.4 mm)
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series with push-buttons, see page 411

### Technical data:

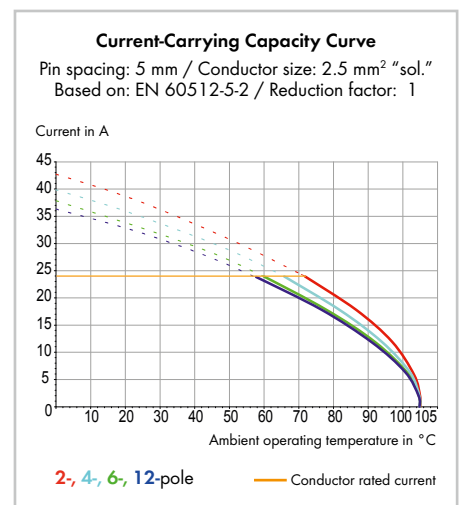
Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	15 A	-	-	15 A	-	-	15 A	-	-

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 14 "sol."
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.8 x 0.4 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated

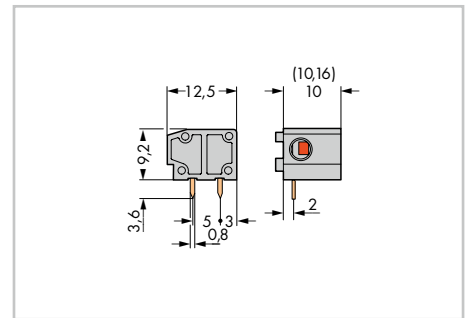
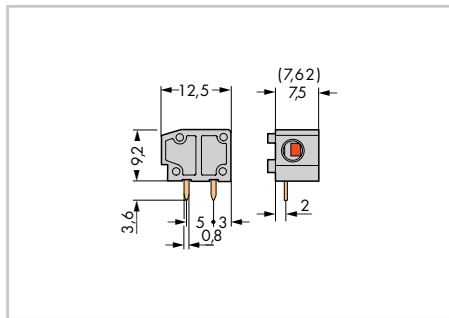
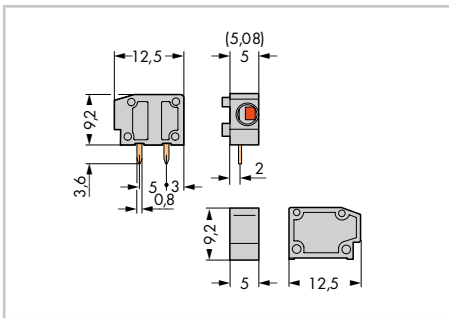


### 235 Series accessories:


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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."	0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."	0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."
320 V/4 kV/2 24 A	300 V/10 A	630 V/6 kV/2 24 A	300 V/10 A	1000 V/8 kV/2 24 A	300 V/10 A



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Modular PCB terminal block, 2 solder pins/pole</b>			<b>Modular PCB terminal block, 2 solder pins/pole</b>			<b>Modular PCB terminal block, 2 solder pins/pole</b>		
gray	235-401	800 (8 x 100)	gray	235-501	600 (6 x 100)	gray	235-801	400 (4 x 100)
dark gray	235-742	800 (8 x 100)	dark gray	235-752	600 (6 x 100)	dark gray	235-762	400 (4 x 100)
light gray	235-743	800 (8 x 100)	light gray	235-753	600 (6 x 100)	light gray	235-763	400 (4 x 100)
blue	235-744	800 (8 x 100)	blue	235-754	600 (6 x 100)	blue	235-764	400 (4 x 100)
orange	235-746	800 (8 x 100)	orange	235-756	600 (6 x 100)	orange	235-766	400 (4 x 100)
light green	235-747	800 (8 x 100)	light green	235-757	600 (6 x 100)	light green	235-767	400 (4 x 100)
			① Suitable for Ex i applications			① Suitable for Ex i applications		

Accessory	Item No.	Pack. Unit
<b>Spacer for modular PCB terminal blocks</b> doubles pin spacing, gray		
	235-701	100

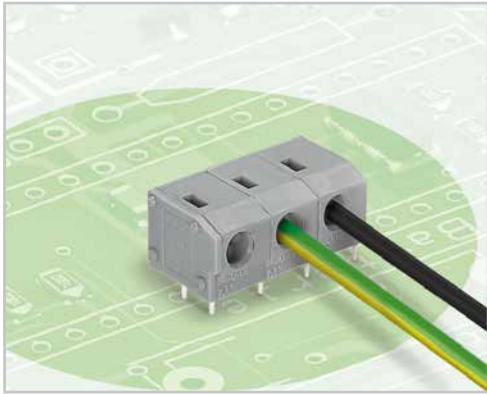
Color	Item No.	Pack. Unit
gray	235-100	100
dark gray	235-200	100
light gray	235-300	100
blue	235-400	100
black	235-500	100
yellow	235-550	100
orange	235-600	100
violet	235-650	100
light green	235-700	100
red	235-800	100
white	235-850	100



# PCB Terminal Strips 2.5 mm<sup>2</sup>

## Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm

### 235 Series



- Low-profile PCB terminal strips with screwdriver-actuated PUSH WIRE® termination
- Push-in termination of solid conductors
- Double solder pins for high mechanical stability
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series with push-buttons, see page 413

#### Technical data:

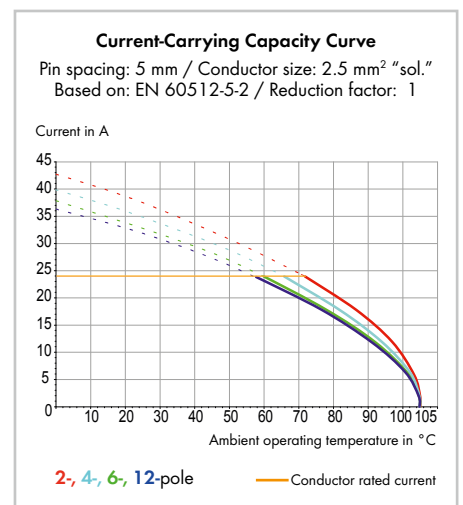
Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	15 A	-	-	15 A	-	-	15 A	-	-

#### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 14 "sol."
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.8 x 0.4 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

#### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated

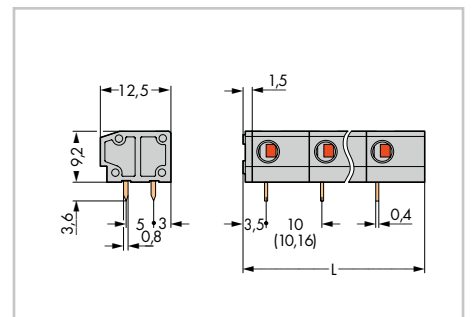
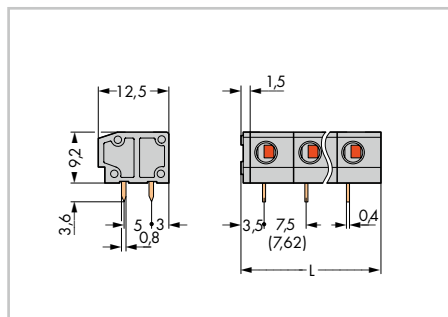
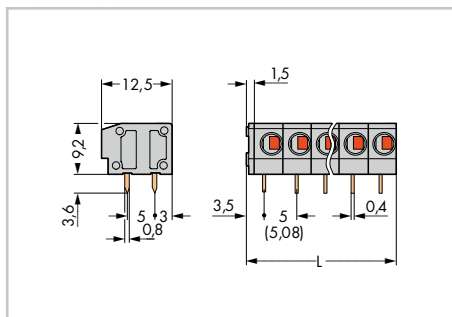
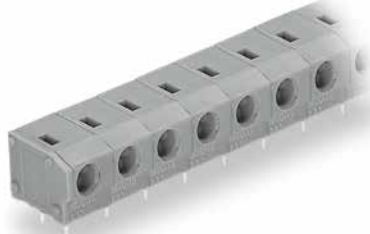
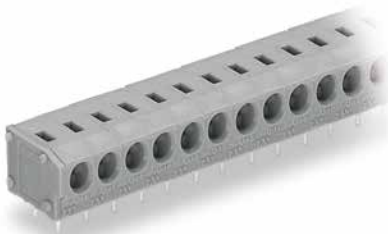


#### 235 Series accessories:

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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."	0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."	0.5 ... 2.5 mm <sup>2</sup> "sol."	20 ... 14 AWG "sol."
320 V/4 kV/2 24 A	300 V/10 A	630 V/6 kV/2 24 A	300 V/10 A	1000 V/8 kV/2 24 A	300 V/10 A



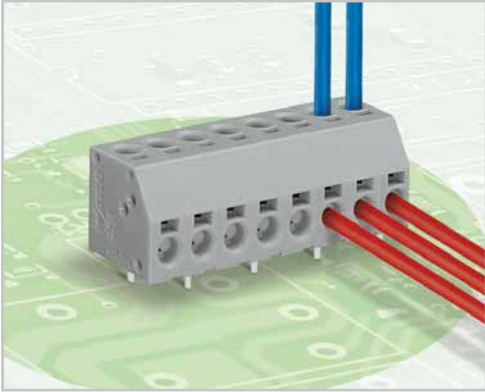
L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>PCB terminal strip, 2 solder pins/pole, gray</b>			<b>PCB terminal strip, 2 solder pins/pole, gray</b>			<b>PCB terminal strip, 2 solder pins/pole, gray</b>		
2	235-402	420 (4 x 105)	2	235-502	280 (4 x 70)	2	235-802	220 (4 x 55)
3	235-403	280 (4 x 70)	3	235-503	200 (4 x 50)	3	235-803	140 (4 x 35)
4	235-404	220 (4 x 55)	4	235-504	140 (4 x 35)	4	235-804	120 (4 x 30)
5	235-405	180 (4 x 45)	5	235-505	120 (4 x 30)	5	235-805	80 (4 x 20)
6	235-406	140 (4 x 35)	6	235-506	100 (4 x 25)	6	235-806	80 (4 x 20)
7	235-407	120 (4 x 30)	7	235-507	80 (4 x 20)	7	235-807	60 (4 x 15)
8	235-408	100 (4 x 25)	8	235-508	60 (4 x 15)	8	235-808	40 (4 x 10)
9	235-409	100 (4 x 25)	9	235-509	60 (4 x 15)	9	235-809	40 (4 x 10)
10	235-410	80 (4 x 20)	10	235-510	60 (4 x 15)	10	235-810	40 (4 x 10)
12	235-412	60 (4 x 15)	12	235-512	40 (4 x 10)	12	235-812	40 (4 x 10)
16	235-416	60 (4 x 15)	16	235-516	40 (4 x 10)	16	235-816	20 (4 x 5)
24	235-424	40 (4 x 10)	24	235-524	20 (4 x 5)	24	235-824	20 (4 x 5)
36	235-436	20 (4 x 5)						
48	235-448	20 (4 x 5)						

PCB terminal strips in other colors are available upon request (depending on quantity required):

① blue
● dark gray
○ light gray
● orange
● light green
① Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)

## 2-Conductor PCB Terminal Strips 1.5 mm<sup>2</sup> Pin Spacing: 5 mm 253 Series



- PCB terminal strips with screwdriver-actuated PUSH WIRE® termination
- Double-conductor connection provides top-entry (vertical) and/or side-entry (horizontal) wiring
- Push-in termination of solid conductors
- Double-conductor connection for feed-in and potential distribution

### Technical data:

Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Rated voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	17.5A	17.5A	17.5A
Approvals per	UL/CSA		
Use group UL1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	8 A	-	8 A
Nominal current CSA	8 A	-	8 A

### Conductor and solder pin data:

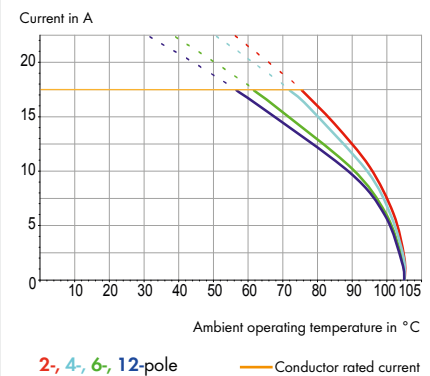
Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
AWG	20 ... 16 "sol."
Strip length	8.5 ... 9.5 mm / 0.32 ... 0.36 in. (for single-side wiring)
Strip length	7 ... 8 mm / 0.28 ... 0.31 in. (for wiring on both sides)
Conductor entry angle	0° and 90° to PCB
Solder pin: length/width	3.6 mm / 0.5 x 0.8 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

### Current-Carrying Capacity Curve: Conductor – Solder Pin

Pin spacing: 5 mm / Conductor size: 1.5 mm<sup>2</sup> "sol."  
Based on: EN 60512-5-2 / Reduction factor: 1



### 253 Series accessories:

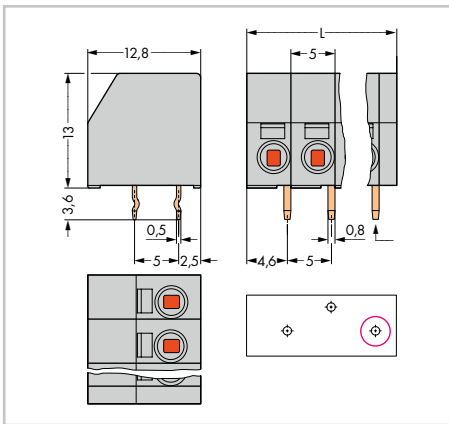
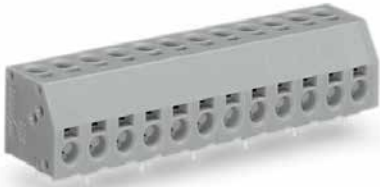
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Pin spacing: 5 mm / 0.197 in.

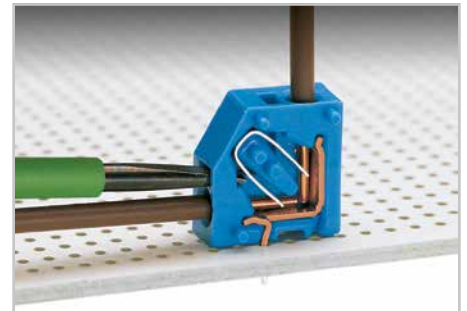
0.5 ... 1.5 mm<sup>2</sup> "sol." | 20 ... 16 AWG "sol."  
 320 V/4 kV/2 17.5 A | 300 V/8 A



L = (pole no. x pin spacing) + 2 mm  
 ○ first solder pin, right front side



Inserting solid conductor via push-in termination.

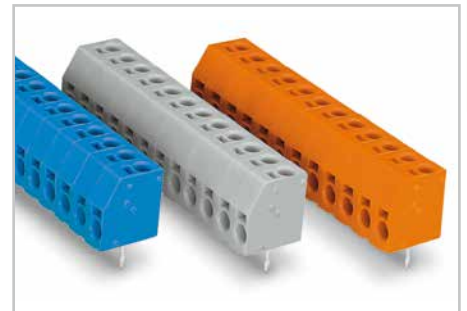


Removing conductor via 2.5 mm screwdriver.

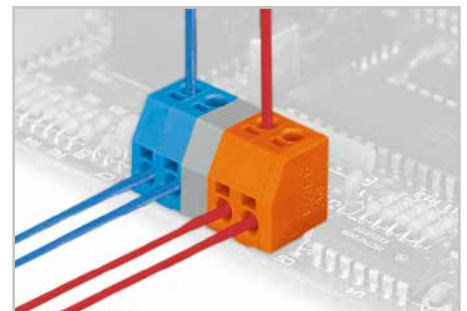
Pole No.	Item No.	Pack. Unit
<b>2-conductor PCB terminal strip, 1 staggered solder pin/pole, gray</b>		
2	253-102	400 (4 x 100)
3	253-103	280 (4 x 70)
4	253-104	220 (4 x 55)
5	253-105	160 (4 x 40)
6	253-106	140 (4 x 35)
7	253-107	120 (4 x 30)
8	253-108	100 (4 x 25)
9	253-109	100 (4 x 25)
10	253-110	80 (4 x 20)
11	253-111	80 (4 x 20)
12	253-112	60 (4 x 15)
13	253-113	60 (4 x 15)
14	253-114	60 (4 x 15)
15	253-115	60 (4 x 15)
16	253-116	40 (4 x 10)

PCB terminal strips in other colors are available upon request (depending on quantity required):

- yellow
- black
- red
- blue
- light gray
- orange
- light green
- violet
- white



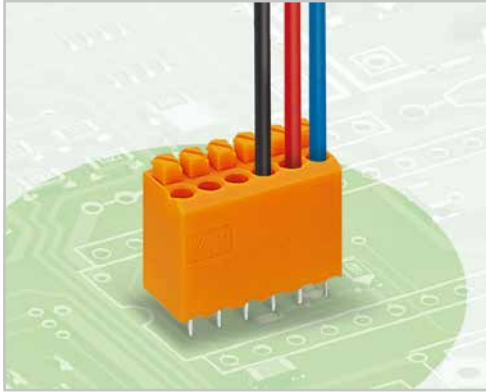
Insulating housings are available in different colors.



Mixed-color connector strips (with or without spacer) are available upon request.

Other pole numbers, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

# Compact PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing: 3.81 mm 735 Series



- Compact PCB terminal blocks with push-buttons and PUSH WIRE® connection
- Top-of-unit, push-button actuation and conductor termination save space on the PCB
- Push-in termination of solid conductors –
- Pin center spacing can be maintained in a PCB terminal block assembly

### Technical data:

Pin Spacing	3.81 mm 0.15 in.				
Ratings per	IEC/EN 60664-1				
Overvoltage category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	250 V	320 V	630 V		
Rated surge voltage	4 kV	4 kV	4 kV		
Nominal current	10 A	10 A	10 A		
Approvals per	UL/CSA				
Use group UL1059	B	C	D		
Rated voltage	300 V	-	300 V		
Nominal current UL	10 A	-	10 A		
Nominal current CSA	10 A	-	10 A		

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 16 "sol."
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry angle	90° to PCB
Solder pin: length/width	3.5 mm / 0.4 x 0.9 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

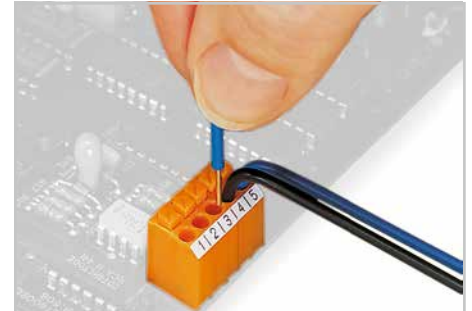
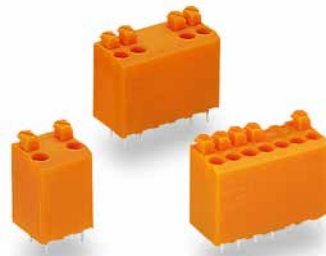
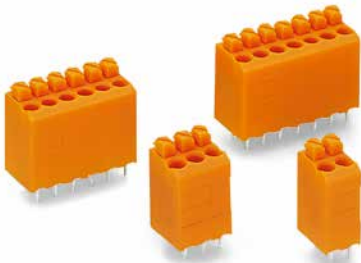
### 735 Series accessories:

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\*For versions with staggered solder pins allowing increased clearances and creepage distances, please contact factory.

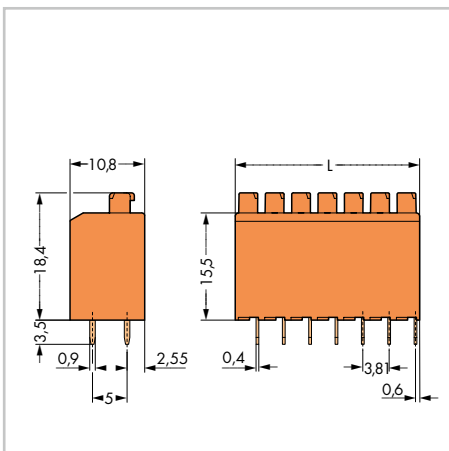
<b>Pin spacing: 3.81 mm / 0.15 in.</b>		<b>With spacer: 1 and 2 x pin spacing Pin spacing: 3.81 mm / 0.15 in.</b>	
0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."	0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."
320 V/4 kV/2 10 A	300 V/10 A	320 V/4 kV/2 10 A	300 V/10 A



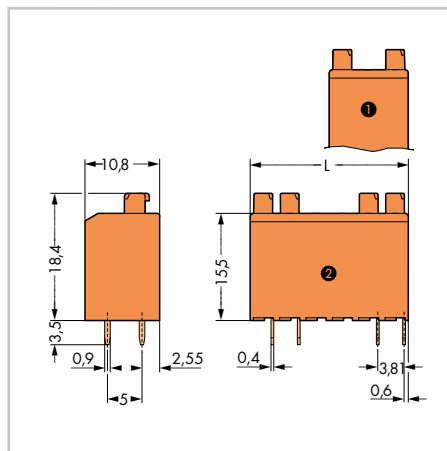
Inserting solid conductors via push-in termination.



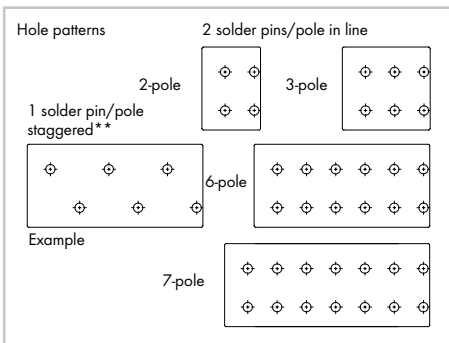
Removing conductor via push-button.



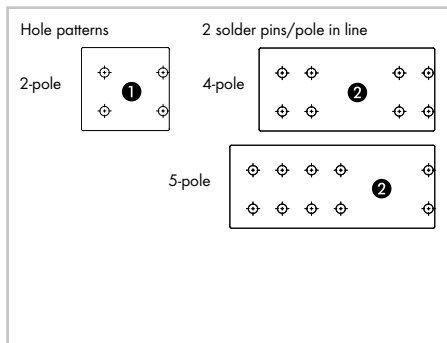
L for 2-pole 7.62 mm, L for 3-pole 11.43 mm  
L for 6-pole 22.86 mm, L for 7-pole 26.67 mm



L for 2-pole 11.43 mm, L for 4-pole 22.86 mm  
L for 5-pole 26.67 mm



\*\* For versions with staggered solder pins allowing increased clearances and creepage distances, please contact factory.

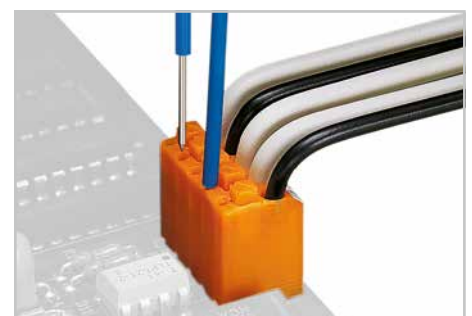


① Spacer of same width as 1 x pin spacing  
② Spacer of same width as 2 x pin spacing



Pin center spacing can be maintained in an assembly.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>Compact PCB terminal block with push-buttons, 2 solder pins/pole in line, orange</b>			<b>Compact PCB terminal block with push-buttons and spacer, 2 solder pins/pole in line, orange</b>		
- high version -			- high version -		
2	735-122	660 (4 x 165)	2	735-123/001-000 *	440 (4 x 110)
3	735-123	440 (4 x 110)	4	735-126/001-000	220 (4 x 55)
6	735-126	220 (4 x 55)	5	735-127/001-000	180 (4 x 45)
7	735-127	180 (4 x 45)	* For technical data, go to <a href="http://www.wago.com">www.wago.com</a> .		



Testing with 1 mm Ø test pin.

# Compact PCB Terminal Blocks with Push-Buttons 1.5 mm<sup>2</sup> Pin Spacing: 5 mm 735 Series



- Compact PCB terminal blocks with push-buttons and PUSH WIRE® connection
- Top-of-unit, push-button actuation and conductor termination save space on the PCB
- Push-in termination of solid conductors
- Pin center spacing can be maintained in a PCB terminal block assembly

### Technical data:

Pin Spacing	5 mm 0.197 in.				
Ratings per	IEC/EN 60664-1				
Overvoltage category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	320 V	320 V	630 V		
Rated surge voltage	4 kV	4 kV	4 kV		
Nominal current	10 A	10 A	10 A		
Approvals per	UL/CSA				
Use group UL1059	B	C	D		
Rated voltage	300 V	-	300 V		
Nominal current UL	10 A	-	10 A		
Nominal current CSA	10 A	-	10 A		

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.5 ... 1 mm <sup>2</sup> (with uninsulated ferrule)
AWG	20 ... 16 "sol."
Strip length	8 ... 9 mm / 0.31 ... 0.35 in.
Conductor entry angle	90° to PCB
Solder pin: length/width	3.5 mm / 0.4 x 0.9 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

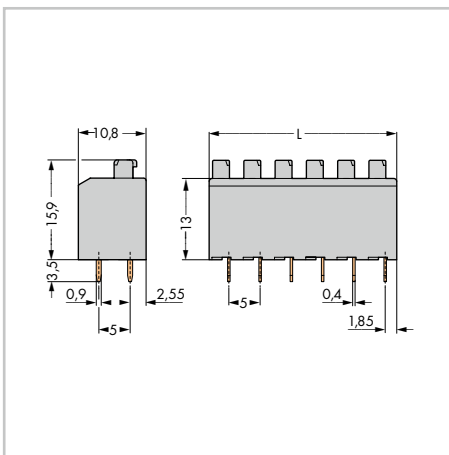
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated

### 735 Series accessories:

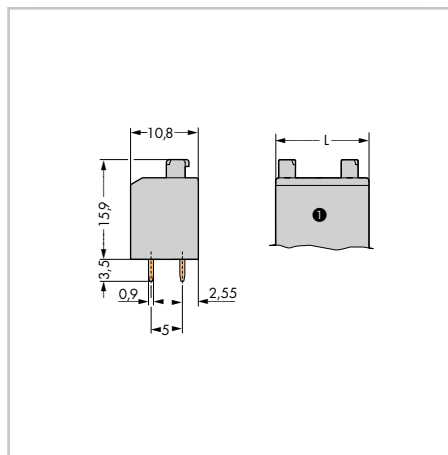
### Page:

Marking accessories	512
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Test pin	510

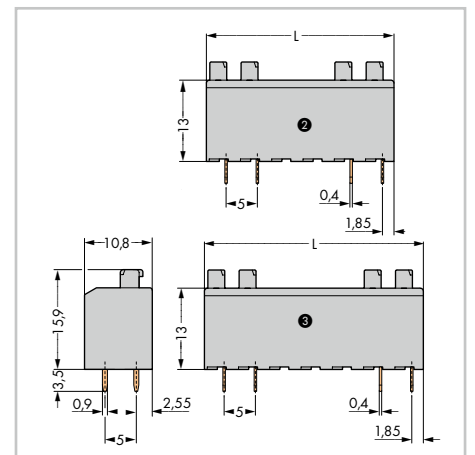
Pin spacing: 5 mm / 0.197 in.		With spacer: 1 x pin spacing Pin spacing: 5 mm / 0.197 in.		With spacer: 2 and 3 x pin spacing Pin spacing: 5 mm / 0.197 in.	
0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."	0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."	0.5 ... 1.5 mm <sup>2</sup> "sol."	20 ... 16 AWG "sol."
320 V/4 kV/2 10 A	300 V/10 A	320 V/4 kV/2 10 A	300 V/10 A	320 V/4 kV/2 10 A	300 V/10 A



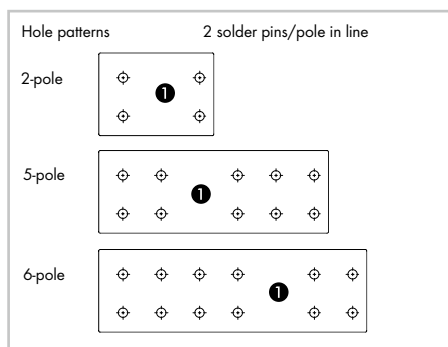
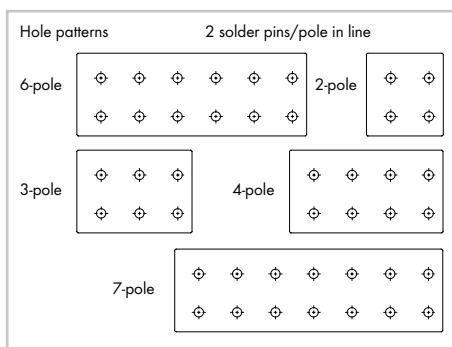
L for 2-pole 10 mm, L for 3-pole 15mm  
L for 4-pole 20 mm, L for 6-pole 30mm  
L for 7-pole 35 mm



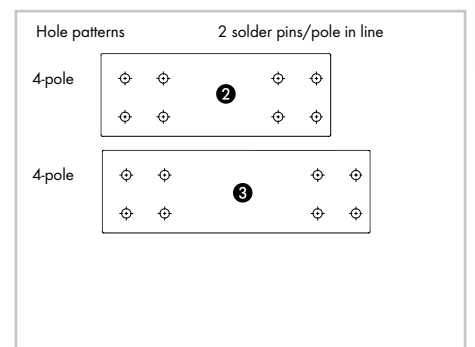
L for 2-pole/① x 15 mm pin spacing  
L for 5-pole/① x 30 mm pin spacing  
L for 6-pole/① x 35 mm pin spacing



L for 4-pole/② x 30 mm pin spacing  
L bei 4-polig/③ x 35 mm pin spacing



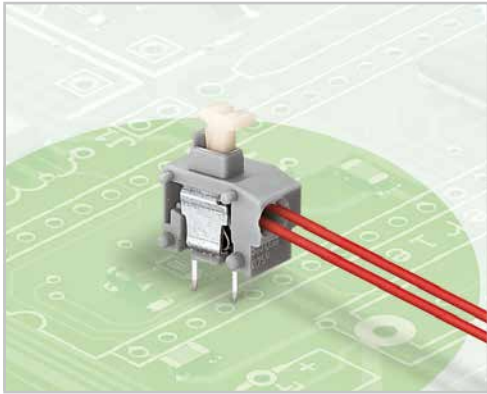
① Spacer of same width as 1 x pin spacing



② Spacer of same width as 2 x pin spacing  
③ Spacer of same width as 3 x pin spacing

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Compact PCB terminal block with push-buttons, 2 in-line solder pins/pole, low version, gray			Compact PCB terminal block with push-buttons and spacer for 1 x pin spacing, 2 in-line solder pins/pole, low version, gray			Compact PCB terminal block with push-buttons and spacer for 2 x pin spacing, 2 in-line solder pins/pole, low version, gray		
2	735-302	500 (4 x 125)	2	735-303/001-000 *	320 (4 x 80)	4	735-306/001-000	160 (4 x 40)
3	735-303	320 (4 x 80)						
4	735-304	240 (4 x 60)						
6	735-306	160 (4 x 40)	5	735-306/003-000	160 (4 x 40)	Compact PCB terminal block with push-buttons and spacer for 3 x pin spacing, 2 in-line solder pins/pole, low version, gray		
7	735-307	140 (4 x 35)	6	735-307/001-000	140 (4 x 35)			
			* For technical data, go to <a href="http://www.wago.com">www.wago.com</a> .			4	735-307/002-000	140 (4 x 35)

## 2-Conductor, Modular PCB Terminal Blocks with Push-Buttons 0.75 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- Modular PCB terminal blocks with push-buttons and PUSH WIRE® connection, for custom PCB terminal strip assemblies
- Double-conductor connection for commoning signals
- Push-in termination of solid conductors
- Easy conductor removal via push-button
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series without push-buttons, see page 427

### Technical data:

Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	-	10 A	-	-	10 A	-	-

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	2 x 0.2 ... 0.75 mm <sup>2</sup>
AWG	2 x 24 ... 18 "sol."
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

### 235 Series accessories:

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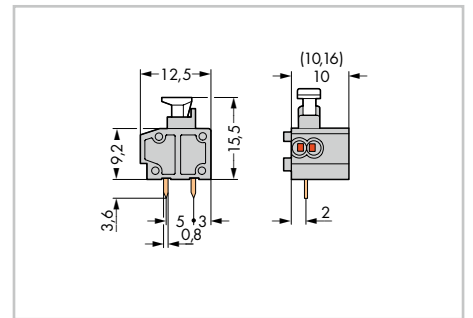
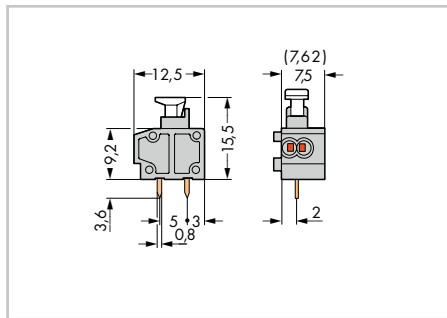
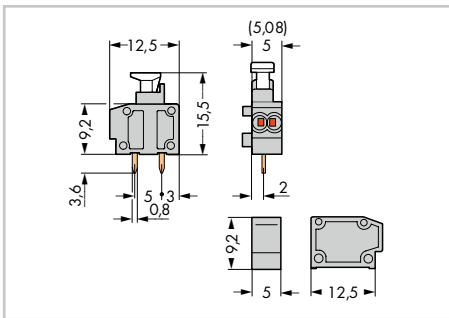
# 2-Conductor, Modular PCB Terminal Blocks with Push-Buttons 0.75 mm<sup>2</sup>

PUSH WIRE®


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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."	2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."	2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."
320 V/4 kV/2 10 A	300 V/10 A	630 V/6 kV/2 10 A	300 V/10 A	1000 V/8 kV/2 10 A	300 V/10 A



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>2-conductor modular PCB terminal block with push-button, 2 solder pins/pole</b>			<b>2-conductor modular PCB terminal block with push-button, 2 solder pins/pole</b>			<b>2-conductor modular PCB terminal block with push-button, 2 solder pins/pole</b>		
gray	235-711/331-000	800 (8 x 100)	gray	235-551/331-000	600 (6 x 100)	gray	235-851/331-000	400 (4 x 100)
dark gray	235-712/331-000	800 (8 x 100)	dark gray	235-722/331-000	600 (6 x 100)	dark gray	235-732/331-000	400 (4 x 100)
light gray	235-713/331-000	800 (8 x 100)	light gray	235-723/331-000	600 (6 x 100)	light gray	235-733/331-000	400 (4 x 100)
blue	235-714/331-000	800 (8 x 100)	blue	235-724/331-000	600 (6 x 100)	blue	235-734/331-000	400 (4 x 100)
orange	235-716/331-000	800 (8 x 100)	orange	235-726/331-000	600 (6 x 100)	orange	235-736/331-000	400 (4 x 100)
light green	235-717/331-000	800 (8 x 100)	light green	235-727/331-000	600 (6 x 100)	light green	235-737/331-000	400 (4 x 100)
			① Suitable for Ex i applications			① Suitable for Ex i applications		

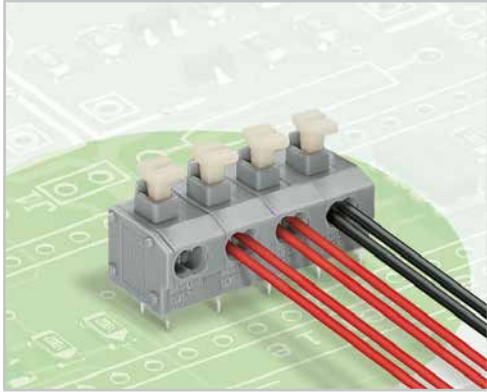
Accessory	Item No.	Pack. Unit
<b>Spacer for modular PCB terminal blocks</b> doubles pin spacing, gray		
	235-701	100

End plates for 235 Series, snap-on type, 1 mm/0.039 in. thick	Color	Item No.	Pack. Unit
	gray	235-100	100
dark gray	235-200	100	
light gray	235-300	100	
blue	235-400	100	
orange	235-600	100	
light green	235-700	100	

Other colors are available upon request (depending on quantity required).

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## 2-Conductor PCB Terminal Strips with Push-Buttons 0.75 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 235 Series



- PCB terminal strips with push-buttons and PUSH WIRE® connection
- Double-conductor connection for commoning signals
- Push-in termination of solid conductors
- Easy conductor removal via push-button
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- For versions with test slots go to [www.wago.com](http://www.wago.com)
- 235 Series without push-buttons, see page 429

### Technical data:

Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	-	10 A	-	-	10 A	-	-

### Conductor and solder pin data:

Connection technology	PUSH WIRE®
Conductor size: solid	2 x 0.2 ... 0.75 mm <sup>2</sup>
AWG	2 x 24 ... 18 "sol."
Strip length	9 ... 10 mm / 0.35 ... 0.39 in.
Conductor entry angle	0° to PCB
Solder pin: length/width	3.6 mm / 0.4 x 0.8 mm
Solder pin: drilled hole diameter	1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

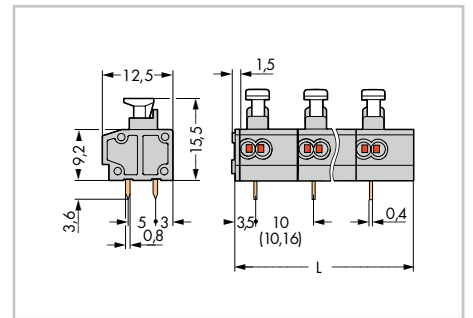
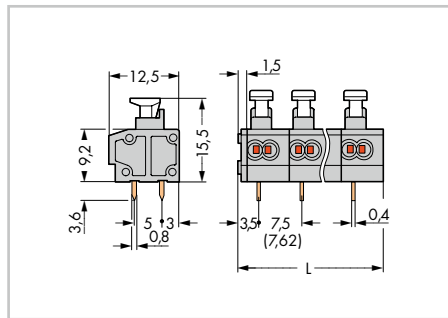
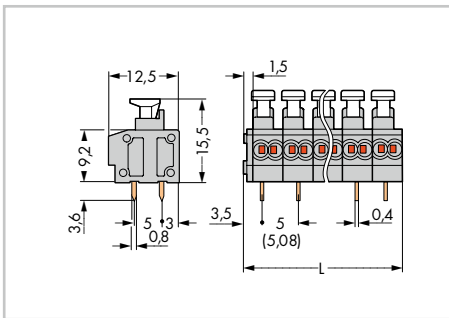
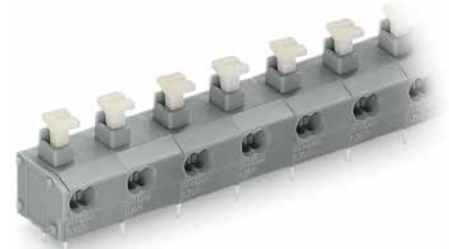
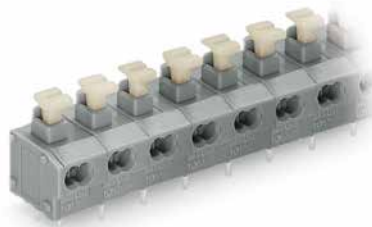
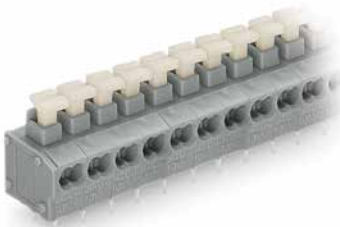
### 235 Series accessories:

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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."	2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."	2 x 0.25 ... 0.75 mm <sup>2</sup> "sol."	2 x 24 ... 18 AWG "sol."
320 V/4 kV/2 10 A	300 V/10 A	630 V/6 kV/2 10 A	300 V/10 A	1000 V/8 kV/2 10 A	300 V/10 A



Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.  
 L = (pole no. x pin spacing) + 1.5 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>2-conductor PCB terminal strip with push-buttons, 2 solder pins/pole, gray</b>			<b>2-conductor PCB terminal strip with push-buttons, 2 solder pins/pole, gray</b>			<b>2-conductor PCB terminal strip with push-buttons, 2 solder pins/pole, gray</b>		
2	235-452/331-000	420 (4 x 105)	2	235-552/331-000	280 (4 x 70)	2	235-852/331-000	220 (4 x 55)
3	235-453/331-000	280 (4 x 70)	3	235-553/331-000	200 (4 x 50)	3	235-853/331-000	140 (4 x 35)
4	235-454/331-000	220 (4 x 55)	4	235-554/331-000	140 (4 x 35)	4	235-854/331-000	120 (4 x 30)
5	235-455/331-000	180 (4 x 45)	5	235-555/331-000	120 (4 x 30)	5	235-855/331-000	80 (4 x 20)
6	235-456/331-000	140 (4 x 35)	6	235-556/331-000	100 (4 x 25)	6	235-856/331-000	80 (4 x 20)
7	235-457/331-000	120 (4 x 30)	7	235-557/331-000	80 (4 x 20)	7	235-857/331-000	60 (4 x 15)
8	235-458/331-000	100 (4 x 25)	8	235-558/331-000	80 (4 x 20)	8	235-858/331-000	40 (4 x 10)
9	235-459/331-000	100 (4 x 25)	9	235-559/331-000	60 (4 x 15)	9	235-859/331-000	40 (4 x 10)
10	235-460/331-000	80 (4 x 20)	10	235-560/331-000	60 (4 x 15)	10	235-860/331-000	40 (4 x 10)
12	235-462/331-000	80 (4 x 20)	12	235-562/331-000	40 (4 x 10)	12	235-862/331-000	40 (4 x 10)
16	235-466/331-000	60 (4 x 15)	16	235-566/331-000	40 (4 x 10)	16	235-866/331-000	20 (4 x 5)
24	235-474/331-000	40 (4 x 10)	24	235-574/331-000	20 (4 x 5)	24	235-874/331-000	20 (4 x 5)
36	235-486/331-000	20 (4 x 5)						
48	235-498/331-000	20 (4 x 5)						

PCB terminal strips in other colors are available upon request (depending on quantity required):

① blue
● dark gray
○ light gray
● orange
● light green
① Suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)



# Modular PCB Terminal Blocks 2.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 236 Series



- Modular PCB terminal blocks with CAGE CLAMP® connection, screwdriver actuation parallel or perpendicular to conductor entry
- versions with Ex e (increased safety) approval
- For custom PCB terminal strip assemblies
- Operating tools for factory wiring
- 45° connection angle permits a wide range of uses and wiring options
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart

**Technical data:**

Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1								
Ratings per	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Overtoltage category	III	III	II	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A

**Conductor and solder pin data:**

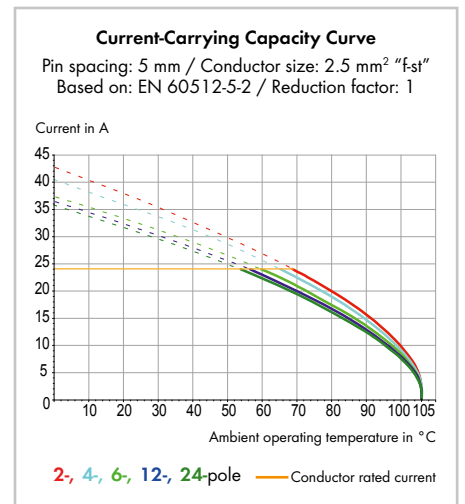
Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 12 (12: THHN, THWN)
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 (3.6; 5.5) mm / 0.7 x 0.7 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

**Technical data for Ex e II ( ) versions:**

Pin Spacing	5/5.08 mm 0.2 in.	7.5/7.62 mm 0.3 in.	10/10.16 mm 0.4 in.
Ratings per	ATEX: PTB 06 ATEX 1061 U IECEx: PTB 06.0042 U		
Rated voltage	176 V	275 V	440 V
Nominal current	16 A	16 A	16 A

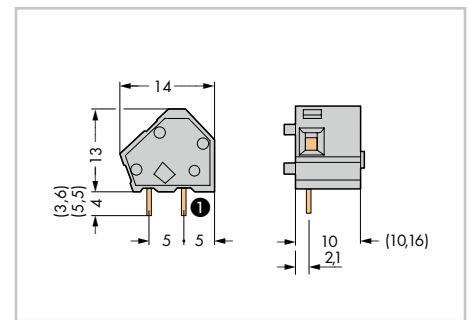
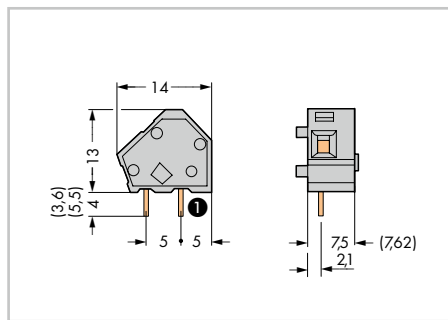
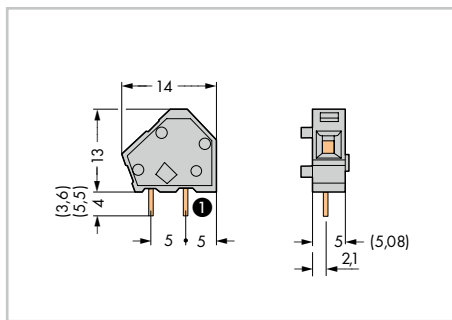


**236 Series accessories:**

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Marking accessories	512
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Commoning strips	Volume 2 / 67
Test plug module	Volume 2 / 204

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 630 V/6 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 1000 V/8 kV/2 24 A	28 ... 12 AWG 300 V/10 A



① Solder pin position for modular PCB terminal block with one solder pin (rear side)


Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
<b>Modular PCB terminal block</b>				<b>Modular PCB terminal block</b>				<b>Modular PCB terminal block</b>			
1 solder pin/pole		2 solder pins/pole		1 solder pin/pole		2 solder pins/pole		1 solder pin/pole		2 solder pins/pole	
gray	236-101	236-401	600 (6 x 100)	gray	236-201	236-501	400 (4 x 100)	gray	236-301	236-601	300 (3 x 100)
red	236-710	236-740	600 (6 x 100)	dark gray	236-722	236-752	400 (4 x 100)	dark gray	236-732	236-762	300 (3 x 100)
yellow	236-711	236-741	600 (6 x 100)	light gray	236-723	236-753	400 (4 x 100)	light gray	236-733	236-763	300 (3 x 100)
dark gray	236-712	236-742	600 (6 x 100)	① blue	236-724	236-754	400 (4 x 100)	① blue	236-734	236-764	300 (3 x 100)
light gray	236-713	236-743	600 (6 x 100)	green	236-725	236-755	400 (4 x 100)	green	236-735	236-765	300 (3 x 100)
blue	236-714	236-744	600 (6 x 100)	orange	236-726	236-756	400 (4 x 100)	orange	236-736	236-766	300 (3 x 100)
green	236-715	236-745	600 (6 x 100)	light green	236-727	236-757	400 (4 x 100)	light green	236-737	236-767	300 (3 x 100)
orange	236-716	236-746	600 (6 x 100)	black	236-855	236-852	400 (4 x 100)	black	236-856	236-853	300 (3 x 100)
light green	236-717	236-747	600 (6 x 100)	brown	236-885	236-882	400 (4 x 100)				
violet	236-894	236-891	600 (6 x 100)								
black	236-854	236-851	600 (6 x 100)								
brown	236-884	236-881	600 (6 x 100)								
○ Ex e II	236-743/999-950			○ Ex e II	236-753/999-950			○ Ex e II	236-763/999-950		
				① Suitable for Ex i applications				① Suitable for Ex i applications			
Item no. suffix for 2 solder pins/pole with 3.6 mm long solder pins: ...-.../334-000* Item no. suffix for 2 solder pins/pole with 5.5 mm long solder pins: ...-.../332-000*											

End plates for 236 Series, snap-on type, 1 mm/0.039 in thick	Color	Item No.	Pack. Unit
	gray	236-100	100
	dark gray	236-200	100
	light gray	236-300	100
	blue	236-400	100
	green	236-500	100
	orange	236-600	100
	light green	236-700	100
	red	236-800	100
	black	236-850	100

\* Other colors and solder pin lengths are available upon request (depending on quantity required).

## PCB Terminal Strips 2.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 236 Series



- PCB terminal strips with CAGE CLAMP® connection and screwdriver actuation parallel or perpendicular to conductor entry
-  versions with Ex e (increased safety) approval
- Mixed-color PCB terminal strips from factory
- Operating tools for factory wiring
- 45° connection angle permits a wide range of uses and wiring options
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart

### Technical data:

Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	400 V	630 V	1000 V	630 V	1000 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV	8 kV	8 kV	8 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A

### Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 12 (12: THHN, THWN)
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 (3.6; 5.5) mm / 0.7 x 0.7 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

### Material data:

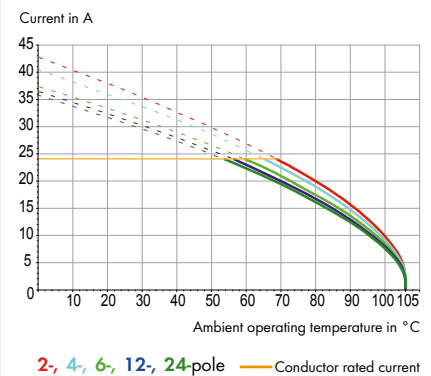
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

### Technical data for Ex e II () versions:

Pin Spacing	5/5.08 mm 0.2 in.	7.5/7.62 mm 0.3 in.	10/10.16 mm 0.4 in.
	Ratings per	ATEX: PTB 06 ATEX 1061 U	
Rated voltage	176 V	275 V	440 V
Nominal current	16 A	16 A	16 A

### Current-Carrying Capacity Curve

Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

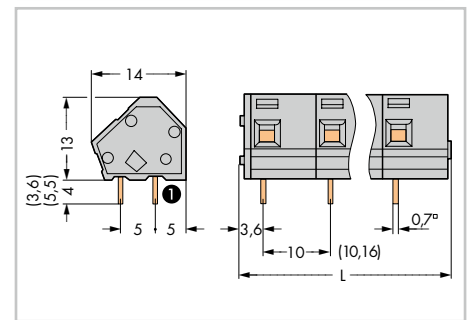
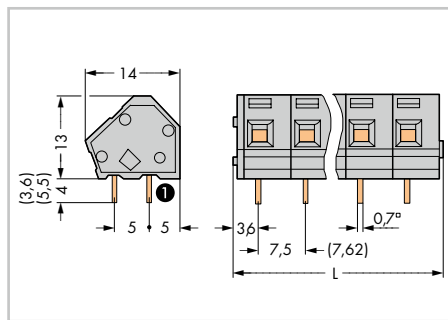
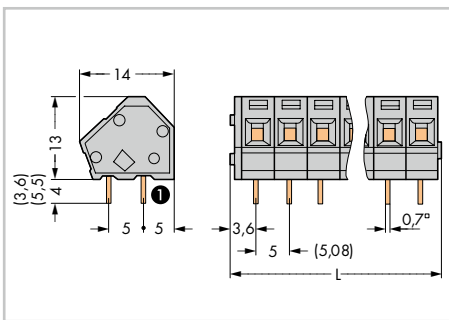
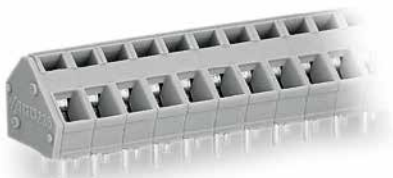


### 236 Series accessories:

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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 630 V/6 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 1000 V/8 kV/2 24 A	28 ... 12 AWG 300 V/10 A



L = (pole no. x pin spacing) + 2.3 mm

① Solder pin position for modular PCB terminal block with 1 solder pin (rear side)

Pole No.	Item No.	Item No.	Pack. Unit	Pole No.	Item No.	Item No.	Pack. Unit	Pole No.	Item No.	Item No.	Pack. Unit
<b>PCB terminal strip, 2 solder pins/pole, gray</b>				<b>PCB terminal strip, 2 solder pins/pole, gray</b>				<b>PCB terminal strip, 2 solder pins/pole, gray</b>			
	<b>1 solder pin/pole</b>	<b>2 solder pins/pole</b>			<b>1 solder pin/pole</b>	<b>2 solder pins/pole</b>			<b>1 solder pin/pole</b>	<b>2 solder pins/pole</b>	
2	236-102	236-402	420 (4 x 105)	2	236-202	236-502	280 (4 x 70)	2	236-302	236-602	200 (4 x 50)
3	236-103	236-403	280 (4 x 70)	3	236-203	236-503	200 (4 x 50)	3	236-303	236-603	140 (4 x 35)
4	236-104	236-404	220 (4 x 55)	4	236-204	236-504	140 (4 x 35)	4	236-304	236-604	100 (4 x 25)
6	236-106	236-406	140 (4 x 35)	6	236-206	236-506	100 (4 x 25)	6	236-306	236-606	80 (4 x 20)
8	236-108	236-408	100 (4 x 25)	8	236-208	236-508	80 (4 x 20)	8	236-308	236-608	60 (4 x 15)
12	236-112	236-412	80 (4 x 20)	12	236-212	236-512	40 (4 x 10)	12	236-312	236-612	40 (4 x 10)
16	236-116	236-416	60 (4 x 15)	16	236-216	236-516	40 (4 x 10)	16	236-316	236-616	20 (4 x 5)
24	236-124	236-424	40 (4 x 10)	24	236-224	236-524	20 (4 x 5)	24	236-324	236-624	20 (4 x 5)
36	236-136	236-436	20 (4 x 5)								
48	236-148	236-448	20 (4 x 5)								

Item no. suffix for 2 solder pins/pole with 3.6 mm long solder pins: ...-.../334-000\*

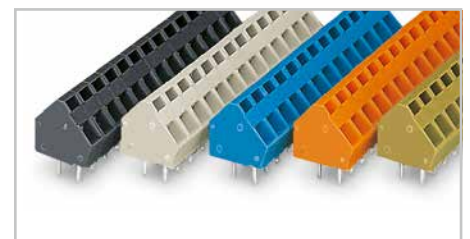
Item no. suffix for 2 solder pins/pole with 5.5 mm long solder pins: ...-.../332-000\*

Item no. suffixes for Ex e II and Ex i applications:

- Ex e II      ...-.../000-009/999-950\* (Ex e II only for PCB terminal strips with 2 solder pins/pole)
- ① Ex i        ...-.../000-006\* (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)

PCB terminal strips in other colors are available upon request (depending on quantity required):

- black
- ① blue
- dark gray
- light gray
- orange
- light green
- green

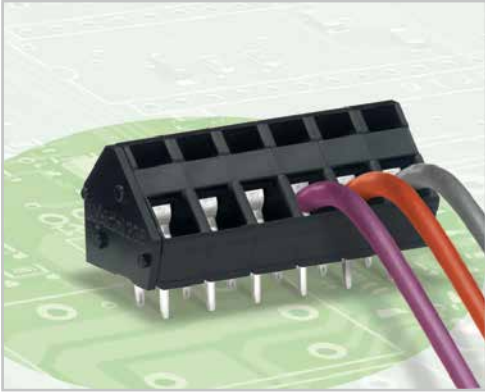


\* Other pole numbers, solder pin lengths, Ex e II and Ex i intrinsically safe variants, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

# PCB Terminal Strips 2.5 mm<sup>2</sup>, THR (Through-Hole Reflow\*)

## Pin Spacing: 5 mm

### 236 Series



- PCB terminal strips made of high-temperature resistant plastic are suitable for SMT reflow soldering
- Tape-and-reel packaging
- Double solder pins for high mechanical stability

**Technical data:**

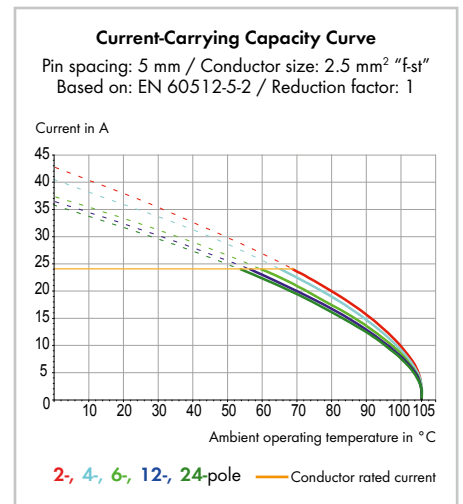
Pin Spacing	5 mm 0.197 in.		
Ratings per	IEC/EN 60664-1		
Overtension category	III	III	II
Pollution degree	3	2	2
Rated voltage	200 V	320 V	320 V
Rated surge voltage	4 kV	4 kV	4 kV
Nominal current	24 A	24 A	24 A
Approvals per	UL/CSA		
Use group UL 1059	B	C	D
Rated voltage	300 V	-	300 V
Nominal current UL	15 A	-	10 A
Nominal current CSA	15 A	-	10 A

**Conductor and solder pin data:**

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 12 (12: THHN, THWN)
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	3.6 mm / 0.7 x 0.7 mm
Solder pin: metal plated hole Ø	1.1 <sup>+0.1</sup> mm

**Material data:**

Material group	III a
Insulating material	Nylon 46 (PA 46)
Flammability class per UL 94	V2
Lower/Upper limit temperature	-60 °C / +115 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

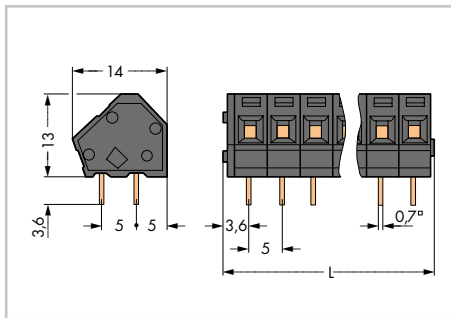
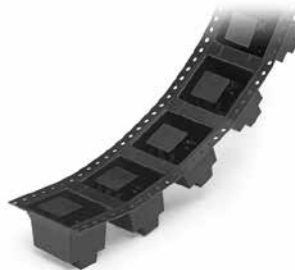
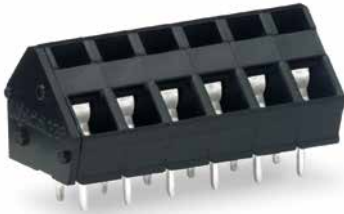


**236 Series accessories:**

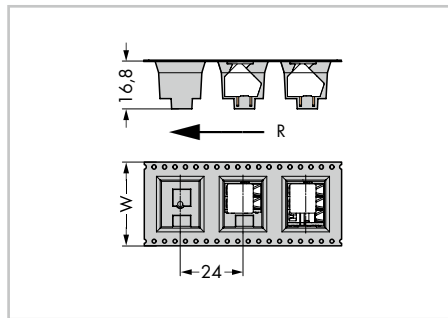
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<b>Pin spacing: 5 mm / 0.197 in.</b>  0.08 ... 2.5 mm <sup>2</sup>   28 ... 12 AWG 320 V/4 kV/2 24 A   300 V/10 A		<b>PCB terminal strips in tape-and-reel packaging</b> <b>Pin spacing: 5 mm / 0.197 in.</b>  0.08 ... 2.5 mm <sup>2</sup>   28 ... 12 AWG 320 V/4 kV/2 24 A   300 V/10 A	
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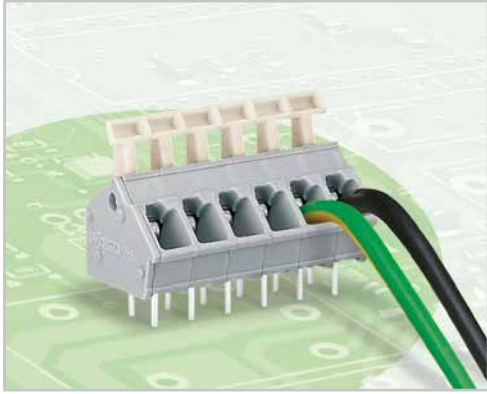
L = (pole no. x pin spacing) + 2.3 mm



W = Tape width  
R = Feed direction

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	W
PCB terminal strip, THR, 2 solder pins/pole, black			PCB terminal strip with additional suction pads, in tape-and-reel packaging acc. to IEC 60286-3, black (mm)		
2	236-402/334-604	420 (4 x 105)	2	236-402/334-604/997-405	32
3	236-403/334-604	280 (4 x 70)	3	236-403/334-604/997-405	32
4	236-404/334-604	220 (4 x 55)	4	236-404/334-604/997-406	44
5	236-405/334-604	180 (4 x 45)	5	236-405/334-604/997-406	44
6	236-406/334-604	140 (4 x 35)	6	236-406/334-604/997-406	44
Reel diameter: 330 mm, 140 pieces per reel					

# Modular PCB Terminal Blocks and Strips with Push-Buttons 2.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm 256 Series



- Modular PCB terminal blocks and PCB terminal strips with push-button actuated CAGE CLAMP®
- versions with Ex e (increased safety) approval
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

**Technical data:**

Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per	III	III	II	III	III	II	III	III	II
Overtoltage category	3	2	2	3	2	2	3	2	2
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V	500 V	630 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A

**Conductor and solder pin data:**

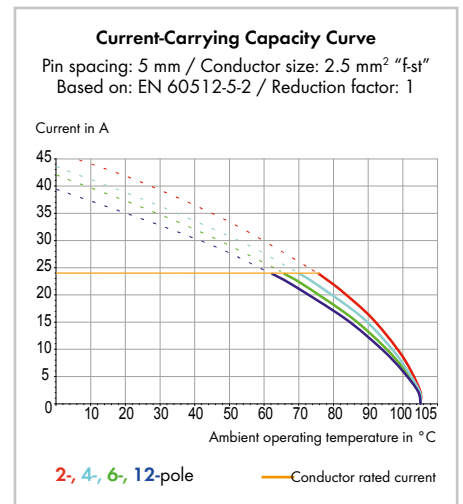
Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 12 (12: THHN, THWN)
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 (5.5) mm / 0.7 x 0.7 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

**Material data:**

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated

**Technical data for Ex e II () versions:**

Pin Spacing	5/5.08 mm 0.2 in.	7.5/7.62 mm 0.3 in.	10/10.16 mm 0.4 in.
Ratings per	ATEX: PTB 06 ATEX 1061 U IECEx: IECEx PTB 06.0042 U		
Rated voltage	176 V	275 V	275 V
Nominal current	16 A	16 A	16 A



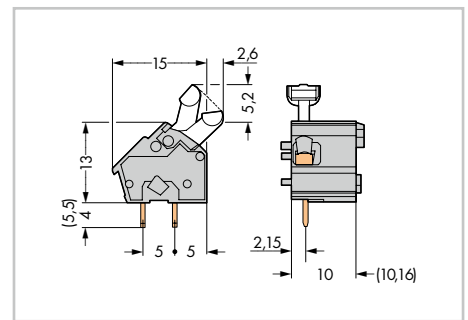
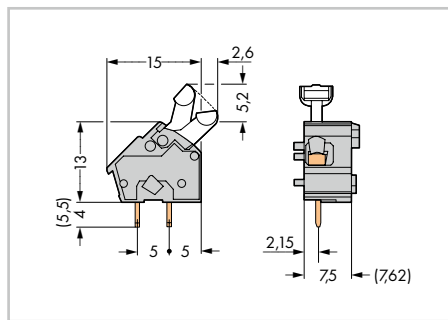
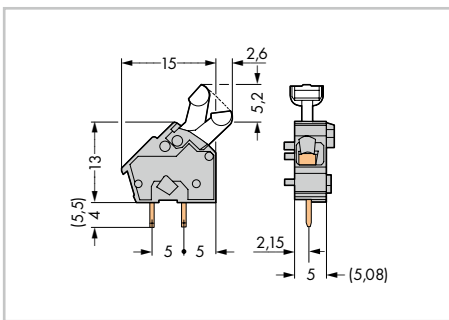
**256 Series accessories:**

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Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 630 V/6 kV/2 24 A	28 ... 12 AWG 300 V/10 A



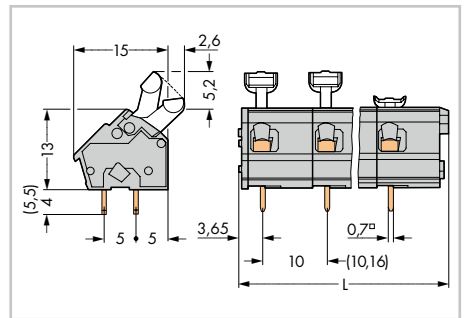
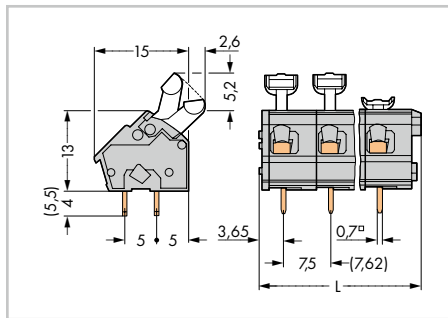
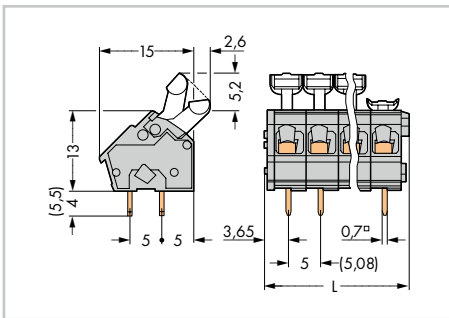
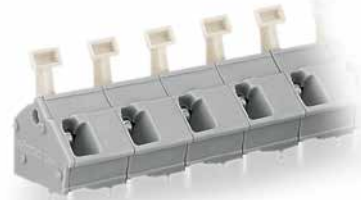
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Modular PCB terminal block with push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal block with push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal block with push-button, 2 solder pins/pole</b>		
gray	256-401	600 (6 x 100)	gray	256-501	400 (4 x 100)	gray	256-601	300 (3 x 100)
red	256-740	600 (6 x 100)	red	256-750	400 (4 x 100)	red	256-760	300 (3 x 100)
dark gray	256-742	600 (6 x 100)	dark gray	256-752	400 (4 x 100)	dark gray	256-762	300 (3 x 100)
light gray	256-743	600 (6 x 100)	light gray	256-753	400 (4 x 100)	light gray	256-763	300 (3 x 100)
blue	256-744	600 (6 x 100)	blue	256-754	400 (4 x 100)	blue	256-764	300 (3 x 100)
orange	256-746	600 (6 x 100)	orange	256-756	400 (4 x 100)	orange	256-766	300 (3 x 100)
light green	256-747	600 (6 x 100)	light green	256-757	400 (4 x 100)	light green	256-767	300 (3 x 100)
Ex e II	256-743/999-950		Ex e II	256-753/999-950		Ex e II	256-763/999-950	
			① Suitable for Ex i applications			① Suitable for Ex i applications		
<b>Item no. suffixes for modular PCB terminal blocks with 5.5 mm long solder pins: .../332-000*</b>								

End plates for 256 Series		Color	Item No.	Pack. Unit
snap-on type, 1 mm/0.039 in. thick		gray	256-100	100
		dark gray	256-200	100
		light gray	256-300	100
		blue	256-400	100
		red	256-500	100
		orange	256-600	100
		light green	256-700	100
		black	256-800	100

\* Other colors and solder pin lengths are available upon request (depending on quantity required).

# PCB Terminal Strips with Push-Buttons, 2.5 mm<sup>2</sup>

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 24 A	300 V/10 A	320 V/4 kV/2 24 A	300 V/10 A	630 V/6 kV/2 24 A	300 V/10 A



$L = (\text{pole no.} \times \text{pin spacing}) + 2.9 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>PCB terminal block with angled push-buttons, 2 solder pins/pole, gray</b>			<b>PCB terminal block with angled push-buttons, 2 solder pins/pole, gray</b>			<b>PCB terminal block with angled push-buttons, 2 solder pins/pole, gray</b>		
2	256-402	400 (4 x 100)	2	256-502	280 (4 x 70)	2	256-602	200 (4 x 50)
3	256-403	280 (4 x 70)	3	256-503	180 (4 x 45)	3	256-603	140 (4 x 35)
4	256-404	200 (4 x 50)	4	256-504	140 (4 x 35)	4	256-604	100 (4 x 25)
5	256-405	160 (4 x 40)	5	256-505	120 (4 x 30)	5	256-605	80 (4 x 20)
6	256-406	140 (4 x 35)	6	256-506	100 (4 x 25)	6	256-606	60 (4 x 15)
7	256-407	120 (4 x 30)	7	256-507	80 (4 x 20)	7	256-607	60 (4 x 15)
8	256-408	100 (4 x 25)	8	256-508	60 (4 x 15)	8	256-608	60 (4 x 15)
9	256-409	100 (4 x 25)	9	256-509	60 (4 x 15)	9	256-609	40 (4 x 10)
10	256-410	80 (4 x 20)	10	256-510	60 (4 x 15)	10	256-610	40 (4 x 10)
12	256-412	60 (4 x 15)	12	256-512	40 (4 x 10)	12	256-612	40 (4 x 10)
16	256-416	60 (4 x 15)	16	256-516	40 (4 x 10)	16	256-616	20 (4 x 5)
24	256-424	40 (4 x 10)	24	256-524	20 (4 x 5)	24	256-624	20 (4 x 5)
36	256-436	20 (4 x 5)						
48	256-448	20 (4 x 5)						

Item no. suffixes for PCB terminal blocks with with 5.5 mm long solder pins: .../332-000\*

Item no. suffixes for Ex e II and Ex i applications:

- Ex e II     .../000-009/999-950\*
- Ex i         .../000-006\* (only for 7.5/7.62 mm and 10/10.16 mm pin spacing)

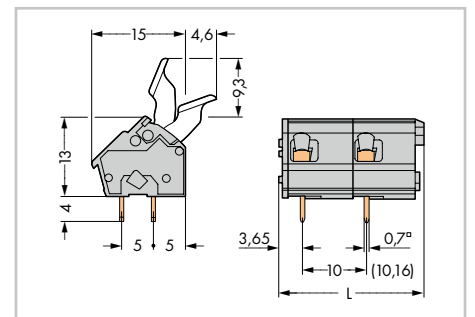
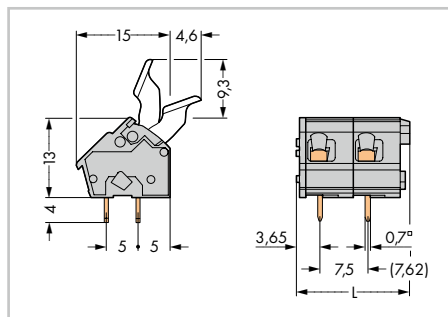
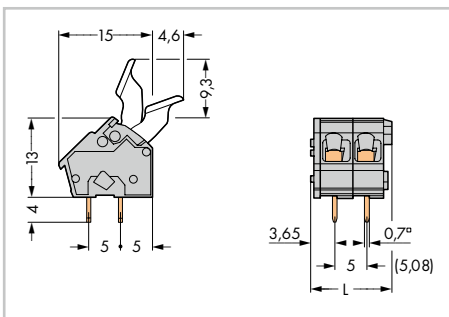
PCB terminal strips in other colors are available upon request (depending on quantity required):

- red
- blue
- dark gray
- light gray
- orange
- light green



\* Other pole numbers, solder pin lengths, Ex e II and Ex i variants, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 24 A	300 V/10 A	320 V/4 kV/2 24 A	300 V/10 A	630 V/6 kV/2 24 A	300 V/10 A



L = (pole no. x pin spacing) + 2.9 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
PCB terminal strip with finger-operated levers, 2 solder pins/pole, gray			PCB terminal strip with finger-operated levers, 2 solder pins/pole, gray			PCB terminal strip with finger-operated levers, 2 solder pins/pole, gray		
2	256-402/333-000	400 (4 x 100)	2	256-502/333-000	280 (4 x 70)	2	256-602/333-000	200 (4 x 50)
3	256-403/333-000	280 (4 x 70)	3	256-503/333-000	180 (4 x 45)	3	256-603/333-000	140 (4 x 35)
4	256-404/333-000	200 (4 x 50)	4	256-504/333-000	140 (4 x 35)	4	256-604/333-000	100 (4 x 25)
5	256-405/333-000	160 (4 x 40)	5	256-505/333-000	120 (4 x 30)	5	256-605/333-000	80 (4 x 20)
6	256-406/333-000	140 (4 x 35)	6	256-506/333-000	100 (4 x 25)	6	256-606/333-000	60 (4 x 15)
7	256-407/333-000	120 (4 x 30)	7	256-507/333-000	80 (4 x 20)	7	256-607/333-000	60 (4 x 15)
8	256-408/333-000	100 (4 x 25)	8	256-508/333-000	60 (4 x 15)	8	256-608/333-000	60 (4 x 15)
9	256-409/333-000	100 (4 x 25)	9	256-509/333-000	60 (4 x 15)	9	256-609/333-000	40 (4 x 10)
10	256-410/333-000	80 (4 x 20)	10	256-510/333-000	60 (4 x 15)	10	256-610/333-000	40 (4 x 10)
12	256-412/333-000	60 (4 x 15)	12	256-512/333-000	40 (4 x 10)	12	256-612/333-000	40 (4 x 10)
<b>Note:</b>								
For lengths greater than 3 poles (5/5.08 mm pin spacing), finger lever operation for center levers may not be possible due to finger size/spacing limitations. †								

Item no. suffixes for Ex e II and Ex i applications:

- Ex e II .../333-009/999-950\*
- Ex i .../333-006\* (only for 10/10.16 mm pin spacing)

PCB terminal strips in other colors are available upon request (depending on quantity required):

- red
- blue
- dark gray
- light gray
- orange
- light green



\* Other pole numbers, Ex e II and Ex i variants, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).

# Modular PCB Terminal Blocks and Strips with Angled Push-Buttons, 2.5 mm<sup>2</sup> Pin Spacing: 5/5.08 mm, 7.5/7.62 mm, 10/10.16 mm

## 256 Series



- PCB terminal blocks with push-button actuated CAGE CLAMP®
- New version with angled push-buttons for easy top-of-unit actuation
- Set to metric or inch pin spacing by compressing PCB terminal strips together or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

### Technical data:

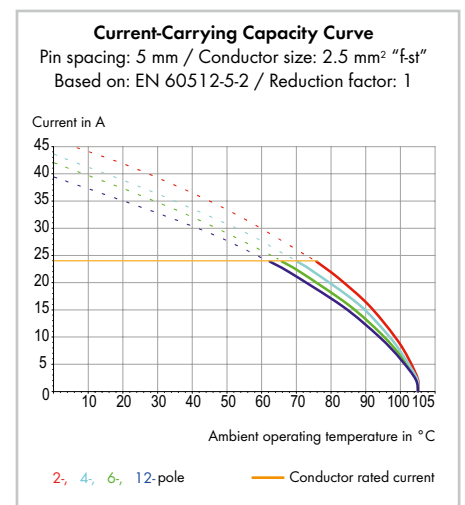
Pin Spacing	5/5.08 mm 0.2 in.			7.5/7.62 mm 0.3 in.			10/10.16 mm 0.4 in.		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Ratings per									
Overtoltage category	III	III	II	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	250 V	320 V	630 V	320 V	320 V	630 V	500 V	630 V	1000 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV	6 kV	6 kV	6 kV
Nominal current	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A	24 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A	15 A	-	10 A

### Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.08 ... 2.5 mm <sup>2</sup>
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 ... 1.5 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 ... 12 (12: THHN, THWN)
Strip length	5 ... 6 mm / 0.20 ... 0.24 in.
Conductor entry angle	45° to PCB
Solder pin: length/width	4 mm / 0.7 x 0.7 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

### Material data:

Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability rating per UL 94	V0
Lower/Upper limit temperature	-60 °C / +105 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated



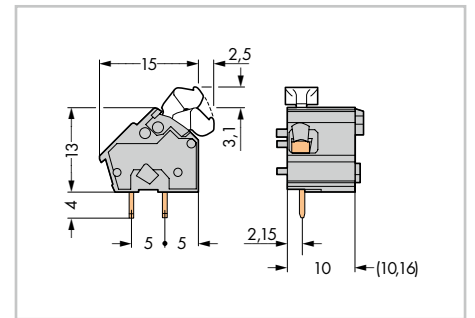
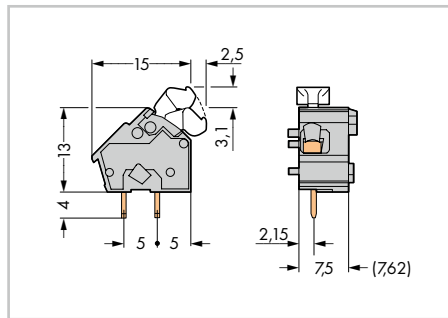
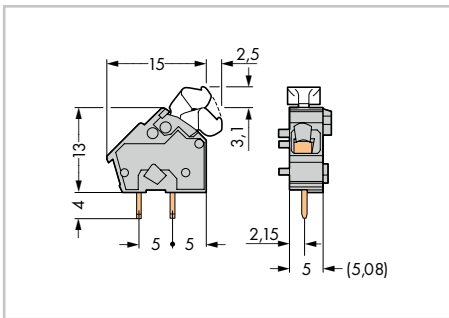
### 256 Series accessories:

### Page:

Marking accessories	512
Operating tools	496
Commoning strips	Volume 2 / 67
Test plug module	Volume 2 / 202

# Modular PCB Terminal Blocks with Angled Push-Buttons, 2.5 mm<sup>2</sup>

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 320 V/4 kV/2 24 A	28 ... 12 AWG 300 V/10 A	0.08 ... 2.5 mm <sup>2</sup> 630 V/6 kV/2 24 A	28 ... 12 AWG 300 V/10 A



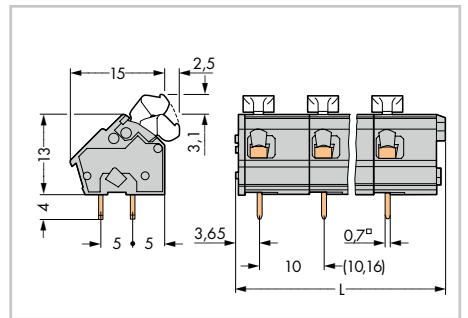
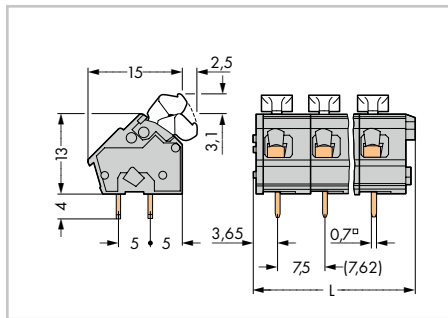
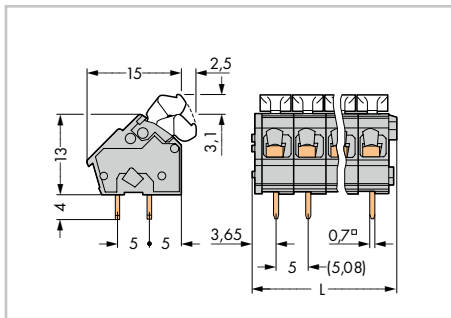
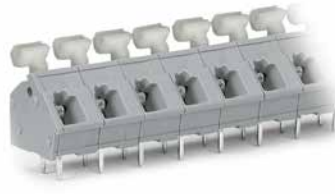
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Modular PCB terminal block with angled push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal block with angled push-button, 2 solder pins/pole</b>			<b>Modular PCB terminal block with angled push-button, 2 solder pins/pole</b>		
gray	256-461	600 (6 x 100)	gray	256-561	400 (4 x 100)	gray	256-661	300 (3 x 100)
red	256-840	600 (6 x 100)	red	256-850	400 (4 x 100)	red	256-860	300 (3 x 100)
dark gray	256-842	600 (6 x 100)	dark gray	256-852	400 (4 x 100)	dark gray	256-862	300 (3 x 100)
light gray	256-843	600 (6 x 100)	light gray	256-853	400 (4 x 100)	light gray	256-863	300 (3 x 100)
blue	256-844	600 (6 x 100)	blue	256-854	400 (4 x 100)	blue	256-864	300 (3 x 100)
orange	256-846	600 (6 x 100)	orange	256-856	400 (4 x 100)	orange	256-866	300 (3 x 100)
light green	256-847	600 (6 x 100)	light green	256-857	400 (4 x 100)	light green	256-867	300 (3 x 100)

<b>End plates for 256 Series</b>		Color	Item No.	Pack. Unit
snap-on type, 1 mm/0.039 in. thick		gray	256-100	100
		dark gray	256-200	100
		light gray	256-300	100
		blue	256-400	100
		red	256-500	100
		orange	256-600	100
		light green	256-700	100
		black	256-800	100

Other colors are available upon request (depending on quantity required).

# PCB Terminal Strips with Angled Push-Buttons, 2.5 mm<sup>2</sup>

Pin spacing: 5/5.08 mm / 0.2 in.		Pin spacing: 7.5/7.62 mm / 0.3 in.		Pin spacing: 10/10.16 mm / 0.4 in.	
0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG	0.08 ... 2.5 mm <sup>2</sup>	28 ... 12 AWG
320 V/4 kV/2 24 A	300 V/10 A	320 V/4 kV/2 24 A	300 V/10 A	630 V/6 kV/2 24 A	300 V/10 A



L = (pole no. x pin spacing) + 2.9 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
<b>PCB terminal strips with angled push-buttons, 2 solder pins/pole, gray</b>			<b>PCB terminal strips with angled push-buttons, 2 solder pins/pole, gray</b>			<b>PCB terminal strips with angled push-buttons, 2 solder pins/pole, gray</b>		
2	256-402/334-000	400 (4 x 100)	2	256-502/334-000	280 (4 x 70)	2	256-602/334-000	200 (4 x 50)
3	256-403/334-000	280 (4 x 70)	3	256-503/334-000	180 (4 x 45)	3	256-603/334-000	140 (4 x 35)
4	256-404/334-000	200 (4 x 50)	4	256-504/334-000	140 (4 x 35)	4	256-604/334-000	100 (4 x 25)
5	256-405/334-000	160 (4 x 40)	5	256-505/334-000	120 (4 x 30)	5	256-605/334-000	80 (4 x 20)
6	256-406/334-000	140 (4 x 35)	6	256-506/334-000	100 (4 x 25)	6	256-606/334-000	60 (4 x 15)
7	256-407/334-000	120 (4 x 30)	7	256-507/334-000	80 (4 x 20)	7	256-607/334-000	60 (4 x 15)
8	256-408/334-000	100 (4 x 25)	8	256-508/334-000	60 (4 x 15)	8	256-608/334-000	60 (4 x 15)
9	256-409/334-000	100 (4 x 25)	9	256-509/334-000	60 (4 x 15)	9	256-609/334-000	40 (4 x 10)
10	256-410/334-000	80 (4 x 20)	10	256-510/334-000	60 (4 x 15)	10	256-610/334-000	40 (4 x 10)
12	256-412/334-000	60 (4 x 15)	12	256-512/334-000	40 (4 x 10)	12	256-612/334-000	40 (4 x 10)
16	256-416/334-000	60 (4 x 15)	16	256-516/334-000	40 (4 x 10)	16	256-616/334-000	20 (4 x 5)
24	256-424/334-000	40 (4 x 10)	24	256-524/334-000	20 (4 x 5)	24	256-624/334-000	20 (4 x 5)
36	256-436/334-000	20 (4 x 5)						
48	256-448/334-000	20 (4 x 5)						

PCB terminal strips in other colors are available upon request (depending on quantity required):








● red
● blue
● dark gray
○ light gray
● orange
● light green

Other pole numbers, direct marking, as well as mixed-color PCB terminal strips are available upon request (depending on quantity required).





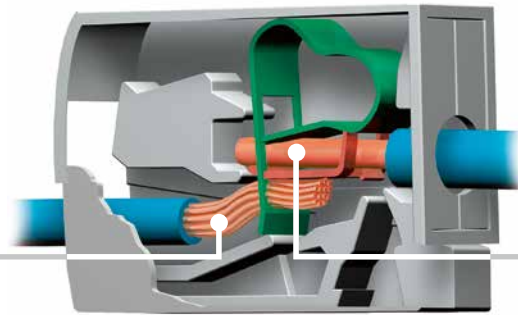


	Page
	<b>Lighting Connectors</b> 224 Series 456
	<b>COMPACT PUSH WIRE® Connectors for Junction Boxes</b> Serie 2273 458
	<b>PUSH WIRE® Connectors for Junction Boxes</b> 273 und 773 Series 460
	<b>Ex PUSH WIRE® Connectors for Junction Boxes</b> 773 Series 465
	<b>Splicing Connectors for all Conductor Types</b> 221 and 222 Series 466
	<b>MICRO PUSH WIRE® Connectors for Junction Boxes</b> 243 Series 470
	<b>Vario-T-BOXX and Variobox</b> 472

# WAGO Lighting Connectors – Two Connection Technologies in One Connector

Lighting side:  
**CAGE CLAMP®**

Installation side:  
**PUSH WIRE®**



CAGE CLAMP® clamps the following copper conductors:\*



solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded with ferrule (gastight crimped)

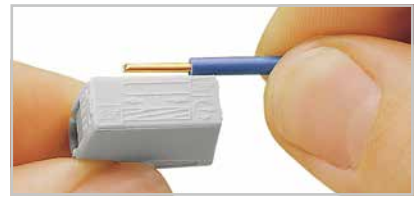


fine-stranded, with pin terminal (gastight crimped)

PUSH WIRE® terminates the following copper conductors:\*

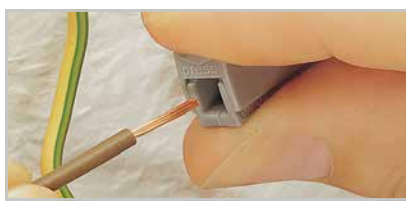


solid



### Stripping

Strip conductor to 9 ... 11 mm/0.39 in.



### Connection

Press button fully and insert conductor into **square** entry.



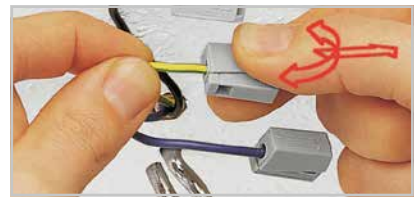
### Connection

Insert solid conductor into the **round** entry and push until it hits backstop.



### Removal

Press button and withdraw conductor on the side with the **square** opening.



### Removal

Hold conductor and alternately twist left and right while pulling the connector.

- The ideal connection between "solid" and "fine-stranded" conductors
- Also with double entries for looping solid conductors
- Tool-free termination



### Testing

via separate test ports.




\* For aluminum conductors, see notes on page 511.

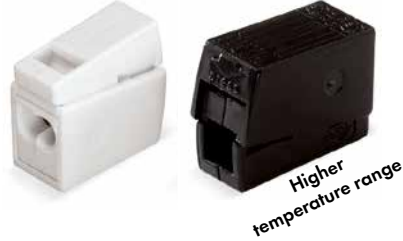
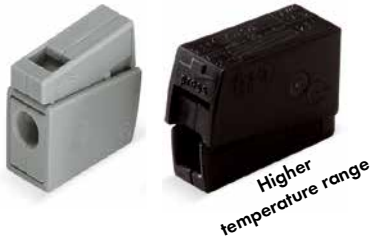
# Lighting and "Service" Connectors 224 Series

CAGE CLAMP®  
PUSH WIRE®

7

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<b>Installation side</b> 1 ... 2.5 mm <sup>2</sup> "s" <b>Lighting side</b> 0.5 ... 2.5 mm <sup>2</sup> "s+f-st" 400 V/4 kV/2; 24 A  9 ... 11 mm / 0.39 in.	AWG 14 ... 12  AWG 20 ... 16 300 V, 20 A <sup>Ⓢ</sup>	<b>Installation side</b> 1 ... 2.5 mm <sup>2</sup> "s" <b>Lighting side</b> 0.5 ... 2.5 mm <sup>2</sup> "s+f-st" 400 V/4 kV/2; 24 A  9 ... 11 mm / 0.39 in.	AWG 14 ... 12  AWG 20 ... 16 300 V, 20 A <sup>Ⓢ</sup>	0.5 ... 2.5 mm <sup>2</sup> "s+f-st" 400 V/4 kV/2 I <sub>N</sub> 24 A   9 ... 11 mm / 0.39 in.	AWG 20 ... 16 300 V, 20 A <sup>Ⓢ</sup>
---	--	---	--	---	---



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Lighting connector,</b> standard version, continuous service temperature 105 °C			<b>2-conductor lighting connector,</b> standard version, continuous service temperature 105 °C			<b>"Service" connector</b>		
● gray	224-101	1000	○ white	224-112	1000	● gray	224-201	50
version for increased continuous service temperature of 120 °C			version for increased continuous service temperature of 120 °C					
● black	224-104	100	● black	224-114	100			

The WAGO lighting connectors ideally connect solid conductors with fine-stranded conductors. Due to their testing and approval as isolated connecting (splicing) terminals per VDE 0606, the 224 Series lighting connectors can also be used in other applications requiring a connection between solid and fine-stranded conductors.

For example, 224 Series connects:

- Blinds, sliding shutters or awning motors
- Window or bathroom fans
- Circulation pumps
- Furnace control systems
- Electrical devices via permanent flexible cables

- ❶ In grounded power lines  
400 V = rated voltage  
4kV = rated surge voltage  
2 = pollution degree



7

# COMPACT PUSH WIRE® Junction Box Connectors for Solid Conductors 2273 Series



### Stripping

Strip solid conductor to 11 mm (see marking).



### Connection

Insert stripped solid conductor until it hits backstop.



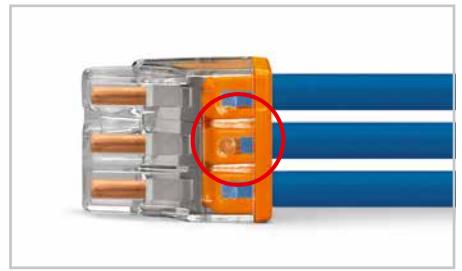
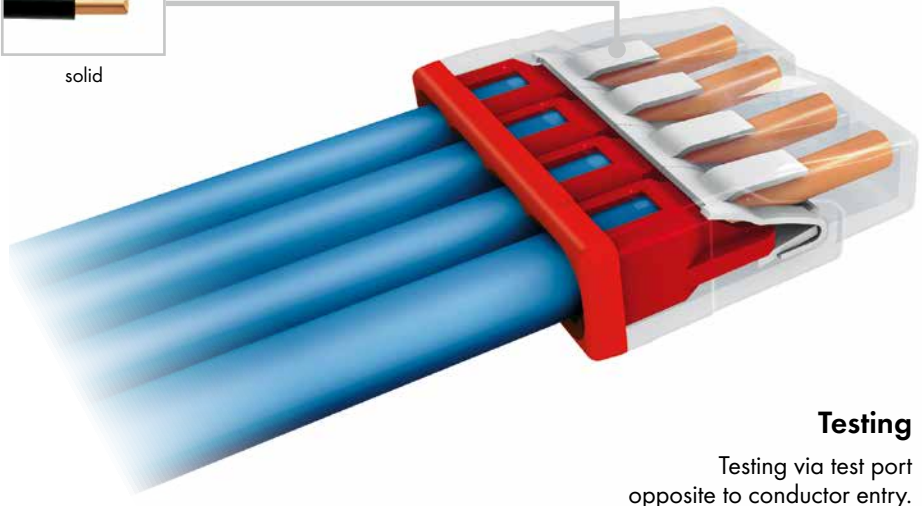
### Removal

Hold conductor and alternately twist left and right, while slightly pulling the connector.

PUSH WIRE® terminates the following copper conductors: \*



solid



### Visual wiring inspection

The transparent housing shows if conductors are fully inserted; within the colored base, a clear port shows if the conductor's strip length is correct. Conductors are correctly stripped if the clear port shows no bare conductor on the unprinted connector side. Picture above shows center conductor with exceeded strip length.

### Testing

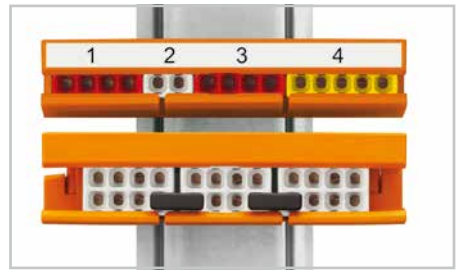
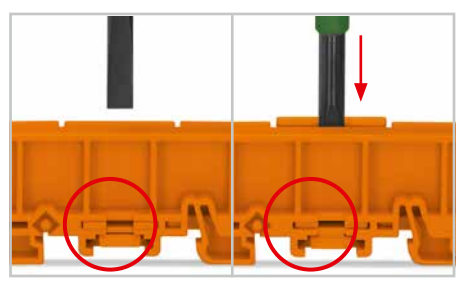
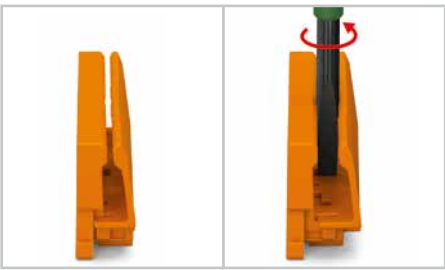
Testing via test port opposite to conductor entry.



- Convenient wiring via extremely compact design
- Conductor sizes: 0.5-2.5 mm<sup>2</sup> (AWG 18-14)
- Any combination of conductor sizes is possible
- PUSH WIRE® terminates solid copper conductors ("s")
- Push-in termination of up to 8 solid conductors




### Mounting carrier

The mounting carrier is suitable for both connector profiles. To adjust the mounting carrier, unlock the latch via 5.5 mm operating tool (see picture, right) and move the clamping slide to the required width by rotating the tool (see picture, below). In the mounting carrier, connectors may be commoned in longitudinal direction using 862-482 jumpers. Please note that jumpers cannot be removed.



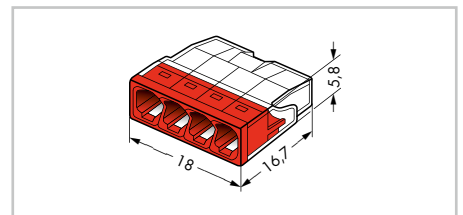
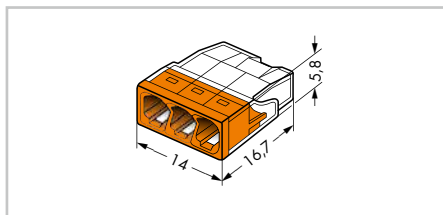
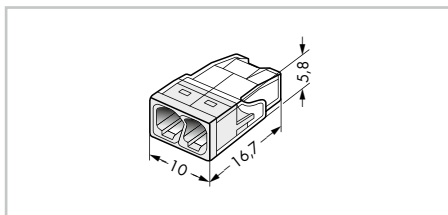
\* For aluminum conductors, see notes on page 511.



# COMPACT PUSH WIRE® Junction Box Connectors and Mounting Carrier 2273 Series

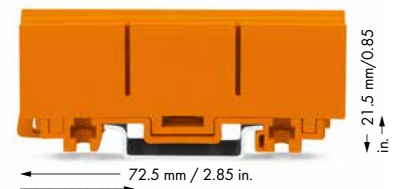
<p>2 x 0.5 ... 2.5 mm<sup>2</sup> "s" 450 V/4 kV/2* I<sub>N</sub> 24 A</p>  11 mm / 0.43 in.	<p>2 x AWG 18 ... 14 "s"</p>	<p>3 x 0.5 ... 2. mm<sup>2</sup> "s" 450 V/4 kV/2* I<sub>N</sub> 24 A</p>  11 mm / 0.43 in.	<p>3 x AWG 18 ... 14 "s"</p>	<p>4 x 0.5 ... 2.5 mm<sup>2</sup> "s" 450 V/4 kV/2* I<sub>N</sub> 24 A</p>  11 mm / 0.43 in.	<p>4 x AWG 18 ... 14 "s"</p>
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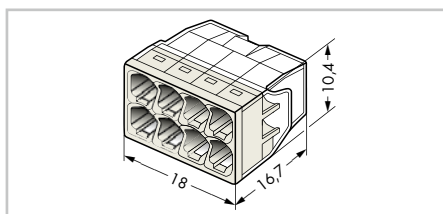
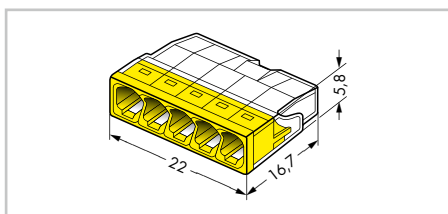
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes, 2-conductor connector, transparent housing			COMPACT PUSH WIRE® connector for junction boxes, 3-conductor connector, transparent housing			COMPACT PUSH WIRE® connector for junction boxes, 4-conductor connector, transparent housing		
○ white	2273-202	1000 (10x100)	● orange	2273-203	1000 (10x100)	● red	2273-204	1000 (10x100)




<p>5 x 0.5 ... 2.5 mm<sup>2</sup> "s" 450 V/4 kV/2* I<sub>N</sub> 24 A</p>  11 mm / 0.43 in.	<p>5 x AWG 18 ... 14 "s"</p>	<p>3 x 0.5 ... 2.5 mm<sup>2</sup> "s" 450 V/4 kV/2* I<sub>N</sub> 24 A</p>  11 mm / 0.43 in.	<p>8 x AWG 18 ... 14 "s"</p>	<p><b>Mounting carrier for 2273 Series</b></p> <p>Carrier width 14/18.5 mm / 0.55/0.72 in.</p>
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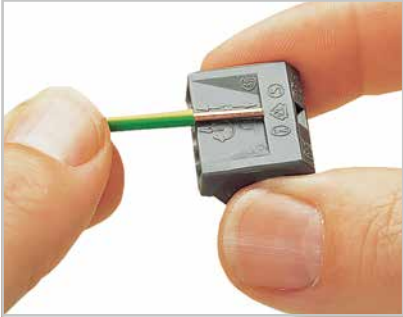
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes, 5-conductor connector, transparent housing			COMPACT PUSH WIRE® connector for junction boxes, 8-conductor connector, transparent housing			Mounting carrier, for single- and double-row 2273 Series connectors		
● yellow	2273-205	1000 (10x100)	○ light gray	2273-208	500 (10x50)	orange	2273-500	50 (5x10)



<p><b>Self-adhesive marker strips, plain,</b> height of marker strip: 5mm, 48 self-adhesive strips per card</p>  <p>white 210-334 1</p>
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Approvals are available online at: [www.wago.com](http://www.wago.com)  
\* In grounded power lines

# MICRO PUSH WIRE® Junction Box Connectors for Solid Conductors 273 Series



### Stripping

Strip solid conductor to 10 ... 13 mm (0.39 ... 0.51 in.).



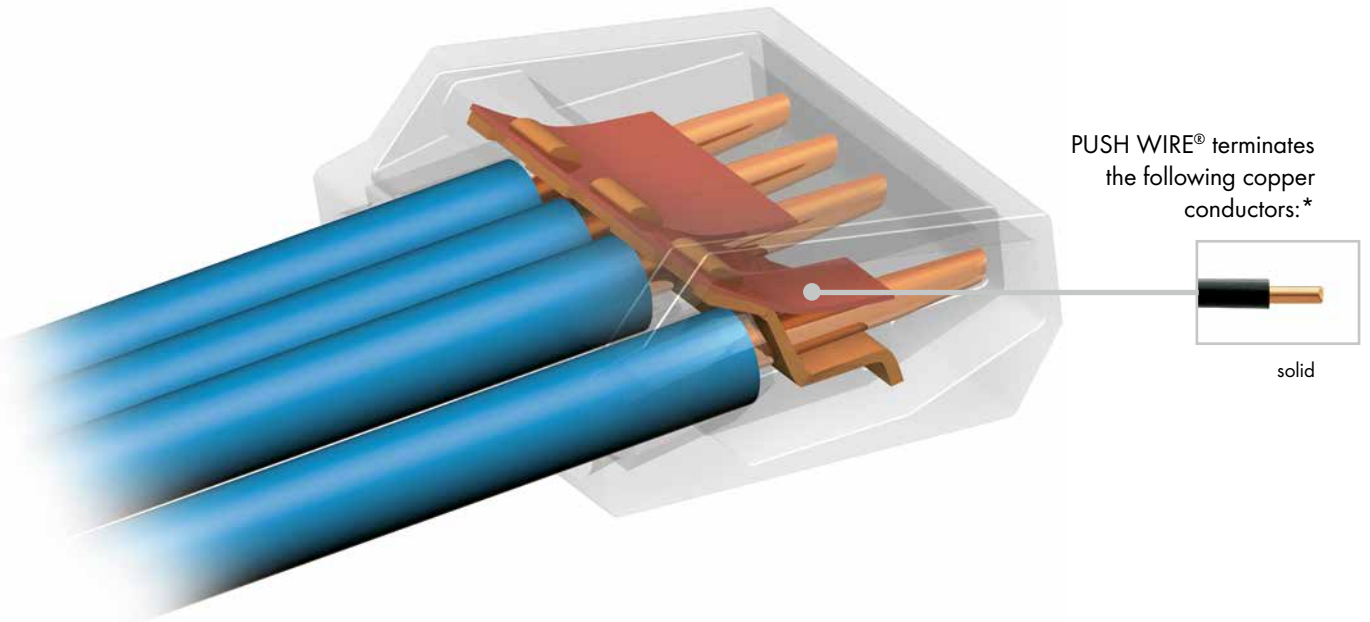
### Connection

Push stripped solid conductors in up to the backstop.



### Removal

Hold conductor and twist alternately left and right while pulling the connector.

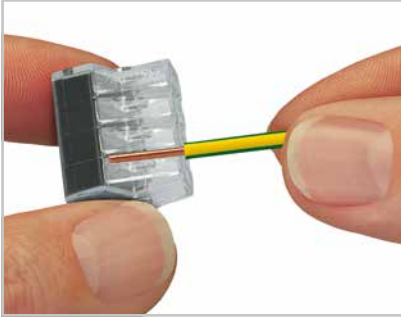


### Testing

- The "classic" connector for electrical installation applications over the past 35 years – proven in billions of applications worldwide
- Push-in termination of up to 8 solid conductors.
- PUSH WIRE® terminates solid copper conductors ("s")
- Conductor sizes:  
0.75 ... 4 mm<sup>2</sup> (AWG 18 ... 10)

\* For aluminum conductors, see notes on page 511.

# PUSH WIRE® Junction Box Connectors for Solid and Stranded Conductors 773 Series



## Stripping

Strip solid and stranded conductors to 10 ... 13 mm (0.39 ... 0.51 in.).



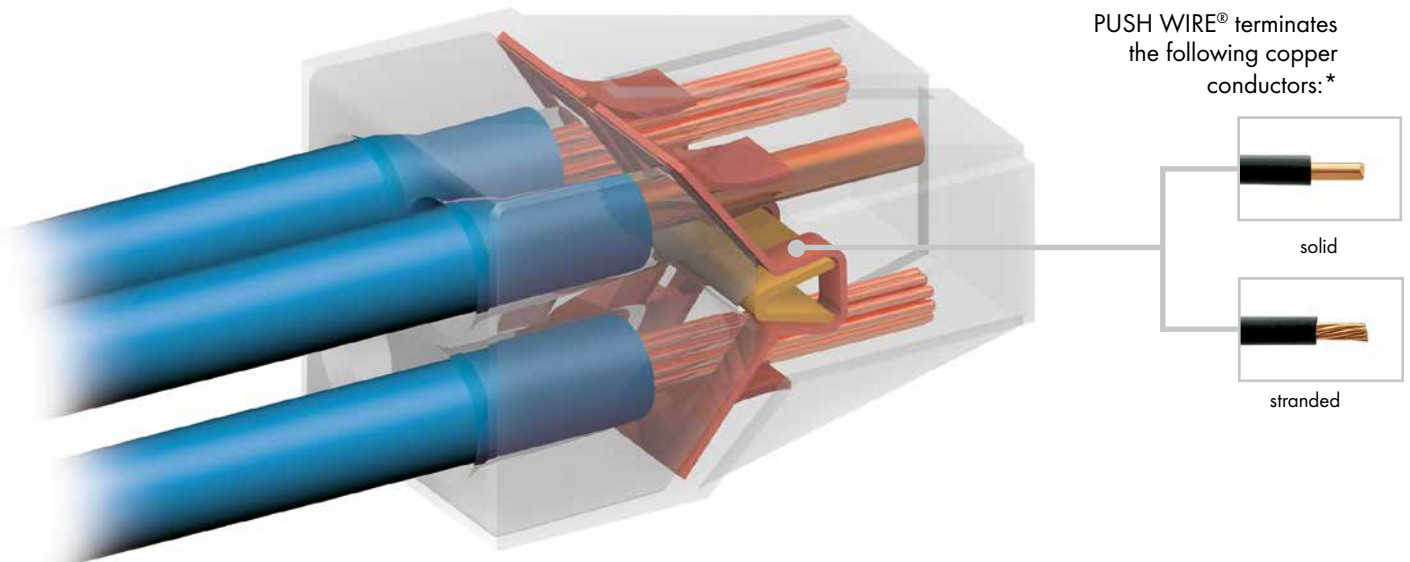
## Connection

Push stripped solid or stranded conductors in up to the backstop.



## Removal

Hold conductor and twist alternately left and right while pulling the connector. Stranded conductors must not be reconnected after removal.






## Testing

- Push-in termination of up to 8 solid or stranded conductors
- Easy-to-use connector carrier for DIN 35 rail or screw mounting
- PUSH WIRE® terminates solid or stranded copper conductors ("s+st")
- Conductor sizes up to max. 6 mm<sup>2</sup> (AWG 10)

\* For aluminum conductors, see notes on page 511.

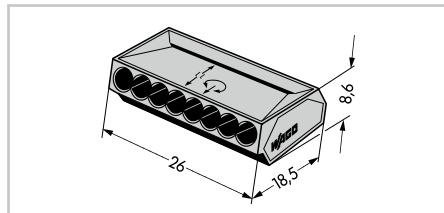
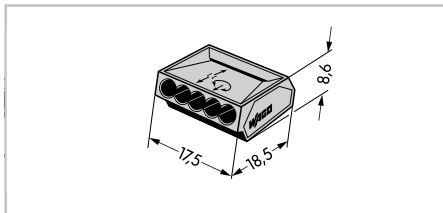
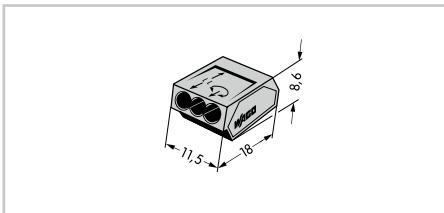
# 7 PUSH WIRE® Junction Box Connectors 273 Series




462

<p>3 x 0.75 ... 1.5 mm<sup>2</sup> "s" ①   3 x AWG 18 ... 16 "s" 400 V/ 4 kV/2*   600 V, 10 A ④ I<sub>N</sub> 18 A</p> <p> 10 ... 13 mm / 0.45 in.</p>	<p>5 x 0.75 ... 1.5 mm<sup>2</sup> "s" ①   5 x AWG 18 ... 16 "s" 400 V/ 4 kV/2*   600 V, 10 A ④ I<sub>N</sub> 18 A</p> <p> 10 ... 13 mm / 0.45 in.</p>	<p>8 x 0.75 ... 1.5 mm<sup>2</sup> "s" ①   8 x AWG 18 ... 16 "s" 400 V/ 4 kV/2*   600 V, 10 A ④ I<sub>N</sub> 18 A</p> <p> 10 ... 13 mm / 0.45 in.</p>
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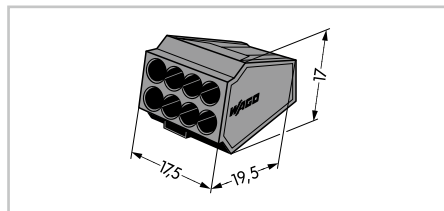
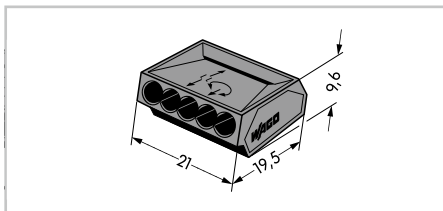
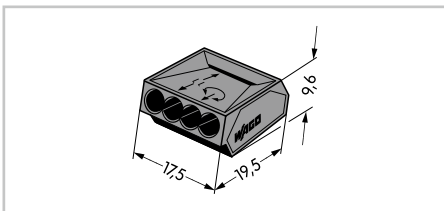
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>PUSH WIRE® connector for junction boxes,</b> 4-conductor connector			<b>PUSH WIRE® connector for junction boxes,</b> 5-conductor connector			<b>PUSH WIRE® connector for junction boxes,</b> 8-conductor connector		
● gray	<b>273-100</b>	1000 (10x100)	● gray	<b>273-101</b>	1000 (10x100)	● gray	<b>273-108</b>	500 (10x50)
○ transparent	<b>273-153</b>	1000 (10x100)	○ transparent	<b>273-155</b>	1000 (10x100)	○ transparent	<b>273-158</b>	500 (10x50)



<p>4 x 1 ... 2.5 mm<sup>2</sup> "s" ②   4 x AWG 18 ... 12 "s" 400 V/ 4 kV/2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p> 10 ... 13 mm / 0.45 in.</p>	<p>5 x 1 ... 2.5 mm<sup>2</sup> "s" ②   5 x AWG 18 ... 12 "s" 400 V/ 4 kV/2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p> 12 ... 13 mm / 0.45 in.</p>	<p>8 x 1 ... 2.5 mm<sup>2</sup> "s+s" ②   8 x AWG 18 ... 12 "s+s" 400 V/ 4 kV/2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p> 10 ... 13 mm / 0.45 in.</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>PUSH WIRE® connector for junction boxes,</b> 4-conductor connector			<b>PUSH WIRE® connector for junction boxes,</b> 5-conductor connector			<b>PUSH WIRE® connector for junction boxes,</b> 8-conductor connector		
● dark gray	<b>273-102</b>	1000 (10x100)	● dark gray	<b>273-105</b>	1000 (10x100)	● dark gray	<b>273-103</b>	500 (10x50)
○ transparent	<b>273-254</b>	1000 (10x100)	○ transparent	<b>273-255</b>	500 (10x50)	○ transparent	<b>273-258</b>	500 (10x50)



Approvals are available online at: [www.wago.com](http://www.wago.com)

\* In grounded power lines ① When using conductors of exclusively the same diameter, 0.5 mm<sup>2</sup>/AWG 20 cross section is also possible.



# PUSH WIRE® Junction Box Connectors

## Mounting Carrier for DIN 35 Rail or Screw Mounting

### 273 Series

PUSH WIRE®

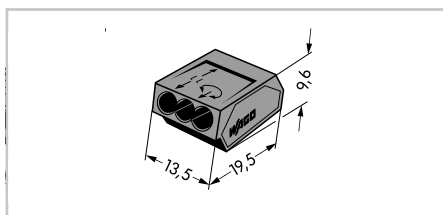
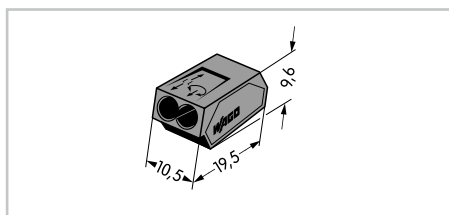
7

463

<p>2 x 1 ... 2.5 mm<sup>2</sup> "s" ②   2 x AWG 18 ... 12 "s" 400 V / 4 kV / 2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p>10 ... 13 mm / 0.45 in.</p>	<p>3 x 1 ... 2.5 mm<sup>2</sup> "s" ②   3 x AWG 18 ... 12 "s" 400 V / 4 kV / 2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p>10 ... 13 mm / 0.45 in.</p>	<p>3 x 1 ... 2.5 mm<sup>2</sup> "s" ②   3 x AWG 18 ... 12 "s" 400 V / 4 kV / 2*   600 V, 20 A ④ I<sub>N</sub> 24 A</p> <p>10 ... 13 mm / 0.45 in.</p>	<p><b>Mounting carrier for 273 Series</b></p> <p><b>Carrier width: 18 mm / 0.71 in.</b></p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes, 2-conductor connector			PUSH WIRE® connector for junction boxes, 4-conductor connector			Mounting carrier 273-150 50 (5x10)		
● dark gray	273-112	1000 (10x100)	● dark gray	273-104	1000 (10x100)	for single-row 273 Series connectors, 1.5 and 2.5 mm <sup>2</sup>		
○ transparent	273-252	1000 (10x100)	○ transparent	273-253	1000 (10x100)	Marking strips, 48 strips per card		
						plain	210-334	1 card



FIXED IN POSITION - DIN 35 rail mounting



FIXED IN POSITION - screw mounting

<p>3 x 1.5 ... 4 mm<sup>2</sup> "s"   3 x AWG 14 ... 10 "s" 400 V / 4 kV / 2*   600 V, 30 A ④ I<sub>N</sub> 32 A</p> <p>12 ... 15 mm / 0.53 in.</p>
---



Before using the carrier, snap off cover and use as end plate.



Snapping carrier onto DIN rail.

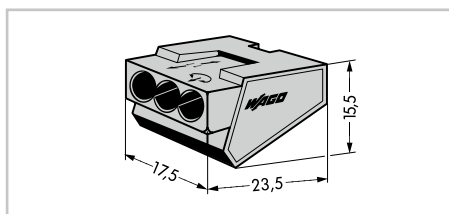
#### PUSH WIRE® connectors in distribution boxes

When performing changes or expansions in junction boxes, there is often the problem that conductors must be extended or additional clamping points are required. Individual PUSH WIRE® connectors (e.g., 222, 243, 273 and 773 Series) are approved as interconnect components for building wiring according to EN 60998. Application standards for building installation (e.g., parts 510 and 520 from DIN VDE 0100) also place the following requirements on junction box connectors:

- They must be arranged so that operation, inspection, maintenance and access to the removable connectors is made easy.
- It must be possible to test them.
- Conductors connected from outside must be clearly and permanently assigned to their associated circuits.

These requirements cannot be met with PUSH WIRE® connectors alone. In combination with WAGO mounting carriers, the PUSH WIRE® connectors clearly meet these requirements, so that there is no more difference to rail-mount terminal blocks. Using PUSH WIRE® connectors with mounting carriers in junction boxes has proved to be accepted by testing authorities.

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes, 3-conductor connectors		
● gray	273-403	500 (10x50)
○ transparent	273-453	500 (10x50)



Approvals are available online at: [www.wago.com](http://www.wago.com)



② When using conductors of exclusively the same diameter, 0.75 mm<sup>2</sup>/AWG 18 cross section is also possible.

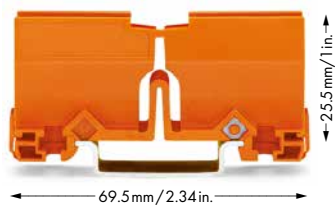
7

# PUSH WIRE® Junction Box Connectors

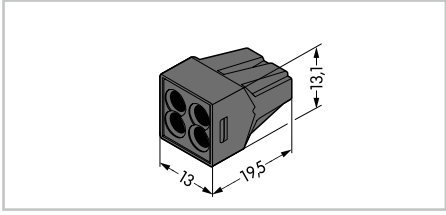
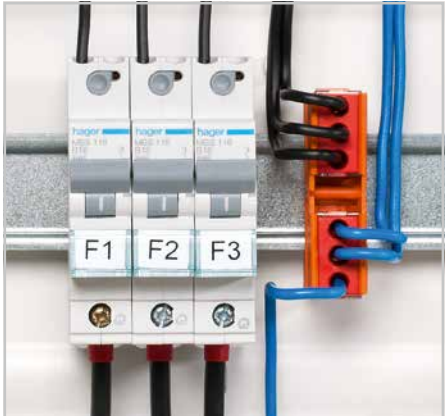
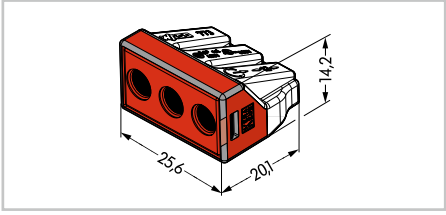
## Mounting Carrier for DIN 35 Rail or Screw Mounting

### 773 Series

<p>3 x 2.5 ... 6 mm<sup>2</sup> "s+st" 400 V/4 kV/2* I<sub>N</sub> 41 A</p> <p>3 x AWG 14 ... 10 "s+st" 600 V, 30 A</p> <p> 12 ... 13 mm / 0.53 in.</p>	<p><b>Mounting carrier for 773 Series</b></p> <p>Carrier width: 18 mm / 0.71 in.</p>	<p>4 x 0.75 ... 2.5 mm<sup>2</sup> "s" 4 x 1.5 ... 2.5 mm<sup>2</sup> "st" 400 V/4 kV/2** I<sub>N</sub> 24 A</p> <p>4 x AWG 18 ... 12 "s" 4 x AWG 16 ... 12 "st" 600 V, 20 A Ⓢ</p> <p> 12 mm / 0.47 in.</p>
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Color	Item No.	Pack. Unit	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>PUSH WIRE® connector for junction boxes,</b> 3-conductor connector, transparent housing			<b>Mounting carrier 773-332</b> for all 773 Series connectors		<b>PUSH WIRE® connector for junction boxes,</b> 4-conductor connector, max. continuous operating temperature: 150 °C		
● red	<b>773-173</b>	500 (10x50)	<b>Marking strips, 48 strips per card</b> plain <b>210-334</b> 1 card		● black	<b>773-514</b>	1000 (10x100)



A mounting carrier (see accessories) is suitable for applications where the connectors must be marked and fixed in position. The carrier fits up to two connectors on DIN 35 carrier rails or screw mounting on level surfaces.



Using this PUSH WIRE® connector, a large range of wiring applications can be realized in distribution or junction boxes, for example. To mention just a few: potential multiplication of an 6 mm<sup>2</sup>/AWG 10 conductor in a junction box, changing from or to 6 mm<sup>2</sup>/AWG 10 conductor size.

# Ex PUSH WIRE® Junction Box Connectors Mounting Carrier for DIN 35 Rail or Screw Mounting 773 Series

PUSH WIRE®

7

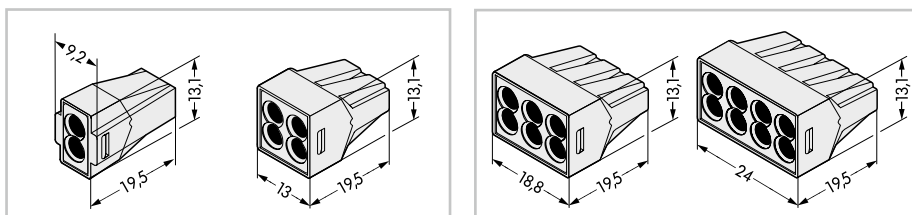
465

0,75 ... 2.5 mm <sup>2</sup> "s"	AWG 18 ... 12 "s" AWG 16 ... 12 "st" 600 V, 20 A ①	0,75 ... 2.5 mm <sup>2</sup> "s"	AWG 18 ... 12 "s" AWG 16 ... 12 "st" 600 V, 20 A ①	<b>Mounting carrier</b> for PUSH WIRE® junction box connectors  <b>Carrier width: 18 mm / 0.71 in.</b>
550 V** I <sub>N</sub> 24 A		550 V** I <sub>N</sub> 24 A		
 12 mm / 0.47 in.		 12 mm / 0.47 in.		

To be used only in conjunction with 773-331 Mounting Carrier.



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit	
PUSH WIRE® connector for junction boxes, light gray			PUSH WIRE® connector for junction boxes, light gray			Mounting carrier		
○ 2-cond. connector	773-492	1000 (10x100)	○ 6-cond. connector	773-496	1000 (10x100)	light gray	773-331	50 (5x10)
○ 4-cond. connector	773-494	1000 (10x100)	○ 8-cond. connector	773-498	1000 (10x100)	Marking strips		
						plain	210-334	1 card



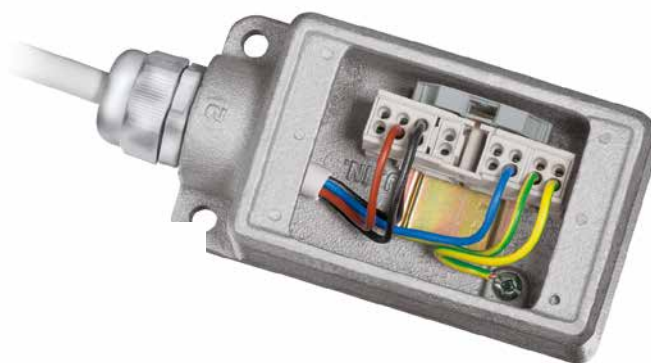
① 300 V/20 A or 600 V/5 A for more than 1 connector per mounting side

## Ex-e PUSH WIRE® connector for junction boxes

For their 2-, 4-, 6- and 8-conductor PUSH WIRE® 773 Series connectors, WAGO has been granted the worldwide first Ex-e approvals in compliance with both the EC 94/9-ATEX directive and the American UL Aex standard.

In most countries, these approvals allow for use in gas environments, zones 1 and 2 as well as zones 21 and 22 dust environments.

WAGO Ex PUSH WIRE® connectors for distribution and junction boxes as well as control and operating systems for use in hazardous areas offer the following advantages over traditional connectors:



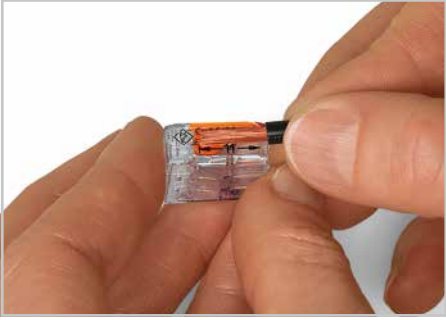
- Time and cost-saving PUSH WIRE® connection
- Vibration-proof, maintenance-free connections
- 100 % touch-proof
- Mounting carriers available for "fixed in position" applications
- One single carrier equipped with 2-, 4-, 6- and 8-conductor connectors can hold up to 16 clamping units according to user requirements, which offers material and cost saving advantages.
- Available as OEM products for manufacturers and suppliers of enclosures and distribution boxes used in potentially explosive areas.

Manufacturer and supplier addresses for completely populated Ex junction boxes are available upon request (junction boxes are not supplied by WAGO Kontakttechnik GmbH & Co KG).

\* Approvals are available online at: [www.wago.com](http://www.wago.com)  
\*\* 275 V at a distance < 10 mm to parts of other potentials

7

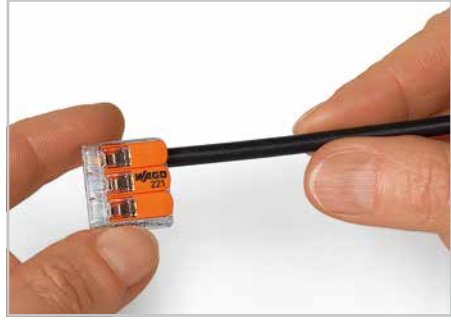
# COMPACT Splicing Connectors for All Conductor Types, 221 Series - Description and Handling -



Strip conductor to 11 mm / 0.43 in.



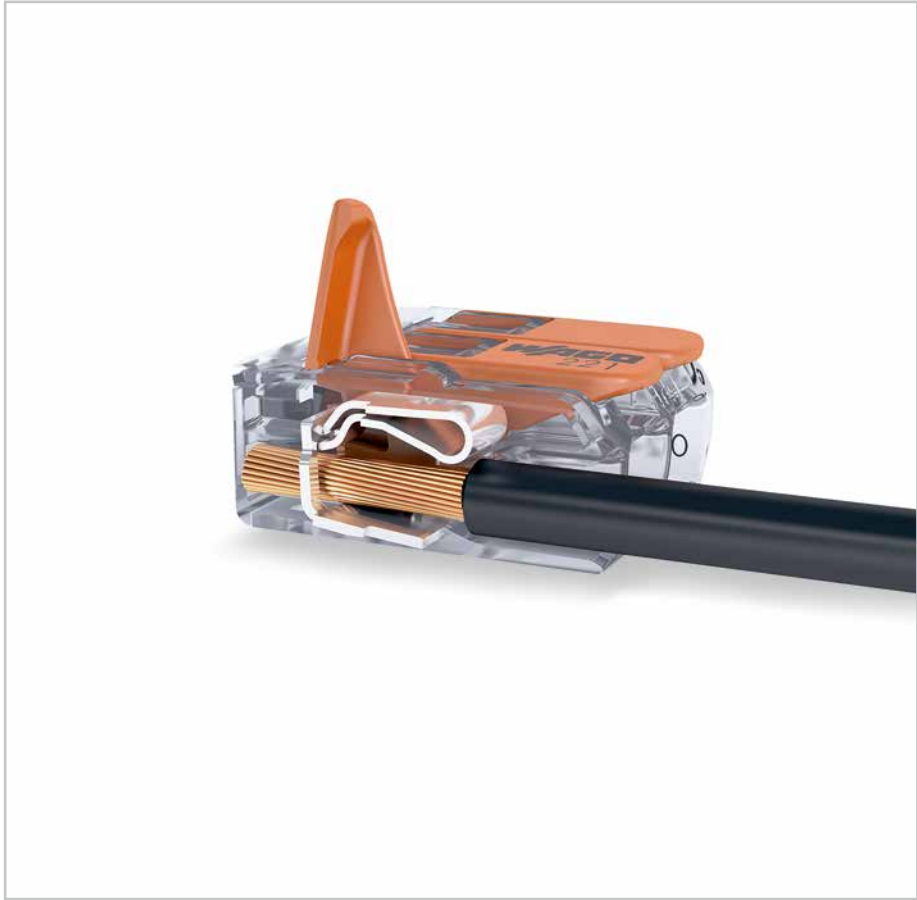
Termination: Open clamping unit using the lever and insert conductor.



Then lower lever to close the clamp.



Wiring fine-stranded conductors in a junction box.



Individual design of low-voltage lighting systems.



Lighting distribution in ceiling canopy



Pendant light connection in suspended ceilings

**CAGE CLAMP®**  
clamps the following  
copper conductors:\*

- solid
- stranded

fine-stranded,  
also with tinned  
single strands

fine-stranded,  
tip-bonded

\* For aluminum conductors, see notes on page 511.

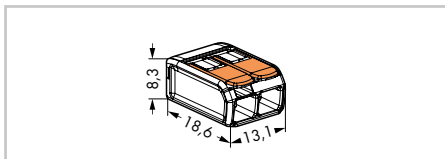
# COMPACT Splicing Connectors for All Conductor Types 221 Series

0.2 ... 4 mm <sup>2</sup> "s+f-st" 0.14 ... 4 mm <sup>2</sup> "f-st" 450 V/4 kV/2 ① I <sub>N</sub> 32 A ② 11 mm / 0.43 in.	AWG 24 ... 12	0.2 ... 4 mm <sup>2</sup> "s+f-st" 0.14 ... 4 mm <sup>2</sup> "f-st" 450 V/4 kV/2 ① I <sub>N</sub> 32 A ② 11 mm / 0.43 in.	AWG 24 ... 12
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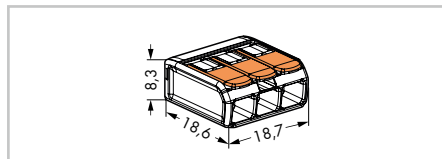


- ① in grounded power lines  
450 V = rated voltage  
4 kV = rated surge voltage  
2 = pollution degree  
(also see Full Line Catalog, Volume 1, Section 14)
- ② Strip length, see packaging or instructions.

Item No.	Pack. Unit	Item No.	Pack. Unit
COMPACT splicing connector for all conductor types, 2-conductor connector, with levers, max. continuous service temperature 105°C		COMPACT splicing connector for all conductor types, 3-conductor connector, with levers, max. continuous service temperature 105°C	
221-412	1000 (10x100)	221-413	500 (10x50)



Dimensions in mm



Dimensions in mm



### COMPACT splicing connectors

Tool-free connection of up to 5 stripped fine-stranded conductors from 0.14 to 4 mm<sup>2</sup>/AWG 24 ... 12, solid or stranded conductors from 0.2 to 4 mm<sup>2</sup>/AWG 24 ... 12.

### This is how it works:

Open the clamping point using one of the orange operating levers until the lever is in vertical position. The conductor can now be inserted, then the lever can be returned to its rest position, flush with the connector housing.

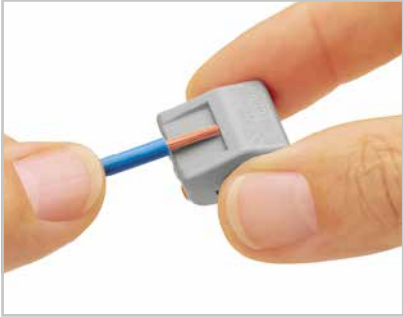
### The safety:

The specially designed rest position of the lever reliably prevents accidental unclamping of a connected conductor. Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC and UL.



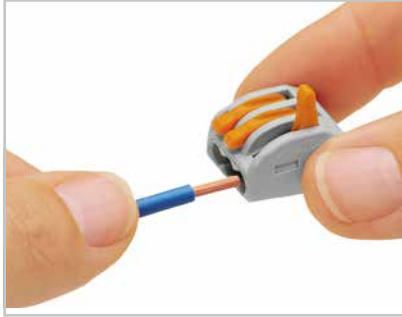
Item No.	Pack. Unit
COMPACT splicing connector for all conductor types, 5-conductor connector, with levers, max. continuous service temperature 105°C	
221-415	400 (10x40)
Dimensions in mm	

# COMPACT Splicing Connectors for All Conductor Types with Lever-Actuated CAGE CLAMP® Connection



### Stripping

Strip conductor to 9 ... 10 mm/0.37 in.



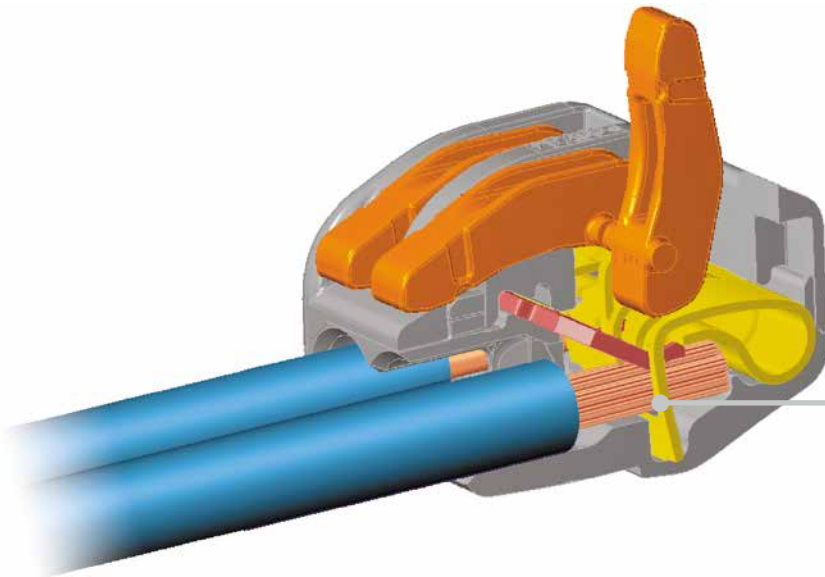
### Connection

Open clamping unit and insert conductor.





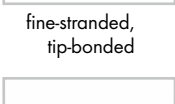
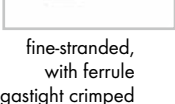


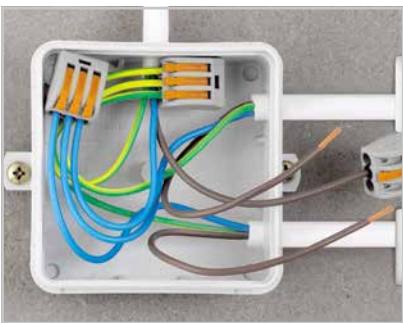
### Connection

Then, lower lever to close the clamp.

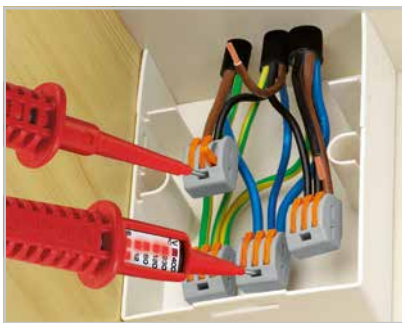


CAGE CLAMP® clamps the following copper conductors:\*

-  solid
-  stranded
-  fine-stranded, also with tinned single strands
-  fine-stranded, tip-bonded
-  fine-stranded, with ferrule gastight crimped
-  fine-stranded, with pin terminal gastight crimped



Wiring fine-stranded conductors in a junction box.



Testing



\* For aluminum conductors, see notes on page 511.

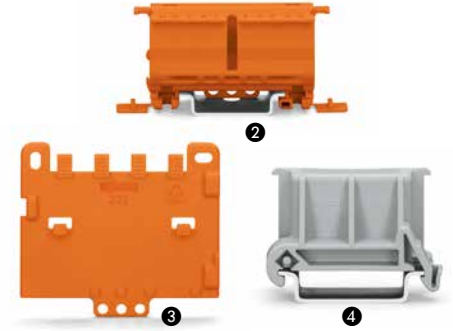
# COMPACT Splicing Connectors for All Conductor Types 222 Series

CAGE CLAMP®

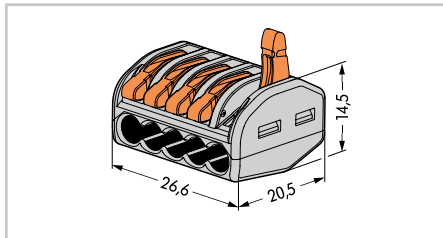
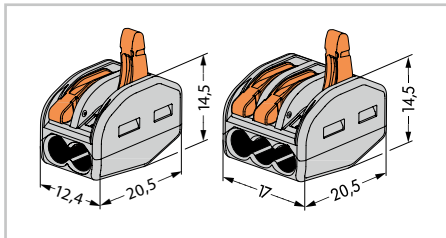
7

469

2 x 0.08 ... 4 mm <sup>2</sup> "f-st" 3 x 0.08 ... 4 mm <sup>2</sup> "f-st" 2.5 mm <sup>2</sup> "s+f-st" 400 V/4 kV/2 ① I <sub>N</sub> 32 A  9 ... 10 mm / 0.37 in.	AWG 28 ... 12 AWG 28 ... 12 600 V, 20 A ②	5 x 0.08 ... 4 mm <sup>2</sup> "f-st" 2.5 mm <sup>2</sup> "s+f-st" 400 V/4 kV/2 ① I <sub>N</sub> 32 A  9 ... 10 mm / 0.37 in.	AWG 28 ... 12 600 V, 20 A ②	Mounting carrier, strain relief plate and angled DIN-rail adapter for 222 Series COMPACT splicing connectors
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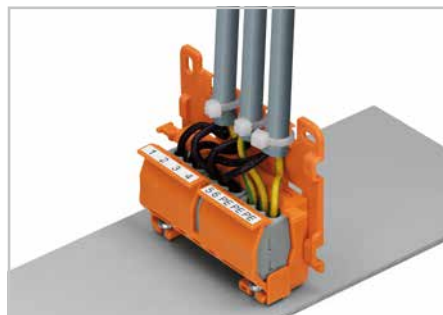
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>COMPACT splicing connector for all conductor types,</b> 2-conductor connector, with levers ● gray <b>222-412</b> 1000 (10x100) Max. continuous operating temperature: 85 °C			<b>COMPACT splicing connector for all conductor types,</b> 5-conductor connector, with levers ● gray <b>222-415</b> 400 (10x40) Max. continuous operating temperature: 85 °C			<b>Mounting carrier ②,</b> for 2, 3 and 5-conductor 222 Series connectors orange <b>222-500</b> 50 (5x10)		
3-conductor connector, with levers ● gray <b>222-413</b> 500 (10x50) Max. continuous operating temperature: 85 °C						<b>Strain relief plate ③, for mounting carrier</b> orange <b>222-505</b> 50 (5x10)		
						<b>Angled DIN-rail adapter ④, DIN 35 rail mounting</b> gray <b>222-510</b> 50 (5x10)		
						<b>Self-adhesive marking strips, plain</b> white <b>210-334</b> 1 card		



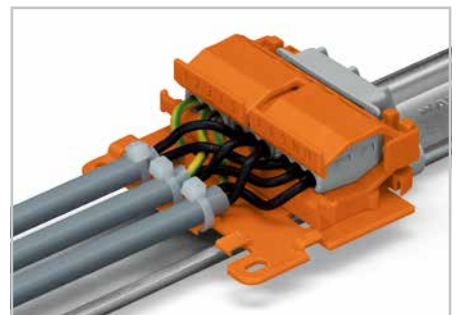
- ① In grounded power lines  
 400 V = rated voltage  
 4kV = rated surge voltage  
 2 = pollution degree



Strain relief by cable tie on the carrier, transverse to the connector's wiring direction. Molded marking of clamping units



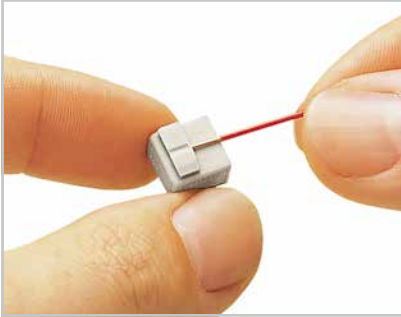
Mounting carrier with strain relief plate mounted vertically on a plate. Round cable fixed via strain relief lug.



Horizontal mounting with strain relief plate on DIN 35 rail using angled DIN-rail adapter

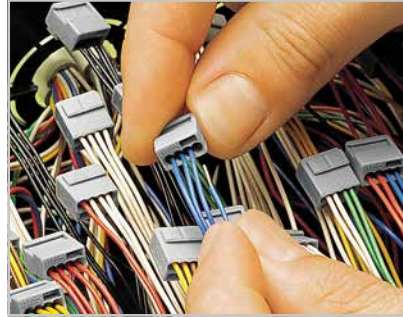
7

## MICRO PUSH WIRE® Junction Box Connectors for Solid Conductors



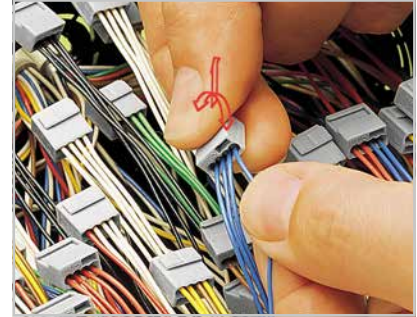
### Stripping

Strip solid conductor to 5 ... 6 mm/0.22 in.



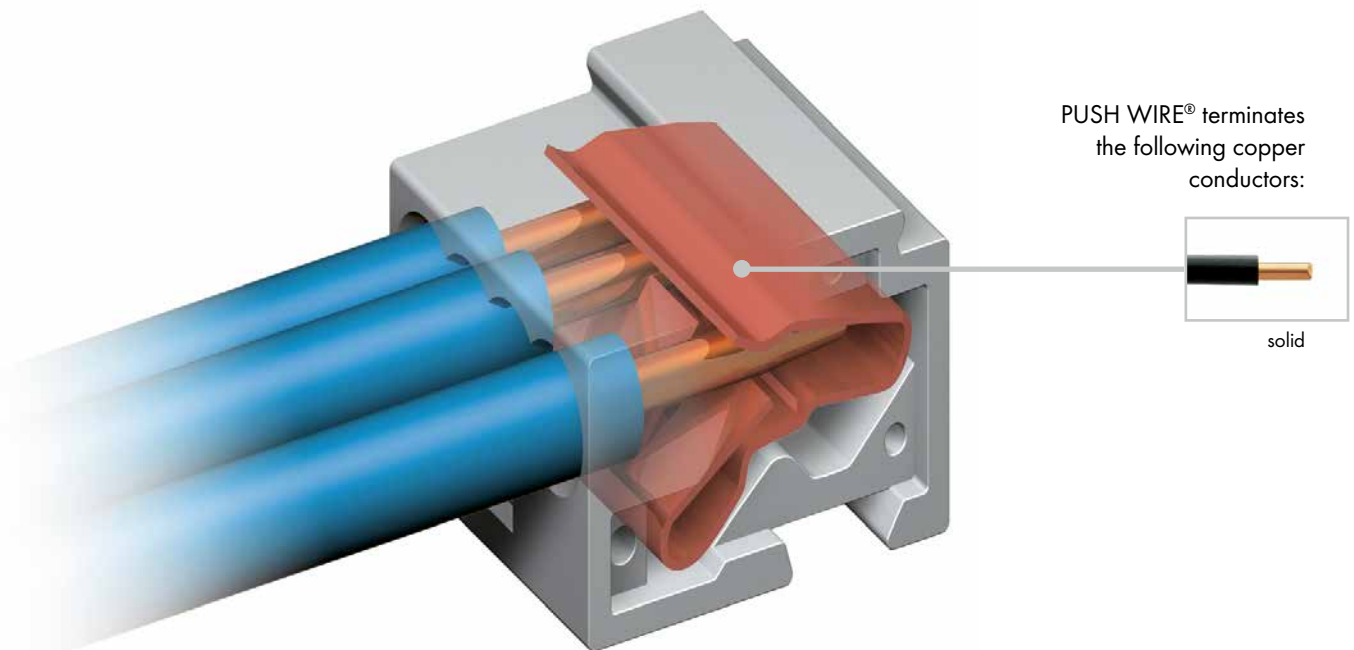
### Connection

Push stripped solid conductors in up to the backstop.



### Removal

Hold conductor and twist alternately left and right while pulling the connector.



### Testing

- Proven millions of times over as 4- and 8-conductor junction box connectors
- MICRO PUSH WIRE® junction box connectors for low-current installations
- Directly push in 8 solid conductors – no twisting
- Easy-to-use connector carrier for DIN 35 rail or screw mounting
- Cross-section range: 0.6 ... 0.8 mm Ø





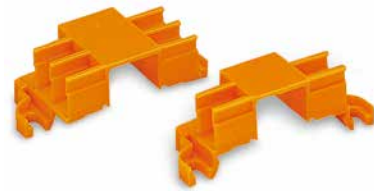
# MICRO PUSH WIRE® Junction Box Connectors 243 Series

PUSH WIRE®

7

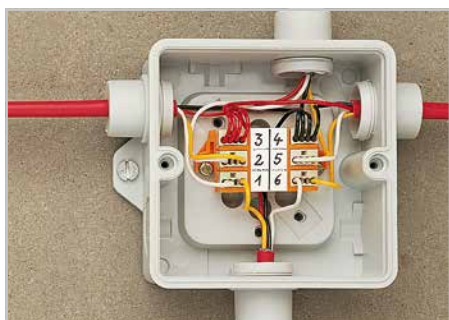
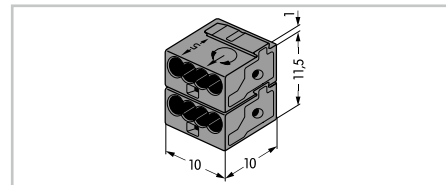
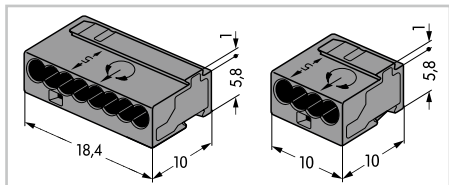
471

<p>0.6 ... 0.8 mm Ø "s" 100 V/1.5 kV/2 I<sub>N</sub> 6 A</p> <p>5 ... 6 mm / 0.22 in.</p>	<p>AWG 22 ... 20 "s"* 125 V, 7 A  150 V, 7 A </p>	<p>Mounting carrier</p>	<p>4 x 0.6 ... 0.8 mm Ø "s" 100 V = I<sub>N</sub> 6 A</p> <p>5 ... 6 mm / 0.22 in.</p>
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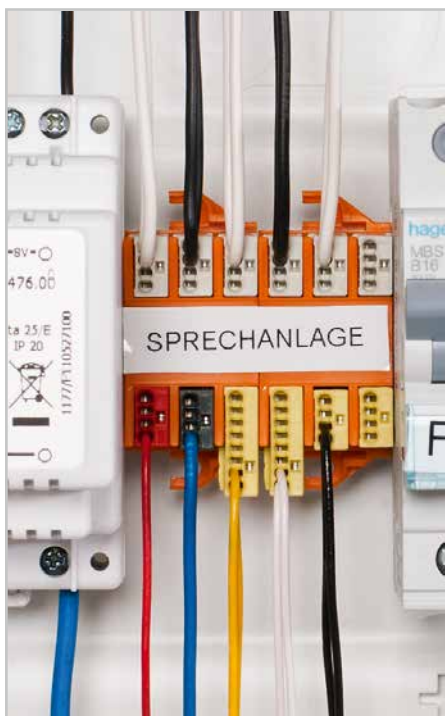


**KNX EIB**

Color	Item No.	Pack. Unit	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>4-conductor connector</b>			<b>Mounting carrier,</b>		<b>Connector strip</b>		
● dark gray	243-204	1000 (10x100)	for 4- and 8-conductor 243 Series connectors		● dark gray	243-211	50
● red	243-804	1000 (10x100)	orange, 4 connectors	243-112	50 (5x10)	● assembled with red connector	
○ light gray	243-304	1000 (10x100)	orange, 6 connectors	243-113	50 (5x10)	<b>Additional version equipped with the same dovetail joints</b>	
● yellow	243-504	1000 (10x100)	<b>Marking strips (3 strips per card)</b>		○ light gray	243-212	50
<b>8-conductor connector</b>			243-110		1 card	● assembled with yellow connector	
● dark gray	243-208	500 (10x50)	<b>Fiber-tip pen</b>		210-110	1	
● red	243-808	500 (10x50)					
○ light gray	243-308	500 (10x50)					
● yellow	243-508	500 (10x50)					



Typical application in a terminal box for burglar alarm - screw mount



Example of residential (home) communication application



Power supply **KNX EIB**



Example of residential door bell application - mounted on DIN 35 rail



Switch interface **KNX EIB**

Approvals are available online at: [www.wago.com](http://www.wago.com)

\* When using conductors of exclusively the same diameter, 0.5 mm/AWG 24 or 1.0 mm/AWG 18 diameters are also possible.

**WAGO**

7






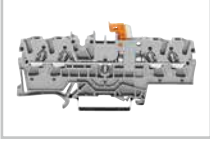
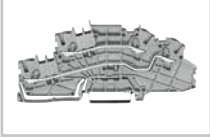
	<p><b>Vario-T-BOXX</b></p> <p>High-quality Sortimo® plastic case containing a selection of WAGO installation connectors</p> <p>Dimensions: 440 x 350 x 80 mm</p>	<p><b>Variobox</b></p> <p>Indestructible Sortimo® metal case containing a selection of WAGO installation connectors</p> <p>Dimensions: 440 x 330 x 66 mm</p>
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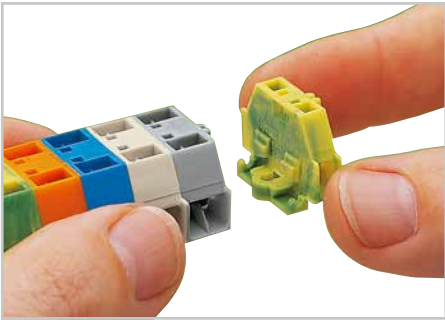
Description	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Vario-T-BOXX, Variobox</b>	<b>Vario-T-BOXX</b>		<b>Variobox</b>	
	887-910	1	887-911	1
High-quality Sortimo® cases contain a selection of WAGO connectors for all applications in electrical building installations.	<b>Contains:</b>		<b>Contains:</b>	
	<b>COMPACT PUSH WIRE® connectors for junction boxes</b>		<b>COMPACT PUSH WIRE® connectors for junction boxes</b>	
	2 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-202</b>	100	2 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-202</b>	100
	3 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-203</b>	100	3 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-203</b>	100
	5 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-205</b>	100	5 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-205</b>	100
	8 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-208</b>	50	8 x 0.5 ... 2.5 mm <sup>2</sup> <b>2273-208</b>	50
	<b>Compact splicing connectors</b>		<b>Compact splicing connectors</b>	
	3 x 0.08 ... 4 mm <sup>2</sup> <b>222-413</b>	50	3 x 0.08 ... 4 mm <sup>2</sup> <b>222-413</b>	50
	5 x 0.08 ... 4 mm <sup>2</sup> <b>222-415</b>	40	5 x 0.08 ... 4 mm <sup>2</sup> <b>222-415</b>	40
	<b>Lighting connectors</b>		<b>Lighting connectors</b>	
	1 ... 2.5 mm <sup>2</sup> <b>224-101</b>	100	1 ... 2.5 mm <sup>2</sup> <b>224-101</b>	100
	<b>MICRO PUSH WIRE® connectors for junction boxes</b>		<b>MICRO PUSH WIRE® connectors for junction boxes</b>	
	dark gray		dark gray	
	4 x 0.6 ... 0.8 mm Ø <b>243-204</b>	100	4 x 0.6 ... 0.8 mm Ø <b>243-204</b>	100
	red		red	
	4 x 0.6 ... 0.8 mm Ø <b>243-804</b>	100	4 x 0.6 ... 0.8 mm Ø <b>243-804</b>	100
	dark gray		dark gray	
	8 x 0.6 ... 0.8 mm Ø <b>243-208</b>	50	8 x 0.6 ... 0.8 mm Ø <b>243-208</b>	50
	<b>Mounting carrier</b>		<b>Mounting carrier</b>	
	for 6 connectors <b>243-113</b>	10	for 6 connectors <b>243-113</b>	10





	Page
	<b>Terminal Strips for Panel Mounting, Side-Entry Wiring</b> 260, 261 and 262 Series 476
	<b>Terminal Strips for Panel Mounting, Front-Entry Wiring</b> 264 Series 480
	<b>Compact Terminal Strips</b> 869 Series 482
	<b>TOPJOB®</b> <b>Through/Ground Conductor and Ex Terminal Blocks</b> 2002 Series 486
	<b>TOPJOB®</b> <b>Double-Deck Terminal Blocks 2.5 mm<sup>2</sup></b> 2002 Series 488
	<b>TOPJOB®</b> <b>Disconnect/Test and Fuse Terminal Blocks, 4-Conductor,</b> 2002 Series 490
	<b>TOPJOB®</b> <b>Multilevel Installation Terminal Blocks</b> 2003 Series 492

## WAGO Terminal Strips for Panel Mounting, Side-Entry Wiring



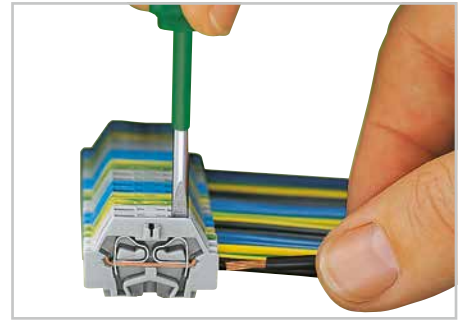
### Snapping

modular terminal blocks into terminal strips.



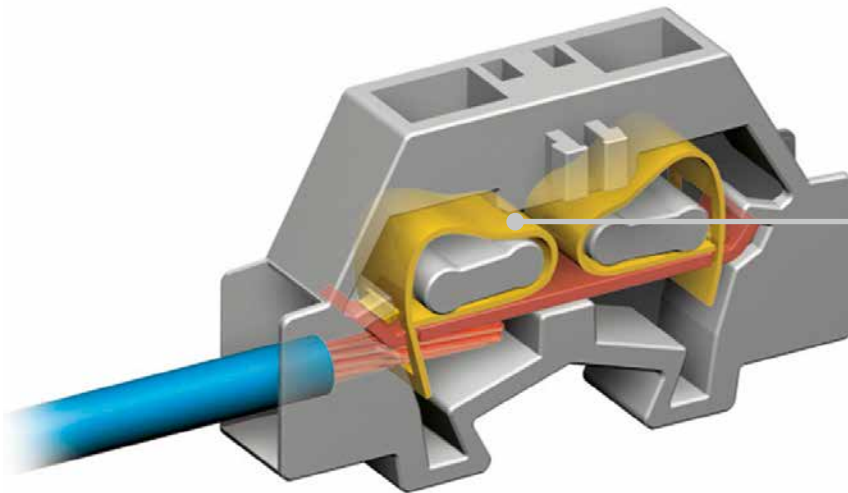
### Assembling

an end plate.

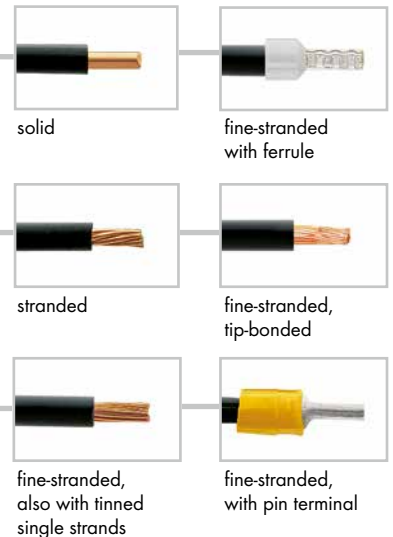


### Conductor termination

### 260 to 262 Series

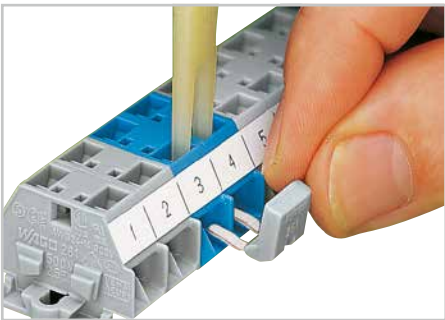


CAGE CLAMP® clamps the following copper conductors:\*



### Mounting options









- Space-saving alternative
- Small, compact and strong features
- Depending on the application: Front- or side-entry wiring
- 2- and 4-conductor terminal blocks with or without push-buttons

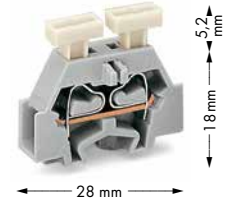
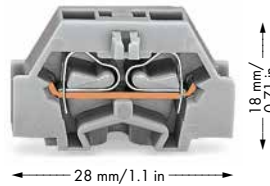


### Commoning

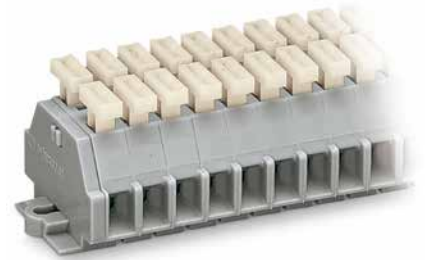
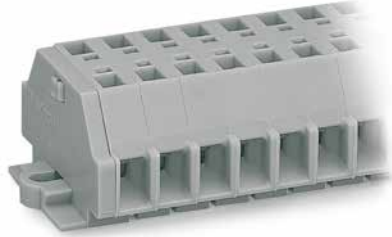
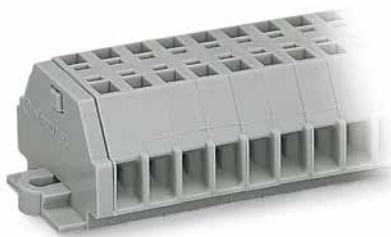
with comb-style jumper bar.

# Modular Terminal Blocks and Terminal Strips 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup> 260 and 261 Series

<b>0.08 ... 1.5 mm<sup>2</sup></b> 400 V/6 kV/3 I <sub>N</sub> 18 A 2-conductor terminal block width: 5 mm / 0.197 in. 4-conductor terminal block width: 8 mm / 0.315 in.  8 ... 9 mm / 0.33 in.	AWG 28 ... 16 300 V, 10 A  300 V, 15 A 	<b>0.08 ... 2.5 mm<sup>2</sup></b> 500 V/6 kV/3 I <sub>N</sub> 24 A 2-conductor terminal block width: 6 mm / 0.236 in. 4-conductor terminal block width: 10 mm / 0.394 in.  8 ... 9 mm / 0.33 in.	AWG 28 ... 14 300/600 V, 10 A  300/600 V, 15 A 	<b>0.08 ... 2.5 mm<sup>2</sup></b> 500 V/6 kV/3 I <sub>N</sub> 24 A 2-conductor terminal block width: 6 mm / 0.236 in.  8 ... 9 mm / 0.33 in.	AWG 28 ... 14 300/600 V, 15/5 A 
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Color	Item No.		Pack. Unit	Color	Item No.		Pack. Unit	Color	Item No.	Pack. Unit
	2-Cond.	4-Cond.			2-Cond.	4-Cond.		2-conductor terminal block, with push-buttons on both sides		
gray	260-301	260-331	300 (6x50)	gray	261-301	261-331	200 (4x50)	gray	261-301/341-000	200 (4x50)
light gray	260-303	260-333	300 (6x50)	light gray	261-303	261-333	200 (4x50)	light gray	261-303/341-000	200 (4x50)
blue	260-304	260-334	300 (6x50)	blue	261-304	261-334	200 (4x50)	blue	261-304/341-000	200 (4x50)
orange	260-306	260-336	300 (6x50)	orange	261-306	261-336	200 (4x50)	orange	261-306/341-000	200 (4x50)
green-yellow	260-307	260-337	300 (6x50)	green-yellow	261-307	261-337	200 (4x50)	green-yellow	261-307/341-000	200 (4x50)



Pole No.	Item No.		Pack. Unit	Pole No.	Item No.		Pack. Unit	Pole No.	Item No.	Pack. Unit
	2-Cond.	4-Cond.			2-Cond.	4-Cond.				
<b>Terminal strip, gray</b>										
2	260-102	260-202	100	2	261-102	261-202	100	2	261-102/341-000	100
3	260-103	260-203	100	3	261-103	261-203	100	3	261-103/341-000	100
:	:	:		:	:	:		:	:	
12	260-112	260-212	25	12	261-112	261-212	25	12	261-112/341-000	25

These terminal strips for 10 and 20 twin wires are ideal for most wiring applications in signal, alarm and telephone installations.

These terminal strips are designed for both standard junction boxes for telephone installations as well as flush-mount junction boxes (e.g., 150 x 150 x 65 mm or 235 x 205 x 65 mm).

The terminal strips can be expanded using the above-listed modular terminal blocks.

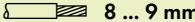
For end plates, see page 478.

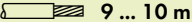


	Item No.	Pack. Unit
<b>Terminal strip</b>		
for 10 twin wires	260-410	25
for 20 twin wires	260-420	25

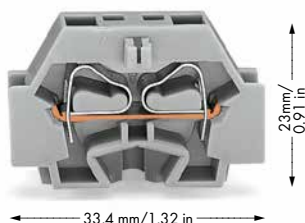
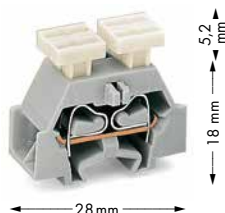
For approval listings and user guide, see pages 534.

# Modular Terminal Blocks and Terminal Strips 2.5 mm<sup>2</sup> and 4 mm<sup>2</sup> 261 and 262 Series

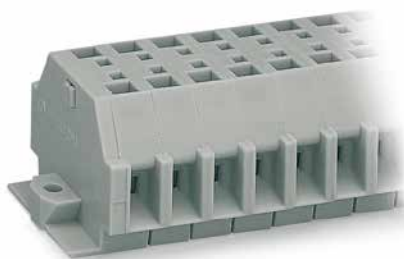
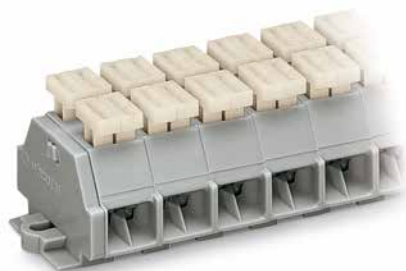
0.08 ... 2.5 mm<sup>2</sup> | AWG 28 ... 14  
 500 V/6 kV/3 | 300/600 V, 15/5 A  $\text{I}_N$   
 $I_N$  18 A  
 2-conductor terminal block width: 5 mm / 0.197 in.  
 4-conductor terminal block width: 8 mm / 0.315 in.  
 8 ... 9 mm / 0.33 in.

0.08 ... 4 mm<sup>2</sup> | AWG 28 ... 12  
 630 V/8 kV/3 | 300/600 V, 20/5 A  $\text{I}_N$   
 $I_N$  24/32 A | 300/600 V, 25/5 A  $\text{I}_N$   
 2-conductor terminal block width: 7 mm / 0.276 in.  
 4-conductor terminal block width: 12 mm / 0.472 in.  
 9 ... 10 mm / 0.37 in.

### Accessories



Color	Item No.	Pack. Unit	Color	Item No.		Pack. Unit
				2-Cond.	4-Cond.	
<b>4-conductor terminal block, with push-buttons on both sides</b>						
	261-331/342-000	200 (4x50)		262-301	262-331	100 (2x50)
	261-333/342-000	200 (4x50)		262-304	262-334	100 (2x50)
	261-334/342-000	200 (4x50)		262-306	262-336	100 (2x50)
	261-336/342-000	200 (4x50)		262-307	262-337	100 (2x50)
	261-337/342-000	200 (4x50)				



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.		Pack. Unit
				2-Cond.	4-Cond.	
<b>Terminal strips, gray,</b>						
	261-202/342-000	100		262-102	262-202	100
	261-203/342-000	100		262-103	262-203	100
:	:		:	:	:	
	261-212/342-000	25		262-112	262-212	25

### End plate, gray



for 260 Series  
**260-361** 100 (2x50)  
 for 261 Series  
**261-361** 100 (2x50)  
 for 262 Series  
**262-361** 50

### Comb-style jumper bar, insulated



Series	$I_N$	Reduced Cross Sect.	Pack. Unit
260-402	10 A	1 mm <sup>2</sup>	25 pcs
261-402	16 A	1.5 mm <sup>2</sup> /AWG 16	25 pcs
262-402	16 A	2.5 mm <sup>2</sup> /AWG 14	25 pcs

### Operating tool, insulated,



for comb-style jumper bar  
**209-132** 1

### Mounting foot,



for DIN 35 rail  
**209-123** 25

### Marking strips, computer marked,



40 strips (self-adhesive),  
 per card 1 card

### For 260 Series

Print- ing	Quan- tity	5mm term. block	Quan- tity	8mm term. block
		<b>210-333/ ...</b>		<b>210-333/ ...</b>
Pin spac-	-	.../500-001	-	.../800-001
1...50	20	.../500-021		
1...40			20	.../500-209
L1	1440	.../500-074	880	.../800-074
L2	1440	.../500-075	880	.../800-075
L3	1440	.../500-076	880	.../800-076
N	1440	.../500-077	880	.../800-077
Ground	1440	.../500-078	880	.../800-078

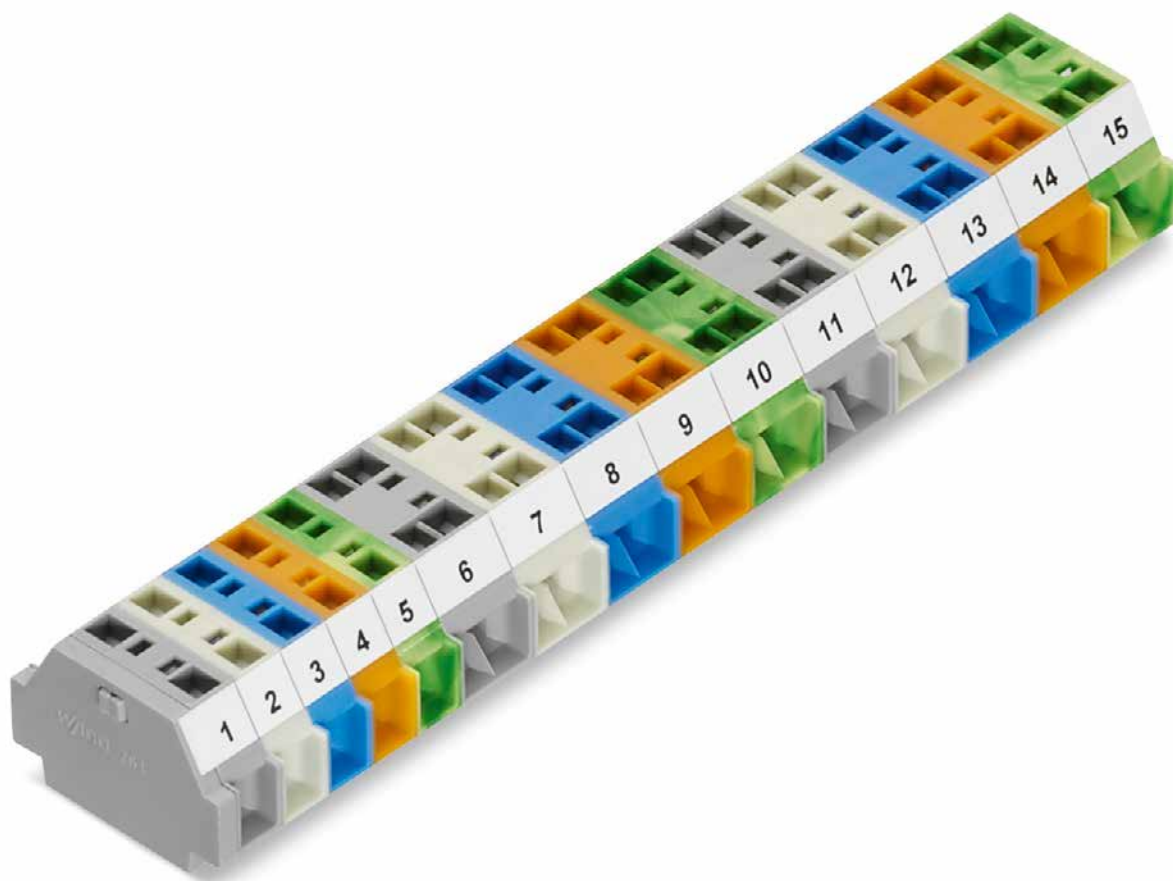
### For 261 Series

Print- ing	Quan- tity	6mm term. block	Quan- tity	10mm term. block
		<b>210-333/ ...</b>		<b>210-333/ ...</b>
Pin spac-	-	.../600-001	-	.../1000-001
1...50	20	.../600-021		
1...36			20	.../1000-208
L1	1200	.../600-074	720	.../1000-074
L2	1200	.../600-075	720	.../1000-075
L3	1200	.../600-076	720	.../1000-076
N	1200	.../600-077	720	.../1000-077
Ground	1200	.../600-078	720	.../1000-078

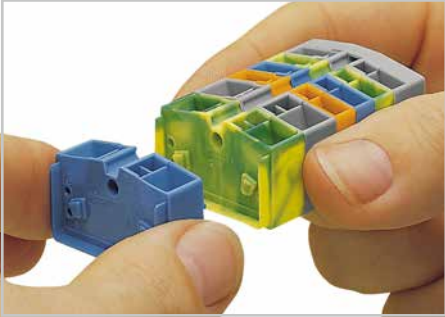
### For 262 Series

Print- ing	Quan- tity	7mm term. block	Quan- tity	12mm term. block
		<b>210-333/ ...</b>		<b>210-333/ ...</b>
Pin spac-	-	.../700-001	-	.../1200-001
1...50	20	.../700-021		
1...24			20	.../1200-203
L1	1200	.../700-074	720	.../1200-074
L2	1200	.../700-075	720	.../1200-075
L3	1200	.../700-076	720	.../1200-076
N	1200	.../700-077	720	.../1200-077
Ground	1200	.../700-078	720	.../1200-078



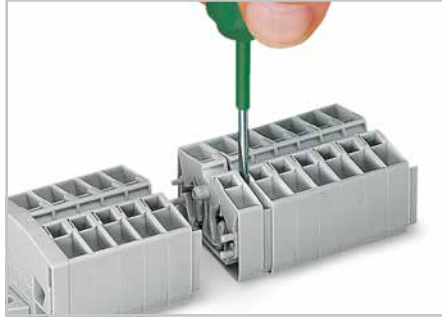


# WAGO Terminal Strips for Panel Mounting, Front-Entry Wiring



### Snapping

modular terminal blocks into terminal strips.

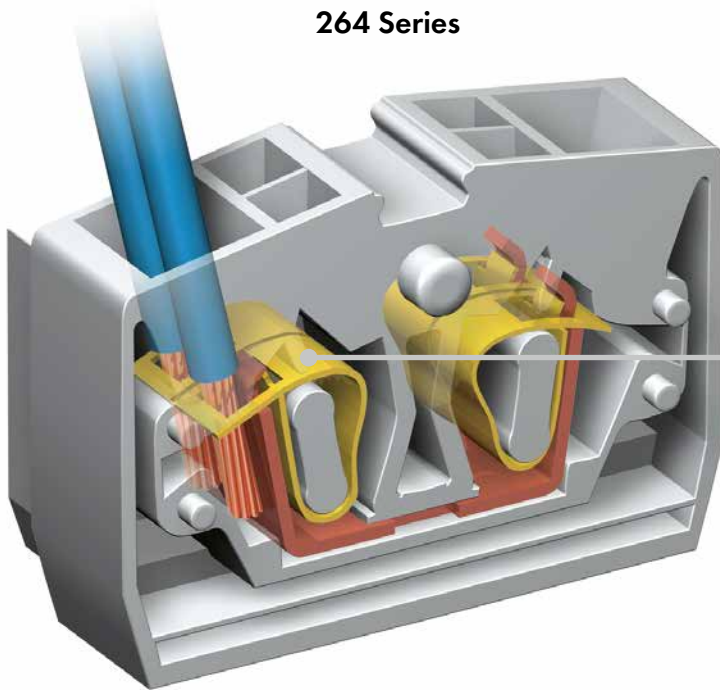


### Removing

a block from the terminal strip.

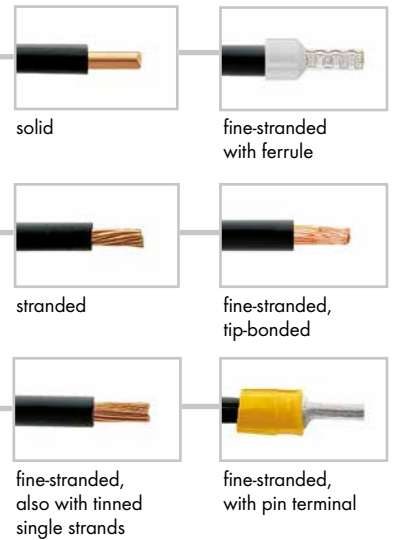


### Conductor termination

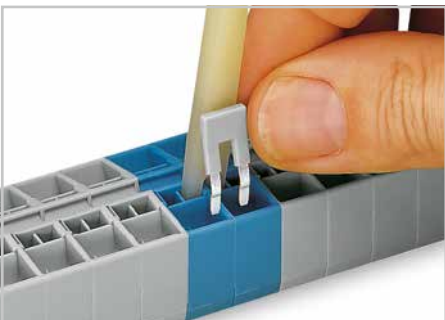


### 264 Series

CAGE CLAMP® clamps the following copper conductors:\*



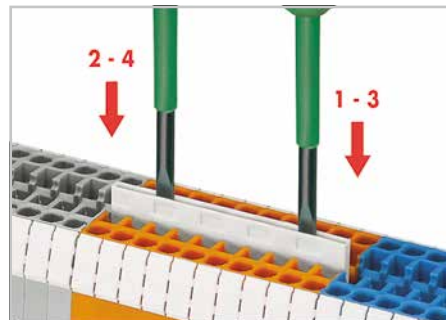
### 264 Series



### Commoning

with 264 Series comb-style jumper bar.

### 869 Series



### Push-in type jumper bar

When using multi-pole bars, push alternately on right and then left side, successively until fully inserted.



### Two parallel jumper slots

\* For aluminum conductors, see notes on page 511.

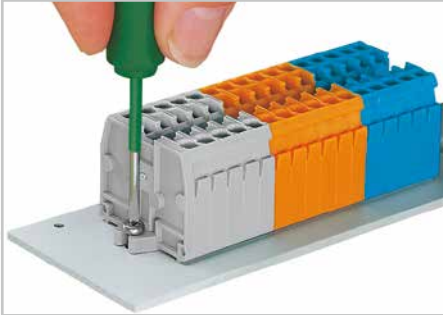


# 8 Compact Terminal Strips, 869 Series

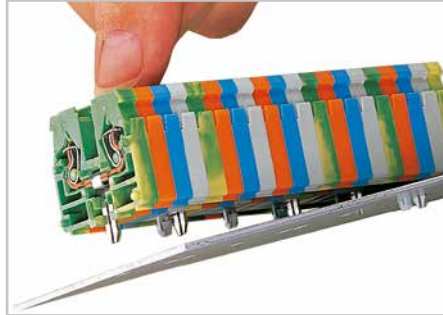
## - Description and Handling -

482

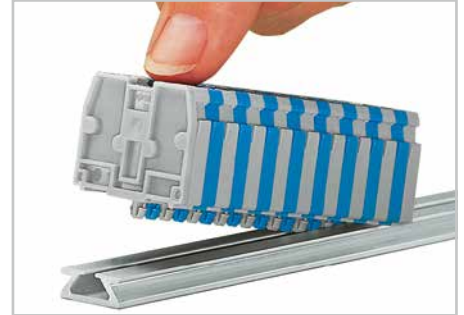
### Mounting



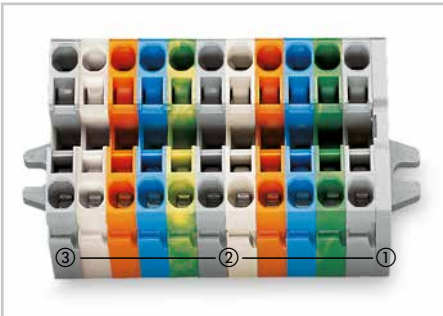
Terminal strip with fixing flanges, screw mount.



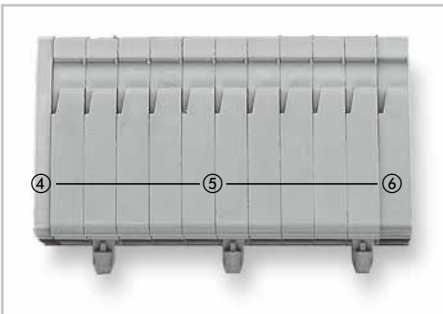
Terminal strip with snap-in mounting feet, mounting in holes



Terminal strip with snap-in mounting feet, assembly onto aluminum rail



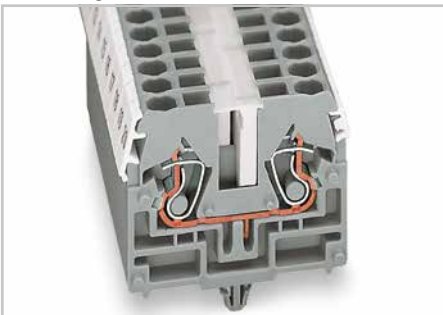
Terminal strip with fixing flanges, consisting of:  
End plate with fixing flange ①  
Center terminal blocks ②  
End terminal block with fixing flange ③



Terminal strip with mounting feet, consisting of:  
End plate ④  
Center term. blocks with/without snap-in mounting feet ⑤  
End term. block with/without snap-in mounting foot ⑥



### Marking



WMB Multi or miniature WSB marking system

### Commoning



Push jumper bars down firmly until fully inserted. When using multi-pole bars, push alternately on right and then left side, successively until installed.

#### CAGE CLAMP® clamps the following copper conductors:\*

solid                      stranded

fine-stranded, also with tinned single strands

fine-stranded, tip-bonded







fine-stranded with ferrule ❶ (gastight crimped)

fine-stranded, with pin terminal (gastight crimped)

\* For aluminum conductors, see notes on page 511.

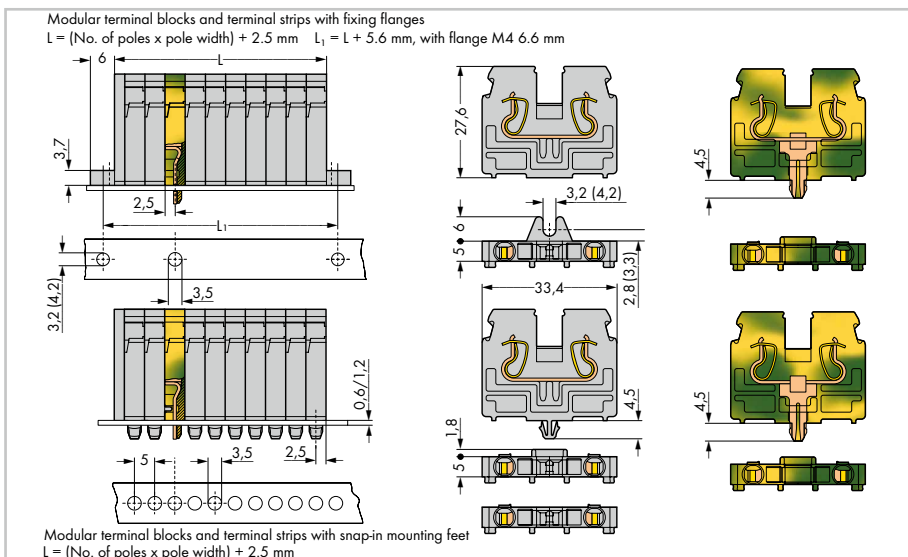
❶ With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

# Compact Terminal Strips 2.5 mm<sup>2</sup> (4 mm<sup>2</sup> "f-st") with Fixing Flanges or Snap-in Mounting Feet 869 Series

0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Pole width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A: 	0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Pole width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A: 	0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Pole width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A: 
---	---	---	---	---	---



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Compact terminal strip with M3 fixing flanges, for screw or similar mounting types, 3.2 mm mounting hole diameter, gray			Compact terminal strip with M4 fixing flanges, for screw or similar mounting types, 4.2 mm mounting hole diameter, gray			Compact terminal strip with snap-in mounting feet, for 0.6 ... 1.2 mm plate thickness, 3.5 <sup>+0.1</sup> mm mounting hole diameter, gray		
2	869-102	100	2	869-202	100	2	869-152	100
3	869-103	100	3	869-203	100	3	869-153	100
4	869-104	100	4	869-204	100	4	869-154	100
5	869-105	100	5	869-205	100	5	869-155	100
6	869-106	50	6	869-206	50	6	869-156	50
7	869-107	50	7	869-207	50	7	869-157	50
8	869-108	50	8	869-208	50	8	869-158	50
9	869-109	50	9	869-209	50	9	869-159	50
10	869-110	50	10	869-210	25	10	869-160	25
11	869-111	25	11	869-211	25	11	869-161	25
12	869-112	25	12	869-212	25	12	869-162	25
light gray			light gray			light gray		
2	869-132	100	2	869-232	100	2	869-182	100
3	869-133	100	3	869-233	100	3	869-183	100
4	869-134	100	4	869-234	100	4	869-184	100
5	869-135	100	5	869-235	100	5	869-185	100
6	869-136	50	6	869-236	50	6	869-186	50
7	869-137	50	7	869-237	50	7	869-187	50
8	869-138	50	8	869-238	50	8	869-188	50
9	869-139	50	9	869-239	50	9	869-189	50
10	869-140	25	10	869-240	25	10	869-190	25
11	869-141	25	11	869-241	25	11	869-191	25
12	869-142	25	12	869-242	25	12	869-192	25



1 For longer strips and/or assemblies of different colors, please contact factory.

Item no. suffix for gray terminal strips in:

blue .../000-006 2

green-yellow .../000-016

869-102 to 869-112







869-202 to 869-212

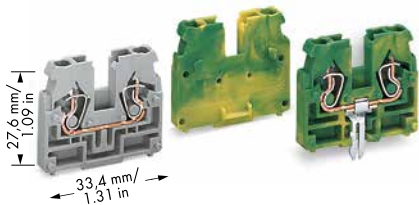
869-152 to 869-162



2 Terminal blocks with blue insulation are suitable for Ex i applications.

# Modular Terminal Blocks 2.5 mm<sup>2</sup> (4 mm<sup>2</sup> "f-st") with Fixing Flanges or Snap-in Mounting Feet

## 869 Series




0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Terminal block width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A 	0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Terminal block width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A 	0.08 ... 2.5 (4 "f-st") mm <sup>2</sup> 500 V/6 kV/3 I <sub>N</sub> 24 A Terminal block width: 5 mm / 0.197 in.  6 ... 7 mm / 0.26 in.	AWG 28 ... 12 300 V, 20 A 
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


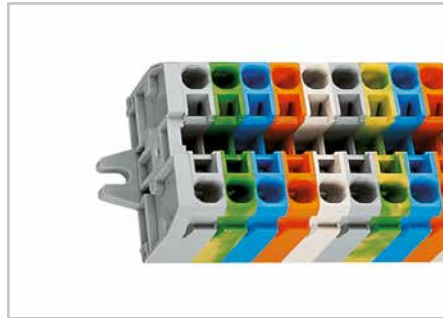
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Center terminal block without snap-in mounting foot, required between end plate and end terminal block for terminal strips with fixing flanges</b>			<b>End terminal block with M3 fixing flange, for screw or similar mounting types, 3.2 mm mounting hole diameter</b>			<b>End terminal block with snap-in mounting foot, for 0.6 ... 1.2 mm plate thickness, 3.5<sup>+0.1</sup> mm mounting hole diameter</b>		
● gray	<b>869-321</b>	100	● gray	<b>869-301</b>	100	● gray	<b>869-331</b>	100
● blue	<b>869-324</b>	100	● blue	<b>869-304</b>	100	● blue	<b>869-334</b>	100
● orange	<b>869-326</b>	100	● green-yellow	<b>869-307</b>	100	● green-yellow	<b>869-337</b>	100
● green-yellow	<b>869-327</b>	100	○ light gray	<b>869-309</b>	100	○ light gray	<b>869-339</b>	100
○ light gray	<b>869-329</b>	100						
<b>Centre terminal block with with direct ground contact, 3.5<sup>+0.1</sup> mm drilled hole diameter, Notice: This terminal block cannot be commoned!</b>			<b>End terminal block with M4 fixing flange, for screw or similar mounting types, 4.2 mm Ø mounting hole</b>			<b>End terminal block without snap-in mounting foot, for 0.6 ... 1.0 mm plate thickness</b>		
● green-yellow	<b>869-328</b>	100	● gray	<b>869-351</b>	100	● gray	<b>869-341</b>	100
			● blue	<b>869-354</b>	100	● blue	<b>869-344</b>	100
			● green-yellow	<b>869-357</b>	100	● green-yellow	<b>869-347</b>	100
			○ light gray	<b>869-359</b>	100	○ light gray	<b>869-349</b>	100
<b>Accessories, Item-Specific</b>								
<b>Aluminum carrier rail,</b> 1000 mm long, 18 mm wide, 7 mm high  <b>210-154</b> 1								
<b>Plastic end stop, with WSB marker slot, for 210-154 aluminum rail, 6 mm wide</b>  <b>209-122</b> 25								

### Accessories, 869 Series

Appropriate marking systems: WMB/Miniature WSB (see Section 9)

End plate with M3 fixing flange	End plate with M4 fixing flange,	End plate, for terminal blocks with snap-in mounting foot,
2.5 mm thick  gray <b>869-385</b> 100 (4x25) blue <b>869-388</b> 100 (4x25) green-yellow <b>869-389</b> 100 (4x25) light gray <b>869-387</b> 100 (4x25)	2.5 mm thick  gray <b>869-395</b> 100 (4x25) blue <b>869-398</b> 100 (4x25) green-yellow <b>869-399</b> 100 (4x25) light gray <b>869-397</b> 100 (4x25)	2.5 mm thick  gray <b>869-375</b> 100 (4x25) blue <b>869-378</b> 100 (4x25) green-yellow <b>869-379</b> 100 (4x25) light gray <b>869-377</b> 100 (4x25)
<b>Insulation stop,</b> 5 pcs/strip, 0.08 ... 0.2 mm <sup>2</sup> "s" (0.14 mm <sup>2</sup> "f-st") white <b>280-470</b> 200 (8x25)	<b>Push-in type jumper bar, insulated,</b> I <sub>N</sub> 18 A, light gray 2-pole <b>870-402</b> 200 (8x25) 3-pole <b>870-403</b> 200 (8x25) 4-pole <b>870-404</b> 200 (8x25) 5-pole <b>870-405</b> 100 (4x25) 6-pole <b>870-406</b> 100 (4x25) 7-pole <b>870-407</b> 100 (4x25) 8-pole <b>870-408</b> 100 (4x25) 9-pole <b>870-409</b> 100 (4x25) 10-pole <b>870-410</b> 100 (4x25)	<b>Push-in type jumper bar, insulated,</b> I <sub>N</sub> 18 A, light gray from 1 to 3 <b>870-433</b> 200 (8x25) from 1 to 4 <b>870-434</b> 200 (8x25) from 1 to 5 <b>870-435</b> 100 (4x25) from 1 to 6 <b>870-436</b> 100 (4x25) from 1 to 7 <b>870-437</b> 100 (4x25) from 1 to 8 <b>870-438</b> 100 (4x25) from 1 to 9 <b>870-439</b> 100 (4x25) from 1 to 10 <b>870-440</b> 100 (4x25)
<b>Insulation stop,</b> 5 pcs/strip, 0.25 ... 0.5 mm <sup>2</sup> light gray <b>280-471</b> 200 (8x25)		
<b>Insulation stop,</b> 5 pcs/strip, 0.75 ... 1 mm <sup>2</sup> dark gray <b>280-472</b> 200 (8x25)		

0.08 ... 2.5 (4 "f-st") mm<sup>2</sup> AWG 28 ... 12  
 500 V/6 kV/3 300 V, 20 A   
 I<sub>N</sub> 24 A  
 Terminal block width: 5 mm / 0.197 in.  
 6 ... 7 mm / 0.26 in.



**Terminal strips with fixing flanges M3 or M4,** for screw or mounting types, mounting holes 3.2 mm Ø, flange M3 4.2 mm Ø, flange M4



- 1 Max. insulation diameter: 4.4 mm
- 2 500 V = rated voltage  
6 kV = rated surge voltage  
3 = pollution degree
- 3 Strip length, see packaging or instructions.
- 4 Suitable for Ex i applications

Color	Item No.	Pack. Unit
<b>Center terminal block with snap-in mounting foot,</b> for 0.6 ... 1.2 mm plate thickness, 3.5 <sup>+0.1</sup> mm mounting hole diameter		
gray	869-311	100
blue	869-314	100
orange	869-316	100
green-yellow	869-317	100
light gray	869-319	100



**Terminal strips with snap-in mounting feet,** for 0.6 ... 1.2 mm plate thickness, 3.5<sup>+0.1</sup> mm mounting hole diameter









Insert insulation stop into conductor entry holes of terminal strip.

Wiring PLC and microprocessor control systems also employs small or very small fine-stranded conductors. These small conductors are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation - not the copper conductor - may be clamped, causing intermittent contact or no contact at all. Common to all terminal block types currently offered, this problem creates unnecessary downtime for troubleshooting.

The solution: an insulation stop for compact terminal blocks. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splicing. This also limits the conductor entry to a defined cross sectional area - ensuring the actual conductor, not the insulation, will enter the clamping unit.

The insulation stop is available as dividable 5-pole strip for the 869 Series terminal strips.

Insulation stop usage will not affect the conductor strip lengths for the aforementioned terminal strips.

<b>Accessories, Item-Specific</b>		
<b>Aluminum carrier rail,</b>		
	1000 mm long, 18 mm wide, 7 mm high	
	<b>210-154</b>	1
<b>Plastic end stop, with WSB marker slot,</b> for 210-154 aluminum rail, 6 mm wide		
		
	<b>209-122</b>	25
<b>Marking strip, plain,</b>		
	7.5 wide, 1 m long, translucent	
	<b>709-196</b>	1
<b>Protective warning marker,</b> with high-voltage symbol, black, for 5 terminal blocks		
	yellow	
	<b>280-405</b>	100 (4x25)
<b>Group marker carrier,</b> fits into the jumper slot of the current bars		
	gray	
	<b>870-184</b>	50 (2x25)
<b>Test plug,</b> with 500 mm cable, 2 mm Ø		
	red	
	<b>210-136</b>	50

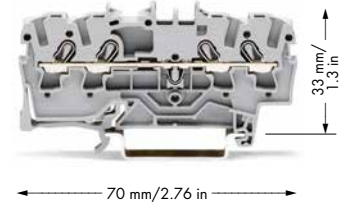
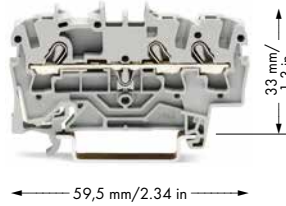
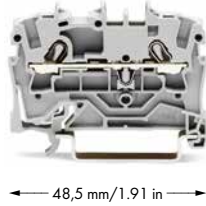


Protective warning marker, with black high-voltage symbols, Item No. 280-405

# TOPJOB® S Through/Ground Conductor and Ex Terminal Blocks 2.5 (4) mm<sup>2</sup> 2002 Series

<p>0.25 ... 2.5 (4) mm<sup>2</sup> ①   AWG 22 ... 12 800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>② Approvals</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup> ①   AWG 22 ... 12 800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>② Approvals</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup> ①   AWG 22 ... 12 800 V/8 kV/3   600 V, 20 A    600 V, 20 A </p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>② Approvals</p>
---	---	---

① Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s+f-st";  
Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and  
0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>2-conductor through terminal block</b>			<b>3-conductor through terminal block</b>			<b>4-conductor through terminal block</b>		
gray	2002-1201	100	gray	2002-1301	100	gray	2002-1401	100
blue	2002-1204	100	blue	2002-1304	100	blue	2002-1404	100
orange	2002-1202	100	orange	2002-1302	100	orange	2002-1402	100
red	2002-1203	100	red	2002-1303	100	red	2002-1403	100
black	2002-1205	100	black	2002-1305	100	black	2002-1405	100
yellow	2002-1206	100	yellow	2002-1306	100	yellow	2002-1406	100
<b>2-conductor ground terminal block</b>			<b>3-conductor ground terminal block</b>			<b>4-conductor ground terminal block</b>		
green-yellow	2002-1207	100	green-yellow	2002-1307	100	green-yellow	2002-1407	100
<b>Other terminal blocks with the same profile:</b>			<b>Other terminal blocks with the same profile:</b>			<b>Other terminal blocks with the same profile:</b>		
Diode 2002-1211/1000-411			Diode 2002-1311/1000-411			Diode 2002-1411/1000-411		
			LED 2002-1321/1000-434			Diode 2002-1411/1000-434		
						Double-potential 2002-1441		







## Accessories, Item-Specific

<p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1292 100 (4x25) gray 2002-1291 100 (4x25)	<p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1392 100 (4x25) gray 2002-1391 100 (4x25)	<p><b>End and intermediate plate</b>, 0.8 mm thick</p> orange 2002-1492 100 (4x25) gray 2002-1491 100 (4x25)
<p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1294 100 (4x25) gray 2002-1293 100 (4x25)	<p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1394 100 (4x25) gray 2002-1393 100 (4x25)	<p><b>Separator</b>, oversized, 0.8 mm thick</p> orange 2002-1494 100 (4x25) gray 2002-1493 100 (4x25)

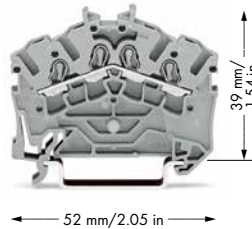
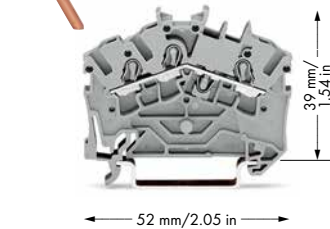
## Accessories, 2002 Series Appropriate marking systems: WMB/Marking Strips/WMB Inline/Mini-WSB (see Section 9)

















<p><b>Push-in type jumper bar</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>2-pole 2002-402 200 (8x25)</li> <li>3-pole 2002-403 200 (8x25)</li> <li>4-pole 2002-404 200 (8x25)</li> <li>: :</li> <li>10-pole 2002-410 100 (4x25)</li> </ul>	<p><b>Push-in type jumper bar</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>1 - 3 2002-433 200 (8x25)</li> <li>1 - 4 2002-434 200 (8x25)</li> <li>1 - 5 2002-435 100 (4x25)</li> <li>: :</li> <li>1 - 10 2002-440 100 (4x25)</li> </ul>	<p><b>Staggered jumper</b>, insulated, I<sub>N</sub> 25 A, light gray</p> <ul style="list-style-type: none"> <li>2-pole 2002-472 100 (4x25)</li> <li>3-pole 2002-473 100 (4x25)</li> <li>4-pole 2002-474 100 (4x25)</li> <li>: :</li> <li>12-pole 2002-482 50 (2x25)</li> </ul>
<p><b>Adjacent jumper for continuous commoning</b>, insulated, I<sub>N</sub> 25 A</p> <ul style="list-style-type: none"> <li>light gray 2002-400 100 (4x25)</li> </ul>	<p><b>Protective warning marker</b>, with high-voltage symbols, for 5 terminal blocks</p> yellow 2002-115 100 (4x25)	<p><b>TOPJOB® S connector</b>, modular, for jumper contact slot</p> gray 2002-511 100 (4x25)
<p><b>Insulation stop</b>, 5 pcs/strip 200 strips</p> <ul style="list-style-type: none"> <li>light gray 2002-171 0.25-0.5 mm<sup>2</sup></li> <li>dark gray 2002-172 0.75-1 mm<sup>2</sup></li> </ul>	<p>● Suitable for Ex i applications   Suitable for Ex e II applications            550 V, 22 A</p>	<p><b>Spacer module</b></p> gray 2002-549 100 (4x25)
<p><b>Marking strip</b>, plain, 11 mm wide, 50 m roll</p> white 2009-110 1		<p><b>Operating tool with partially insulated shaft</b>, type 2, (3.5 x 0.5) mm blade</p> 210-720 1
<p><b>Insulated ferrules</b>, extra long, for TOPJOB® S terminal blocks, see Full Line Catalog, Volume 1</p>		

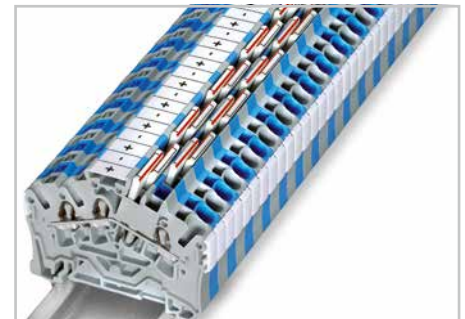






0.25 ... 2.5 (4) mm <sup>2</sup> ① 800 V/8 kV/3 I <sub>N</sub> 24 A (32 A) Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	AWG 22 ... 12 600 V, 20 A  600 V, 20 A 	0.25 ... 2.5 (4) mm <sup>2</sup> ① 800 V/8 kV/3 I <sub>N</sub> 24 A (32 A) Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	AWG 22 ... 12 600 V, 20 A  600 V, 20 A 
② Approvals		② Approvals	















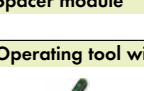









① Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s+f-st";  
 Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and  
 0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>3-conductor through terminal block</b>			<b>4-conductor through terminal block</b>		
 gray 	2002-6301	100	 gray 	2002-6401	100
 blue 	2002-6304	100	 blue 	2002-6404	100
 orange 	2002-6302	100	 orange 	2002-6402	100
Additional colors pending			Additional colors pending		
<b>3-conductor ground terminal block</b>			<b>4-conductor ground terminal block</b>		
 green-yellow 	2002-6307	100	 green-yellow 	2002-6407	100
<b>Notice: These terminal blocks cannot be commoned with push-in type jumper bars!</b>					



Accessories, Item-Specific	
<b>End and intermediate plate, 0.8 mm thick</b>  orange 2002-6392 100 (4x25)  gray 2002-6391 100 (4x25)	<b>End and intermediate plate, 0.8 mm thick</b>  orange 2002-6392 100 (4x25)  gray 2002-6391 100 (4x25)

Accessories, 2002 Series		Appropriate marking systems: WMB/Marking Strips/WMB Inline/Mini-WSB (see section 9)	
<b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b>  2-pole 2002-402 200 (8x25)  3-pole 2002-403 200 (8x25)  4-pole 2002-404 200 (8x25)  5-pole 2002-405 100 (4x25) : :  10-pole 2002-410 100 (4x25)			
<b>Push-in type jumper bars, light gray, insulated, I<sub>N</sub> 25 A</b>  1 - 3 2002-433 200 (8x25)  1 - 4 2002-434 200 (8x25)  1 - 5 2002-435 100 (4x25) : :  1 - 10 2002-440 100 (4x25)	<b>Insulated ferrules, extra long,</b>  for TOPJOB® S terminal blocks, see Full Line Catalog, Volume 1	<b>Insulation stop, 5 pcs/strip</b> 200 strips  light gray 2002-171 0.25-0.5 mm <sup>2</sup> dark gray 2002-172 0.75-1 mm <sup>2</sup>	
<b>Staggered jumper, insulated, I<sub>N</sub> 25 A, light gray</b>  2-pole 2002-472 100 (4x25)  3-pole 2002-473 100 (4x25)  4-pole 2002-474 100 (4x25)  5-pole 2002-475 50 (2x25) : :  12-pole 2002-482 50 (2x25)	<b>Protective warning marker, with high-voltage symbol,</b>  for 5 terminal blocks yellow 2002-115 100 (4x25)	<b>Test plug adapter, for test plug 4 mm Ø</b>  gray 2009-174 100 (4x25) <b>Testing tap, max. 2.5 mm<sup>2</sup>/AWG 14</b>  gray 2009-182 100 (4x25)	
<b>TOPJOB® S connector, modular,</b>  for jumper contact slot gray 2002-511 100 (4x25)	<b>Banana plugs, only for safety extra-low voltage (42 V)</b>  black 215-211 50  red 215-212 50  blue 215-711 50		
<b>Spacer module</b> gray 2002-549 100 (4x25)			
<b>Operating tool with partially insulated shaft,</b>  type 2, (3.5 x 0.5) mm blade 210-720 1	● Suitable for Ex i applications ☒ Suitable for Ex e II applications 550 V, 22 A		

**3- and 4-conductor terminal blocks**

The TOPJOB® S rail-mounted terminal blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. For applications in switchgear and control cabinets using the LSC wiring system from Lütze, e.g., these terminal blocks are a space- and cost-saving solution. This allows the cable duct to be placed very close to the terminal blocks, keeping its height relatively low.



**Product features:**

- CAGE CLAMP® S connection for all conductor types, with the additional benefit of solid and ferruled conductors being simply pushed in
- Vibration-proof, fast, maintenance-free
- 3-conductor through and ground conductor terminal blocks equipped with a dual jumper slot
- 4-conductor terminal blocks permit potential multiplication – no additional jumpers or terminal blocks needed
- 3- and 4-conductor terminal blocks have **the same dimensions**

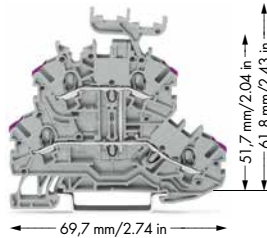
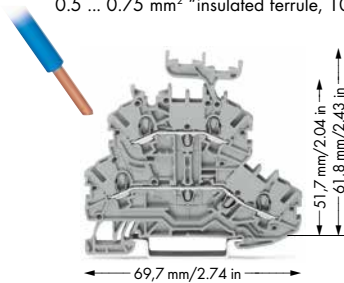
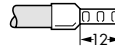
An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

# 8 TOPJOB® Double-Deck Terminal Blocks 1.5 mm<sup>2</sup> 2000 Series

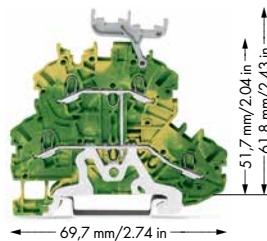
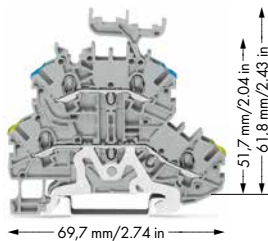
488

0.14 ... 1 (1.5) mm <sup>2</sup> ①   AWG 24 ... 16 500 V/6 kV/3 I <sub>N</sub> 13.5 A (18 A)	0.14 ... 1 (1.5) mm <sup>2</sup> ①   AWG 24 ... 16 500 V/6 kV/3 I <sub>N</sub> 13.5 A (18 A)	End and intermediate plates
Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in.	Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in.	

① Conductor sizes: 0.14 ... 1.5 mm<sup>2</sup> "s+f-st";  
Push-in conductor sizes: 0.5 ... 1.5 mm<sup>2</sup> "s" and  
0.5 ... 0.75 mm<sup>2</sup> "insulated ferrule, 10 mm"



Item No.	Item No.	Pack. Unit	Item No.	Item No.	Pack. Unit
<b>Through/through terminal block, gray housing</b>			<b>4-conductor through terminal block, internal commoning, gray housing, conductor entry position colored in violet</b>		
Marker carrier with			Marker carrier with		
	without			without	
● L/L	2000-2231	2000-2201	50	● L	2000-2238
● N/L	2000-2232	2000-2202	50	2000-2208	50
● L/N	2000-2233	2000-2203	50		
<b>Blue housing</b>			<b>4-conductor through terminal block, internal commoning, blue housing, conductor entry position colored in violet</b>		
● N/N	2000-2234	2000-2204	50	● N	2000-2239
				2000-2209	50



Item No.	Item No.	Pack. Unit	Item No.	Item No.	Pack. Unit
<b>Ground conductor/through terminal block, gray housing</b>			<b>4-conductor ground terminal block, internal commoning, green-yellow housing</b>		
Marker carrier with			Marker carrier with		
	without			without	
● PE/N	2000-2247	2000-2217	50	● PE	2000-2237
● PE/L	2000-2257	2000-2227	50	2000-2207	50

### Accessories, Item-Specific

End and intermediate plate, 0.7 mm thick



orange 2000-2292 100 (4x25)  
gray 2000-2291 100 (4x25)

End and intermediate plate, 0.7 mm thick



orange 2000-2292 100 (4x25)  
gray 2000-2291 100 (4x25)

### Accessories, 2002 Series

Appropriate marking systems: **WMB/Marking Strips** (see Section 9)

Push-in type jumper bar, insulated, I<sub>N</sub> 14 A, light gray



2-way 2000-402 200 (8x25)  
3-way 2000-403 200 (8x25)  
4-way 2000-404 200 (8x25)  
5-way 2000-405 100 (4x25)  
: :  
10-way 2000-410 100 (4x25)

Push-in type jumper bar, insulated, I<sub>N</sub> 14 A, light gray



1 - 3 2000-433 200 (8x25)  
1 - 4 2000-434 200 (8x25)  
1 - 5 2000-435 100 (4x25)  
: :  
1 - 10 2000-440 100 (4x25)

Star point jumper, insulated,



I<sub>N</sub> = I<sub>N</sub> terminal block, light gray  
1-3-5 2000-405/011-000  
100 (4x25)

Protective warning marker, with high-voltage symbol, for 5 terminal blocks





yellow 2000-115 100 (4x25)

● Ex e II approvals (pending)

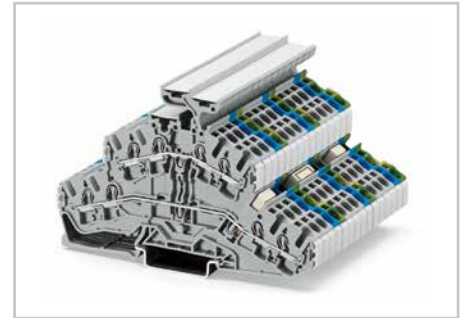
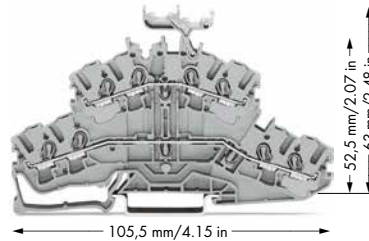
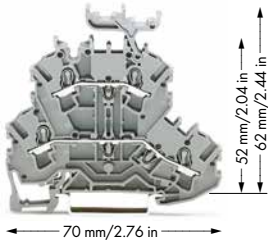
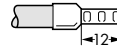
Operating tool with partially insulated shaft,




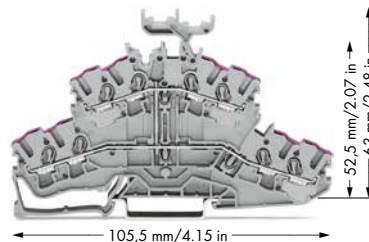
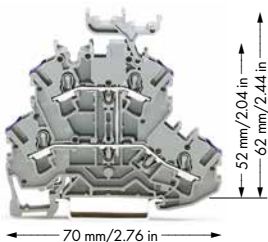
type 1, (2.5 x 0.4) mm blade  
210-719 1






0.25 ... 2.5 (4) mm <sup>2</sup> ①   AWG 22 ... 12 800 V/8 kV/3 I <sub>N</sub> 24 A (28 A)	0.25 ... 2.5 (4) mm <sup>2</sup> ①   AWG 22 ... 12 800 V/8 kV/3 I <sub>N</sub> 24 A (28 A)	End and intermediate plates
Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	

① Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s+fsi";  
Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and  
0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"



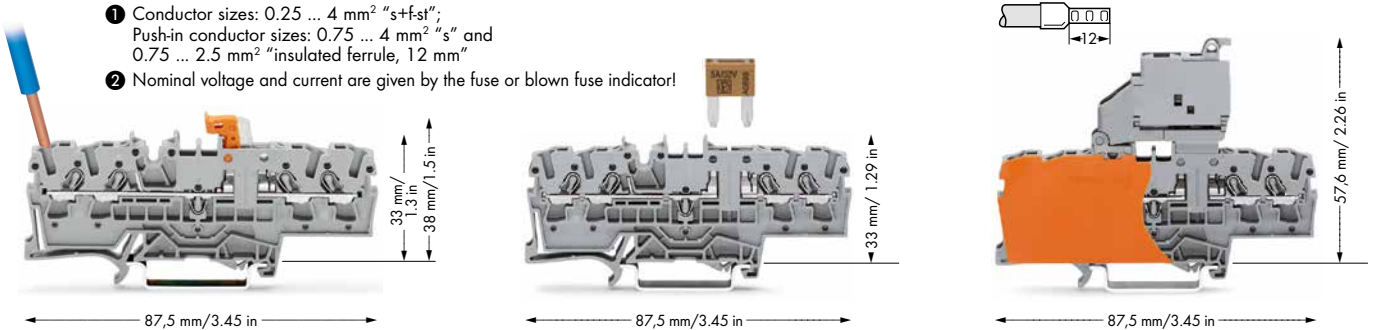
Item No.	Item No.	Pack. Unit	Item No.	Item No.	Pack. Unit	Accessories, 2002 Series	
<b>2-cond. double-deck terminal block, for DIN 35 rail</b>			<b>4-cond. double-deck terminal block, for DIN 35 rail</b>			<b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b>	
<b>Through/through terminal block, gray housing</b>			<b>Through/through terminal block, gray housing</b>				
Marker carrier with			Marker carrier with				
without			without				
● L/L	2002-2231	2002-2201 50	● L/L	2002-2431	2002-2401 50		2-way <b>2002-402</b> 200 (8x25)
● N/L	2002-2232	2002-2202 50	● N/L	2002-2432	2002-2402 50		3-way <b>2002-403</b> 200 (8x25)
● L/N	2002-2233	2002-2203 50	● L/N	2002-2433	2002-2403 50		4-way <b>2002-404</b> 200 (8x25)
Blue housing			Blue housing			5-way <b>2002-405</b> 100 (4x25)	
● N/N	2002-2234	2002-2204 50	● N/N	2002-2434	2002-2404 50	: : 10-way <b>2002-410</b> 100 (4x25)	
<b>Ground conductor/through terminal block, gray housing</b>			<b>Ground conductor/through terminal block, gray housing</b>			<b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b>	
● PE/N			● PE/N				
● PE/L			● PE/L				
● PE/N	2002-2247	2002-2217 50	● PE/N	2002-2447	2002-2417 50	1 - 3 <b>2002-433</b> 200 (8x25)	
● PE/L	2002-2257	2002-2227 50	● PE/L	2002-2457	2002-2427 50	1 - 4 <b>2002-434</b> 200 (8x25)	
						1 - 5 <b>2002-435</b> 100 (4x25)	
						: : 1 - 10 <b>2002-440</b> 100 (4x25)	



Item No.	Item No.	Pack. Unit	Item No.	Item No.	Pack. Unit	Accessories, 2002 Series	
<b>4-cond. double-deck terminal block, for DIN 35 rail</b>			<b>8-cond. double-deck terminal block, for DIN 35 rail</b>			<b>Staggered jumper, insulated, I<sub>N</sub> 25 A, light gray</b>	
<b>Through terminal block, internal commoning, gray housing, conductor entry position colored in violet</b>			<b>Through terminal block, internal commoning, gray housing, conductor entry position colored in violet</b>				
Marker carrier with			Marker carrier with				
without			without				
● L	2002-2238	2002-2208 50	● L	2002-2438	2002-2408 50		2-way <b>2002-472</b> 100 (4x25)
							3-way <b>2002-473</b> 100 (4x25)
							4-way <b>2002-474</b> 100 (4x25)
						5-way <b>2002-475</b> 50 (2x25)	
						: : 12-way <b>2002-482</b> 50 (2x25)	
<b>4-conductor through terminal block, internal commoning, blue housing, conductor entry position colored in violet</b>			<b>Through terminal block, internal commoning, blue housing, conductor entry position colored violet</b>			<b>TOPJOB®S connector, modular, for jumper contact slot</b>	
● N	2002-2239	2002-2209 50	● N	2002-2439	2002-2409 50		gray <b>2002-511</b> 100 (4x25)
<b>4-cond. double-deck terminal block, for DIN 35 rail</b>			<b>4-cond. double-deck terminal block, for DIN 35 rail</b>			<b>Spacer module</b>	
<b>Ground conductor terminal block, internal commoning, green-yellow housing</b>			<b>Ground conductor terminal block, internal commoning, green-yellow housing</b>				
● PE	2002-2237	2002-2207 50	● PE	2002-2437	2002-2407 50	gray <b>2002-549</b> 100 (4x25)	
<b>Accessories, Item-Specific</b> Appropriate marking systems: <b>WMB/Marking Strips</b> (see Section 9)						<b>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</b>	
<b>End and intermediate plate, 0.8 mm thick</b>			<b>End and intermediate plate, 0.8 mm thick</b>				
● orange <b>2002-2292</b> 100 (4x25)			● orange <b>2002-2492</b> 100 (4x25)				
● gray <b>2002-2291</b> 100 (4x25)			● gray <b>2002-2491</b> 100 (4x25)				
						<b>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade</b>	
							
						<b>Marking strips, plain</b>	
							
						<b>Insulated ferrules, extra long, for TOPJOB®S terminal blocks, see Full Line Catalog, Volume 1</b>	
							
						● Suitable for Ex i applications ⊗ Ex e II approvals (pending)	

# TOPJOB® Disconnect/Test and Fuse Terminal Blocks, 4-Conductor 2002 Series

<p>0.25 ... 2.5 (4) mm<sup>2</sup> ① AWG 22 ... 12 400 V/6 kV/3 I<sub>N</sub> 16 A</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup> ① AWG 22 ... 12 400 V/6 kV/3 I<sub>N</sub> 10 A ②</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup> ① AWG 22 ... 12 400 V/6 kV/3 I<sub>N</sub> 10 A ②</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit	
<b>4-conductor disconnect/test terminal block</b>			<b>4-conductor fuse terminal block,</b>			<b>4-conductor fuse terminal block with end plate,</b>		
gray	2002-1871	50	for blade-style fuses acc. to DIN 72581-3f, ISO 8820-3			with blown fuse indication by LED, gray		
blue	2002-1874	50				12 ... 30 V ≈	2002-1811/1000-541 50	
orange	2002-1872	50		2002-1881	50	30 ... 65 V ≈	2002-1811/1000-542 50	
<b>4-conductor through terminal block, same profile</b>			- Individual arrangement: 10 A - Block arrangement: 5 A			120 V ≈		2002-1811/1000-867 50
gray	2002-1801	50	Protection against direct contact must be observed for 42 V and higher voltages!			230 V ≈		2002-1811/1000-836 50
blue	2002-1804	50				<b>4-conductor fuse terminal block with end plate,</b>		
orange	2002-1802	50				without blown fuse indication		
						gray	2002-1811 50	

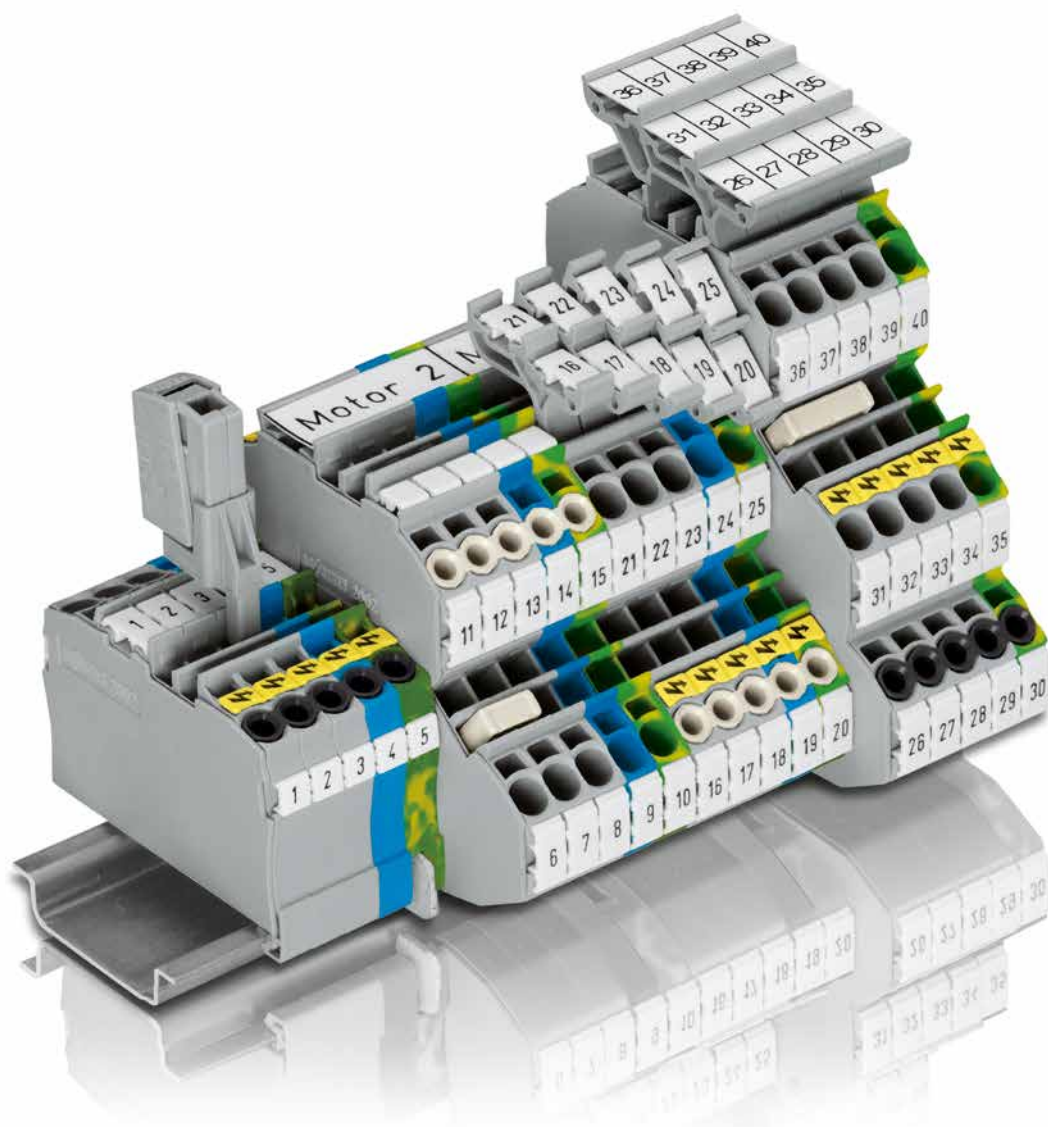
### Accessories, Item-Specific

<p><b>End and intermediate plate, 1 mm thick</b></p> <p>orange 2002-1892 100 (4x25) gray 2002-1891 100 (4x25)</p>	<p><b>End and intermediate plate, 1 mm thick</b></p> <p>orange 2002-1892 100 (4x25) gray 2002-1891 100 (4x25)</p>
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


### Accessories, 2002 Series

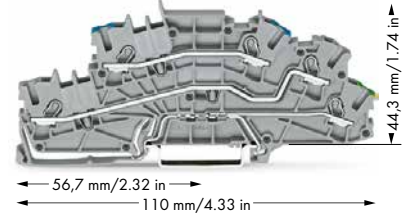
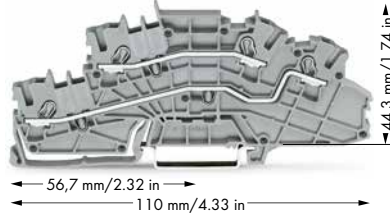
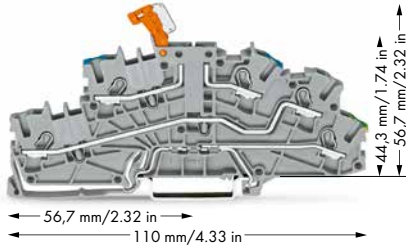
Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Mini-WSB** (see Section 9)



<p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) 5-way 2002-405 100 (4x25) : : 10-way 2002-410 100 (4x25)</p> <p><b>For step-down jumpers, see page 31.</b></p>	<p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : : 1 - 10 2002-440 100 (4x25)</p>	<p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>2-way 2004-402 200 (8x25) 3-way 2004-403 200 (8x25) 4-way 2004-404 200 (8x25) 5-way 2004-405 100 (4x25) : : 10-way 2004-410 100 (4x25)</p>
<p><b>Staggered jumper, light gray, insulated, I<sub>N</sub> 25 A</b></p> <p>2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25)</p> <p><b>Insulation stop, 5 pcs/strip</b> 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm<sup>2</sup> dark gray 2002-172 0.75-1 mm<sup>2</sup></p>	<p><b>Disconnect plug for fuse terminal blocks, suitable</b> when using the fuse terminal block as a disconnect terminal block orange 2002-401 100 (4x25)</p> <p><b>TOPJOB®S connector, modular,</b> for jumper contact slot gray 2002-511 100 (4x25)</p> <p><b>Spacer module</b> gray 2002-549 100 (4x25)</p>	<p><b>Push-in type jumper bar, insulated, I<sub>N</sub> 25 A, light gray</b></p> <p>1 - 3 2004-433 200 (8x25) 1 - 4 2004-434 200 (8x25) 1 - 5 2004-435 100 (4x25) : : 1 - 10 2004-440 100 (4x25)</p> <p><b>Insulation stop, 5 pcs/strip</b> 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm<sup>2</sup> dark gray 2002-172 0.75-1 mm<sup>2</sup></p>
<p><b>Test plug adapter, for test plug 4 mm Ø</b> 2009-174 100 (4x25)</p> <p><b>Testing tap, for max. 2.5 mm<sup>2</sup>/AWG 14</b> 2009-182 100 (4x25)</p>	<p><b>Protective warning marker, with high-voltage symbol,</b> for 5 terminal blocks yellow 2002-115 100 (4x25)</p>	<p><b>Insulated ferrules, extra long,</b> for TOPJOB®S terminal blocks, see Full Line Catalog, Volume 1</p>
<p><b>Test plug, with 500 mm cable, 2 mm Ø</b></p> <p>red 210-136 50 (5x10)</p>	<p><b>WMB Multi marking system,</b> 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm plain 793-5501 50 (10x5)</p>	<p><b>Operating tool with partially insulated shaft,</b> type 2, (3.5 x 0.5) mm blade 210-720 1</p>
<p><b>Double-deck marker carrier,</b> pivoting gray 2002-121 50 (2x25)</p>	<p>● Approval for Ex i applications (pending) ⊕ Approval for Ex e II applications (pending)</p>	<p><b>End plate for fuse terminal blocks, 2 mm thick</b></p> <p>orange 2002-992 100 (4x25) gray 2002-991 100 (4x25)</p>

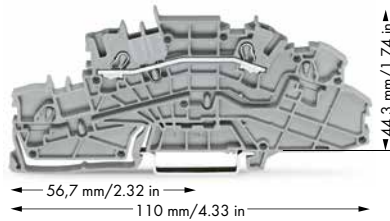
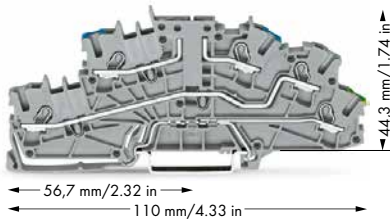




# TOPJOB® Multilevel Installation Terminal Blocks 2.5 (4) mm<sup>2</sup> 2003 Series

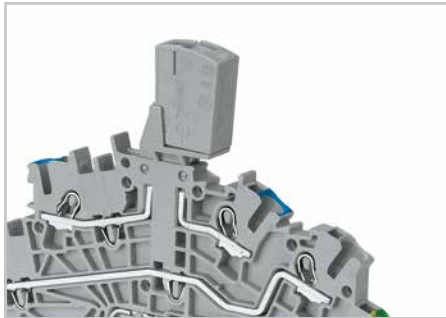
<p>0.25 ... 2.5 (4) mm<sup>2</sup>①   AWG 22 ... 12 250 V/4 kV/3; 20 A (25 A) ② ③ 400 V/6 kV/3; 20 A (25 A) ② ④</p> <p>Terminal block width: 5.2 mm / 0.205 in.   10 ... 12 mm / 0.43 in.⑤</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup>①   AWG 22 ... 12 400 V/6 kV/3 ② I<sub>N</sub> 24 A (28 A)</p> <p>Terminal block width: 5.2 mm / 0.205 in.   10 ... 12 mm / 0.43 in.⑤</p>	<p>0.25 ... 2.5 (4) mm<sup>2</sup>①   AWG 22 ... 12 250 V/4 kV/3; 24 A (28 A) ② ③ 400 V/6 kV/3; 24 A (28 A) ② ④</p> <p>Terminal block width: 5.2 mm / 0.205 in.   10 ... 12 mm / 0.43 in.⑤</p>
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Multilevel installation terminal block, with movable knife disconnect, gray</b>		<b>Multilevel installation terminal block, gray</b>		<b>Multilevel installation terminal block, gray</b>	
● NT/L/PE	2003-6641 50	● L/L	2003-6642 50	● N/L/PE	2003-6646 50
<b>Accessories, Item-Specific</b>		● N/L	2003-6649 50	● L/L/PE	2003-6645 50
<b>Test plug adapter N / L, for vertical test slot, gray</b>					
	2-pole 2003-499 1				
<b>Test plug adapter N, for vertical test slot, gray</b>					
	1-pole 2003-500 1				



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Multilevel installation terminal block, carrier terminal block without knife disconnect, gray</b>		<b>Multilevel installation terminal block, gray</b>			
Maximum current depends on accessories used.		● L	2003-6650 50		
● N/L/PE	2003-6640 50	● N	2003-6651 50		
Black upper-deck, brown middle-deck, green-yellow lower-deck printing					
●	2003-6643 50				
<b>Accessories, Item-Specific</b>					
<b>Test plug adapter N / L, for vertical test slot, gray</b>					
	2-pole 2003-499 1				
<b>Test plug adapter N, for vertical test slot, gray</b>					
	1-pole 2003-500 1				



2003-6640 Multilevel Installation Terminal Block with 2003-499 N/L Test Plug Adapter for insulation resistance measurement with connected N and L potentials



2003-6640 Multilevel Installation Terminal Block with 2003-500 N Test Plug Adapter for insulation resistance measurement of N potential

- ❶ Conductor sizes: 0.25 mm<sup>2</sup> ... 4 mm<sup>2</sup> "s + f-st";  
Push-in conductor sizes: 0.75 mm<sup>2</sup> ... 4 mm<sup>2</sup> "s" and 0.75 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>  
"insulated ferrules, 12 mm"
- ❷ 250 V/  
400 V = rated voltage  
4 kV/  
6 kV = rated surge voltage  
3 = pollution degree  
(see Full Line Catalog, Volume 1, Section 14)
- ❸ 250 V/4 kV potential-ground
- ❹ 400 V/6 kV potential-potential
- ❺ Strip length, see packaging or instructions.

## Accessories for Multilevel Installation Terminal Blocks

Push-in type jumper bars and staggered jumpers, see 2002 Series



2003-6641 Multilevel Installation Terminal Block with 2003-499 N/L Test Plug Adapter for insulation resistance measurement with connected N and L potentials







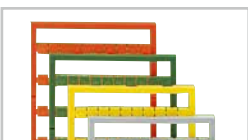
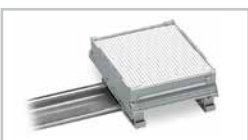



2003-6641 Multilevel Installation Terminal Block with 2003-500 N Test Plug Adapter for insulation resistance measurement of N potential

<b>End and intermediate plate,</b> 0.8 mm thick gray <b>2003-6692</b> 100 (4x25)	<b>Insulation stop,</b> 5 pcs/strip, 0.25 ... 0.5 mm <sup>2</sup> light gray <b>2002-171</b> 200 (8x25)
<b>Adjacent jumper for continuous commoning, insulated,</b> I <sub>N</sub> 25 A, light gray 2-pole <b>2002-400</b> 100 (4x25)	<b>Insulation stop,</b> 5 pcs/strip, 0.75 ... 1 mm <sup>2</sup> dark gray <b>2002-172</b> 200 (8x25)
<b>Busbar carrier,</b> not suitable as end stop, for DIN 35 rail, 1.5 mm thick blue <b>2009-304</b> 100 (4x25)	<b>Staggered jumper,</b> insulated, I <sub>N</sub> 25 A, light gray 2-pole <b>2002-472</b> 100 (4x25) 3-pole <b>2002-473</b> 100 (4x25) 4-pole <b>2002-474</b> 100 (4x25) 5-pole <b>2002-475</b> 50 (2x25) 6-pole <b>2002-476</b> 50 (2x25) 7-pole <b>2002-477</b> 50 (2x25) 8-pole <b>2002-478</b> 50 (2x25) 9-pole <b>2002-479</b> 50 (2x25) 10-pole <b>2002-480</b> 50 (2x25) 11-pole <b>2002-481</b> 50 (2x25) 12-pole <b>2002-482</b> 50 (2x25)
<b>Busbar carrier,</b> can replace end bracket, with detachable separator plate, for DIN 35 rail, 7.5 mm thick blue <b>2009-305</b> 25	<b>Push-in type wire jumper,</b> insulated, I <sub>N</sub> 16 A, wire size 1.5 mm <sup>2</sup> L = 60 mm <b>2009-412</b> 100 (10x10) L = 110 mm <b>2009-414</b> 100 (10x10) L = 250 mm <b>2009-416</b> 100 (10x10)
<b>Push-in type jumper bar, insulated,</b> I <sub>N</sub> 25 A, light gray 2-pole <b>2002-402</b> 200 (8x25) 3-pole <b>2002-403</b> 200 (8x25) 4-pole <b>2002-404</b> 200 (8x25) 5-pole <b>2002-405</b> 100 (4x25) 6-pole <b>2002-406</b> 100 (4x25) 7-pole <b>2002-407</b> 100 (4x25) 8-pole <b>2002-408</b> 100 (4x25) 9-pole <b>2002-409</b> 100 (4x25) 10-pole <b>2002-410</b> 100 (4x25)	<b>WMB Multi marking system,</b> 10 strips with 10 markers per card, stretchable 5 ... 5.2 mm plain <b>793-5501</b> 5
<b>Push-in type jumper bar, insulated,</b> I <sub>N</sub> 25 A, light gray from 1 to 3 <b>2002-433</b> 200 (8x25) from 1 to 4 <b>2002-434</b> 200 (8x25) from 1 to 5 <b>2002-435</b> 100 (4x25) from 1 to 6 <b>2002-436</b> 100 (4x25) from 1 to 7 <b>2002-437</b> 100 (4x25) from 1 to 8 <b>2002-438</b> 100 (4x25) from 1 to 9 <b>2002-439</b> 100 (4x25) from 1 to 10 <b>2002-440</b> 100 (4x25)	<b>WMB Inline, plain,</b> stretchable 5 ... 5.2 mm, 1,500 WMB markers, 5 mm, on roll white <b>2009-115</b> 1
<b>Operating tool,</b> 3.5 mm and 2.5 mm blades, for TOPJOB® S installation terminal blocks <b>2009-309</b> 50	<b>Marking strip, plain,</b> 11 mm wide, 50 m roll white <b>2009-110</b> 1
<b>Operating tool,</b> 3.5 mm and 5.5 mm blades, for TOPJOB® S installation terminal blocks <b>2009-310</b> 50	<b>Operating tool,</b> 3.5 mm and 5.5 mm blades, for TOPJOB® S installation terminal blocks <b>2009-310</b> 50



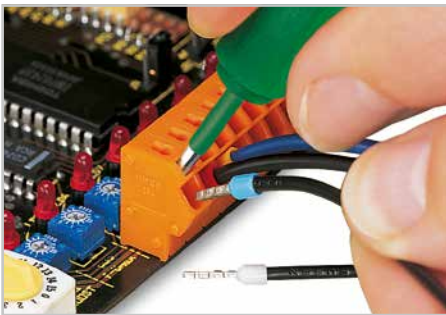


	Page	
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	Disconnection Tools	502
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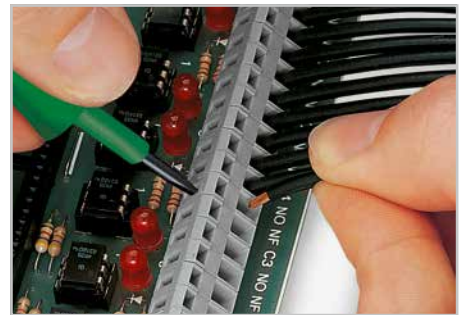
<p><b>Operating tools</b></p> <p>with partially insulated shaft Type 1, 2 and 3</p>	<p><b>Operating tools</b></p> <p>with partially insulated shaft Type 1, 2 and 3 in set</p>	<p><b>Operating tools</b></p> <p>with partially insulated shaft Type 1 and 2, short</p>
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<p><b>Operating tool, type 1, (2.5 x 0.4) mm blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805 and 2734 Series</p>	1	<p><b>Set of operating tools</b> Type 1, (2.5 x 0.4) mm blade Type 2, (3.5 x 0.5) mm blade Type 3, (5.5 x 0.8) mm blade</p>	1	<p><b>Operating tool, type 1, short, (2.5 x 0.4) mm straight blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805, and 2734 Series</p>	1
<b>210-719</b>		<b>210-722</b>		<b>210-647</b>	
<p><b>Operating tool, type 2, (3.5 x 0.5) mm blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231, and 2721 Series</p>	1			<p><b>Operating tool, type 2, short, (3.5 x 0.5) mm straight blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231 and 2721 Series</p>	1
<b>210-720</b>				<b>210-657</b>	
<p><b>Operating tool, type 3, (5.5 x 0.8) mm blade,</b> with partially insulated shaft, suitable for 745, 746 and 831 Series</p>	1			<p><b>Operating tool, type 1, short, (2.5 x 0.4) mm angled blade,</b> with partially insulated shaft, suitable for 218, 233, 234, 235, 250, 253, 730, 733, 734, 735, 739, 713, 714, 805, and 2734 Series</p>	1
<b>210-721</b>				<b>210-648</b>	
				<p><b>Operating tool, type 2, short, (3.5 x 0.5) mm angled blade,</b> with partially insulated shaft, suitable for 226, 231, 232, 235, 236, 237, 246, 250, 254, 255, 256, 257, 721, 722, 723, 731, 732, 733, 735, 736, 737, 738, 739, 740, 741, 742, 745, 804, 805, 806, 816, 2231 and 2721 Series</p>	1
				<b>210-658</b>	



The blade dimensions of the above-listed operating tools are ideal for operating both PCB terminal blocks and MCS connectors.



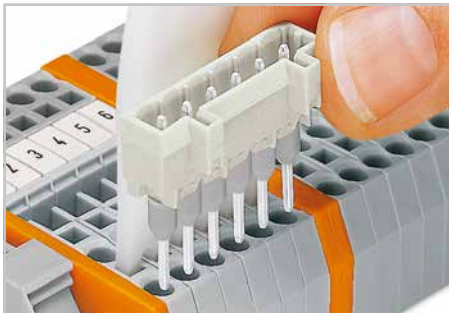
The above-listed operating tools with blade dimensions to DIN 5264 are ideal for operating PCB terminal blocks.



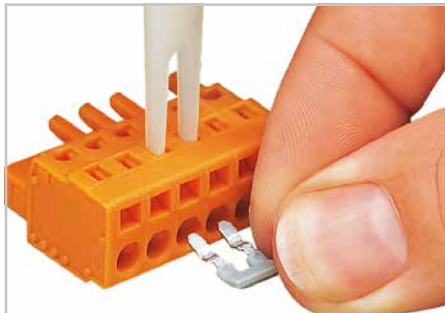
<p><b>Operating tools</b></p> <p>Operation parallel to conductor entry</p>	<p><b>Operating tool</b></p> <p>Operation perpendicular to conductor entry</p>	<p><b>Operating tool</b></p>
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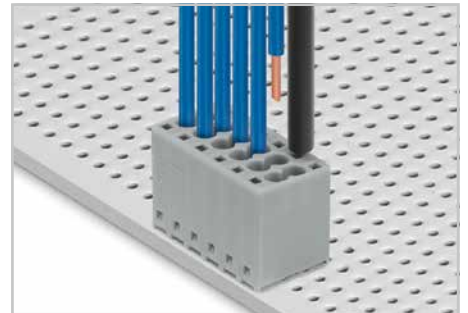
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<p><b>Multipole operating tool</b>, insulated, 5/5.08 mm pin spacing, operation parallel to conductor entry, suitable for male and female connectors with CAGE CLAMP®, also suitable for 280 Series rail-mounted terminal blocks</p>		<p><b>Operating tool</b>, insulated, 5/5.08 mm pin spacing, operation perpendicular to conductor entry, suitable for male and female connectors with CAGE CLAMP®</p>		<p><b>Operating tool</b>, suitable for 2080 Series</p>	
1-pole	209-130	1	2-pole	209-132	1
2-pole	280-432	1			
3-pole	280-433	1			
4-pole	280-434	1			
5-pole	280-435	1			
6-pole	280-436	1			
7-pole	280-437	1			
8-pole	280-438	1			
9-pole	280-439	1			
10-pole	280-440	1			
				206-880	1



Inserting a male connector with long contact pins into a front-entry rail-mounted terminal block via 6-pole operating tool.



Commoning a female connector with 231-902 comb-style jumper bar via 2-pole operating tool.



Conductor removal (2080 Series) ... via push-button and 1 mm Ø operating tool (206-880).

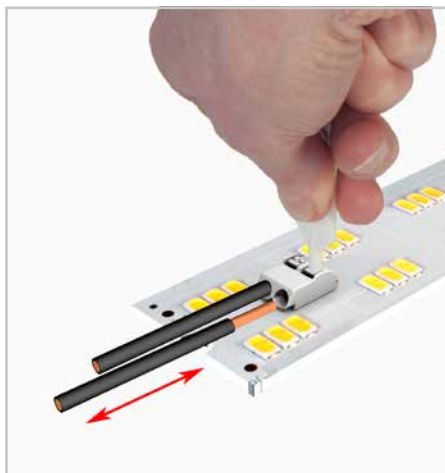
<b>Operating tools</b>	<b>Operating tools insulated</b>	
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Item No.	Pack. Unit	Item No.	Pack. Unit	
<b>Operating tool,</b> suitable for 2059, 2060 and 2061 Series		<b>Operating tool, insulated,</b> suitable for 2059, 2060 and 2061 Series		
for 2059 Series	<b>206-859</b>	5	for 2059 Series	<b>2059-189</b> 600 (12 x 50)
for 2060 Series	<b>206-860</b>	5	for 2060 Series	<b>2060-189</b> 300 (6 x 50)
for 2061 Series	<b>206-861</b>	5	for 2061 Series	<b>2061-189</b> 300 (6 x 50)



Inserting/removing fine-stranded conductors by lightly pressing on push-button.



Inserting/removing fine-stranded conductors by lightly pressing on push-button.

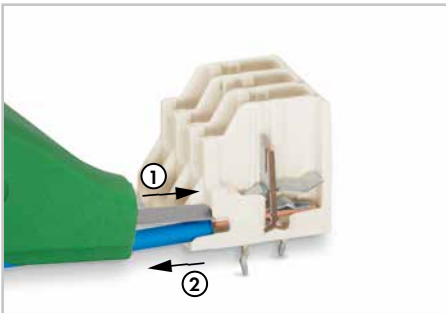




<p>Disconnection tool, for removing conductors from PUSH WIRE® connections</p>	<p>Disconnection tool, for removing conductors from PUSH WIRE® connections</p>	<p>Disconnection tool, for removing conductors from PUSH WIRE® connections</p>
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Disconnection tool, with two replacement blades in the handle, suitable for 251 Series, "mini" version		Disconnection tool, suitable for 744 Series		Disconnection tool, suitable for 294 Series	
206-830	1	206-840	1	206-294	1



Removing a conductor by sliding disconnection tool over the conductor (1) and pulling it out (2).



Removing a conductor by inserting disconnection tool into the operating slot and pulling it out.



Conductor removal: Slide disconnection tool beneath the conductor and pull conductor out.



Two replacement blades in the handle.







# Cable Strippers

<b>Cable stripper for round cables</b> 2.5 ... 11 mm / 0.1 ... 0.43 in. Ø	<b>Cable stripper for round cables</b> 4.5 ... 45 mm / 0.18 ... 1.77 in. Ø
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Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Cable stripper</b> , for round cables with 2.5 ... 11 mm outer diameter		<b>Cable stripper</b> , for round cables with 4.5 ... 45 mm outer diameter	
206-171	1	206-174	1
<b>Item-Specific Accessories</b>		<b>Item-Specific Accessories</b>	
<b>Replacement blade</b> , for 2.5 ... 11 mm Ø		<b>Replacement blade</b> , for 4.5 ... 45 mm Ø	
 206-170	1	 206-173	1

**206-171 Cable Stripper:**

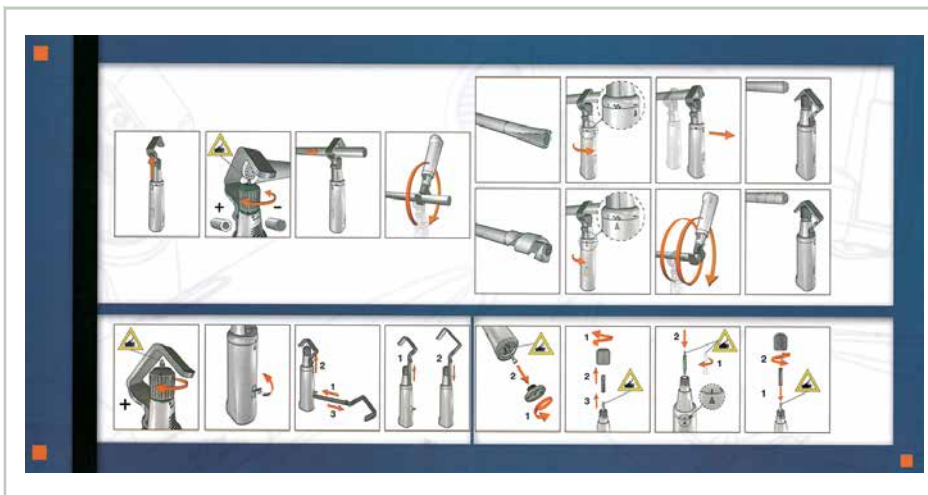
- 10-position adjustment wheel ensures repeatable stripping results
- Fine adjustability via 10-position blade cutting depth adjustment
- Strips the sheath from multi-core and fiber optic cables up to 11 mm/0.43 inch diameter
- Safe and easy to use through closed stripping cavity

**206-174 Cable Stripper:**

- Safe and easy to use: Three locking positions for circular, longitudinal and spiral cuts
- High cable stripping capacity of up to 45 mm/1.77 inch diameter
- Well balanced, ergonomic design features rests for thumb, index and pinky fingers to ease raising of the cable retention hook
- Replacement blades can be stored within the tool body



Operating instructions for 206-171 Cable Stripper






Operating instructions for 206-174 Cable Stripper



# Wire Strippers

<p><b>"Quickstrip" 10" wire stripper</b></p> <p>0.02 mm<sup>2</sup> ... 10 mm<sup>2</sup> "f-st" (AWG 34 ... 8)</p>	<p><b>"Quickstrip 16" wire stripper</b></p> <p>4 mm<sup>2</sup> ... 16 mm<sup>2</sup></p>
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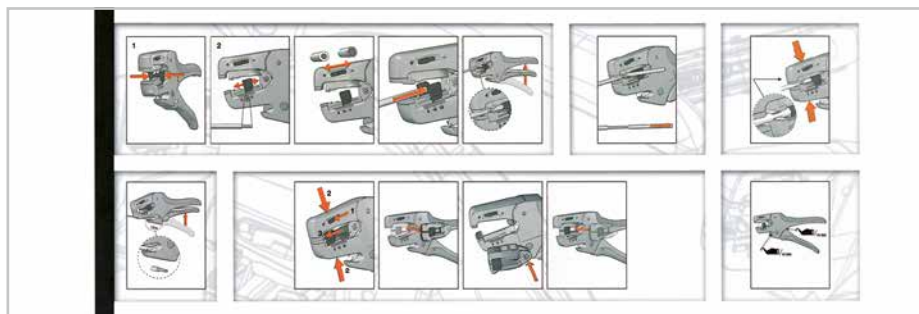
Item No.	Pack. Unit	Item No.	Pack. Unit
<p><b>"Quickstrip 10" wire stripper,</b> 0.02 ... 10 mm<sup>2</sup> "f-st" (6 mm<sup>2</sup> "sol.") Wire cutter up to 10 mm<sup>2</sup> "f-st" (1.5 mm<sup>2</sup> "sol.")</p>		<p><b>"Quickstrip 16" wire stripper,</b> 4 ... 16 mm<sup>2</sup> Wire cutter up to 10 mm<sup>2</sup> "f-st" (1.5 mm<sup>2</sup> "sol.")</p>	
206-124	1	206-125	1
<b>Product Accessories</b>		<b>Product Accessories</b>	
<p><b>"Standard" blade cassette, 0.02 ... 10 mm<sup>2</sup></b></p> 		<p><b>"Standard" blade cassette, 4 ... 16 mm<sup>2</sup></b></p> 	
206-126	1	206-128	1
<p><b>"V" blade cassette,</b> 0.1 ... 4 mm<sup>2</sup> for PTFE</p> 			
206-127	1		



Cutting a conductor.



Stripping a conductor.



Handling instructions are included.

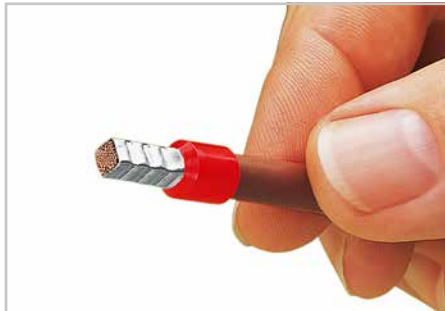
<b>Cable cutter acc. to VDE</b> up to 35 mm <sup>2</sup> / AWG 2	<b>“Variocrimp 4” crimping tool</b> 0.25 ... 4 mm <sup>2</sup> / AWG 22 ... 12	<b>“Variocrimp 16” crimping tool</b> 6 mm <sup>2</sup> ... 16 mm <sup>2</sup> / AWG 10 ... 6
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Cable cutter,</b> for copper and aluminum cables up to 35 mm <sup>2</sup> /AWG 2		<b>“Variocrimp 4” crimping tool,</b> for insulated and uninsulated ferrules, crimping range of 0.25 ... 4 mm <sup>2</sup>		<b>“Variocrimp 16” crimping tool,</b> for insulated and uninsulated ferrules, crimping range of 6 ... 16 mm <sup>2</sup>	
206-118	1	206-204	1	206-216	1



Cutting



A perfect gastight crimp, both electrically and mechanically reliable.

**Application notes:**

- With “Variocrimp 4,” the built-in crimping pressure control automatically adjusts crimping force to the conductor cross section used
- With “Variocrimp 16,” it is necessary to select the wire gauge on the tool before crimping
- Only one crimping station is needed to handle the specified conductor size range
- Uniform compact crimping from all four sides for high conductor retention
- No need to center the conductor into the ferrule
- Conductor and ferrule insertion possible from both sides (for left- and right-handers)
- Built-in ratchet mechanism ensures gastight crimp connection
- Crimping tools open automatically after crimping operation is complete
- Comfortable handles for operator

**What is a “gas-tight” connection?**

In a gas-tight connection, the conductor and the ferrule are compressed together, eliminating all spaces. Under normal atmospheric conditions, neither a liquid nor a gaseous medium can penetrate into the crimped connection.

Oxidation between crimped single conductors is prevented, ruling out nearly any increase in the crimped connection resistance. In some exceptional cases, minute, isolated spaces may be present. These can be considered to be closed off on account of the twisted wires, however.

Inadequate crimping can allow the conductor to be pulled out of the connection. Hollow spaces also remain in which oxidation can form. Oxidation leads to an increase in contact resistance.

Elevated resistance is detrimental for signal transmission, as the signal flow is damped (weakened), and for power transmission, as power loss and, hence a temperature increase due to contact (risk of fire) can result.

Crimping tools with built-in ratchets are recommended, such as the **WAGO Variocrimp** tools. These tools only open after the crimping process has been fully completed. Space-saving crimping from all four sides is ideal for spring clamp termination.

Cross section data for ferruled conductors indicated for WAGO products is based on this crimping method.

# Crimping Tools

<b>Crimping tool 25</b> 10 mm <sup>2</sup> , 16 mm <sup>2</sup> , 25 mm <sup>2</sup> / AWG 8, 6, 4	<b>Crimping tool 50</b> 35 mm <sup>2</sup> and 50 mm <sup>2</sup> / AWG 2 and 1
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Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Crimping tool 25,</b> for insulated and uninsulated ferrules, crimping range of 10 mm <sup>2</sup> , 16 mm <sup>2</sup> and 25 mm <sup>2</sup>		<b>Crimping tool 50,</b> for insulated and uninsulated ferrules, crimping range of 35 mm <sup>2</sup> and 50 mm <sup>2</sup>	
206-225	1	206-250	1



Insert ferruled conductor into crimping station.



Squeeze handles until ratchet mechanism is released.

**Application notes:**

- Improved crimping for higher conductor retention
- Conductor and ferrule insertion possible from both sides (for left- and right-handers)
- Built-in ratchet mechanism ensures gastight crimp connection
- Crimping tools open automatically after crimping operation is complete
- Comfortable handles for operator



## Voltage tester

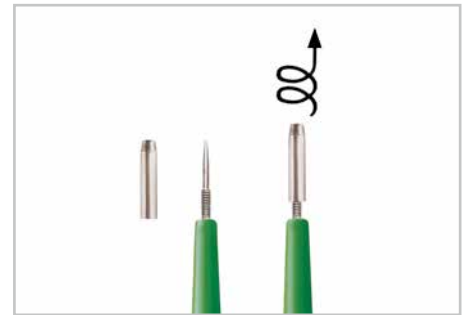
Profi-LCD+

## Voltage tester

Profi-LED+



Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Profi-LCD+,</b> 2-pole voltage tester with LCD display, removable test probes, 4 mm Ø Measuring range: 6 ... 1000 V AC/DC Protection class: IP65 Resistance measurement: up to 2000 Ω		<b>Profi-LED+,</b> 2-pole voltage tester with LED display, removable test probes, 4 mm Ø Measuring range: 6 ... 1000 V AC/DC Protection class: IP65 Resistance measurement: up to 2000 Ω	
<b>206-807</b>	1	<b>206-806</b>	1
<b>Item-Specific Accessories</b>		<b>Item-Specific Accessories</b>	
Replacement test probes, 4 mm Ø (2 pcs)		Replacement test probes, 4 mm Ø (2 pcs)	
 <b>206-808</b>	1	 <b>206-808</b>	1

**Additional Profi LCD+ features:**

- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- Automatic backlight
- Auto power-off function
- CAT IV 1000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

**Additional Profi LED+ features:**


- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- CAT IV 1000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

**Profi-LCD+ and Profi-LED+:**

- Improved socket contact via 4 mm Ø test probes
- Removable test probes for small test ports (suitable for all WAGO terminal blocks)

<b>Digital multimeter</b> Multi-Tester	<b>Digital clamp meter</b> Amp-Tester	<b>Voltage tester</b> TESTBOY
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Multi-Tester,</b> digital multimeter with non-contact voltage tester, with bag Measuring range: 600 V AC/DC, 10 A AC/DC Resistance measurement: up to 20 MΩ		<b>Amp-Tester,</b> digital clamp meter, true RMS measurement, with bag Measuring range: 0.01 ... 200 A AC/DC, up to 400 Hz (sinus) Protection class: IP44		<b>TESTBOY,</b> non-contact voltage tester, with integrated flashlight Voltage range: 12 ... 1000 VAC	
206-810	1	206-815	1	206-804	1
<b>Item-Specific Accessories</b>					
Replacement test leads, red/black					
		206-811	1		



**Additional Multi-Tester features:**

- Contact-less voltage test AC >100 V (optical and acoustical)
- Resistance measurement up to 20 MΩ
- Acoustical continuity test
- Diode test
- Data hold function
- Auto power-off function
- LED torch lamp function
- CAT IV 600 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)



**Additional Amp-Tester features:**

- AC and DC current measurement
- True RMS measurement
- Data hold function
- Maximum jaw opening: 21 mm Ø
- Compact design for measuring in tight spaces
- Resolution: 0.01 A at 40 A
- Resolution: 0.1 A at 200 A
- Sampling rate: 3 times per second
- Auto power-off function
- CAT III 300 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)



A device that will reliably detect AC voltage in cables, sockets, fuses, switches, outlets, etc.

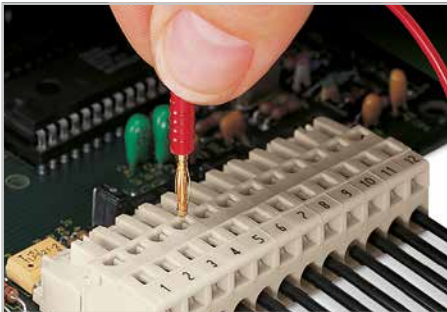
The voltage tester detects:

- Live conductors
- Cable breaks
- Blown fuses
- Defective switches
- Defective lamps

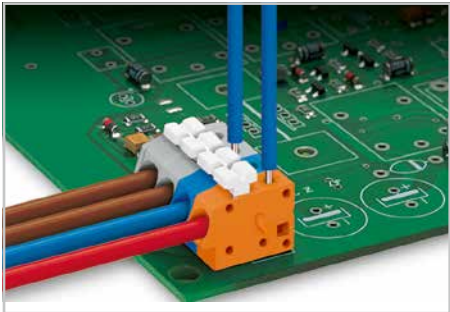
<b>Test plugs</b>	<b>Test pin</b>	
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Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Test plug, 2 mm Ø, 500 mm cable length</b>		<b>Test pin, 1 mm Ø, with solder connection for test cable</b>	
red	210-136	50	735-500
			1
<b>Test plug, 2.3 mm Ø, 500 mm cable length</b>			
yellow	210-137	50	



Testing with 2 mm Ø test plug.



Testing with 1 mm Ø test pin, tip contact.



## "Alu-Plus" contact paste



Item No.	Pack. Unit
"Alu-Plus" syringe, contains 20 ml "Alu-Plus" contact paste for reliable connection of solid aluminum conductors* up to 4 mm <sup>2</sup> /AWG 12 in WAGO spring-clamp terminal blocks	
249-130	20 (4 x 5)
Use "Alu-Plus" contact paste when terminating solid aluminum conductors in WAGO spring-clamp terminal blocks.	

\*Aluminum conductors according to IEC 61545, Class B, "Alloy 1370" with a tensile strength of 90 ... 180 N/mm<sup>2</sup> and a tensile strain of 1 ... 4%.

WAGO "Alu-Plus" contact paste also allows WAGO spring-clamp terminal blocks to be reliably terminated with solid aluminum conductors up to 4 mm<sup>2</sup>/AWG 12.

### "Alu-Plus" Contact Paste:

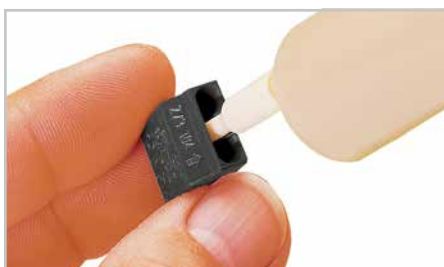
- Prevents fresh oxidation at the clamping point
- Prevents electrolytic corrosion between aluminum and copper conductors.
- Provides long-term protection against corrosion

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned and then immediately be inserted into the clamping units filled with WAGO "Alu-Plus" contact paste.

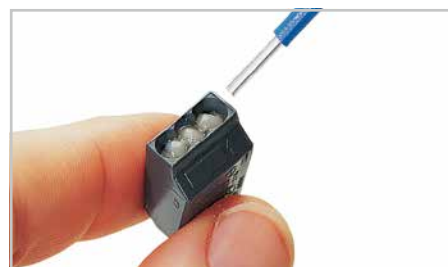
It is, of course, also possible to apply WAGO "Alu-Plus" additionally on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:

2.5 mm<sup>2</sup> / AWG 14 = 16 A,  
4 mm<sup>2</sup> / AWG 12 = 22 A



**WAGO PUSH WIRE® connectors**  
Push nozzle of the "Alu-Plus" syringe into the center conductor entry hole of the WAGO PUSH WIRE® connector.



Press plunger until "Alu-Plus" is visible in the other holes.



**WAGO lighting connectors**  
Push nozzle of the "Alu-Plus" syringe first into the circular and then into the square conductor entry hole of the WAGO lighting connector.



Press plunger down until the "Alu-Plus" has filled both holes.



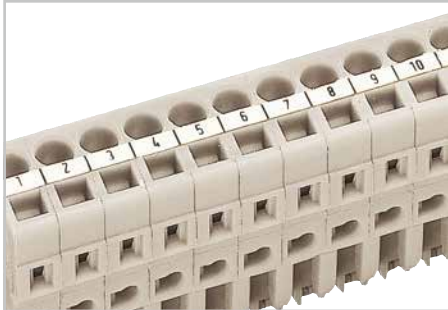
**WAGO rail-mount terminal blocks (only up to 4 mm<sup>2</sup>/AWG 12)**  
For each conductor entry: Insert nozzle of the "Alu-Plus" syringe in every open conductor entry hole (one after the other).



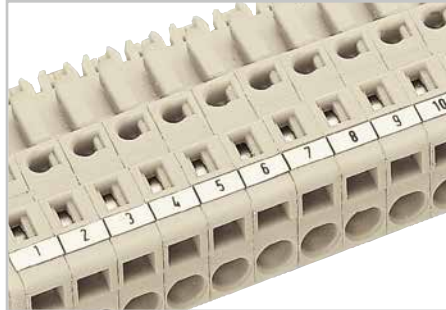
Press plunger down until "Alu-Plus" has filled each of these holes.

## Self-adhesive marking strips on DIN A4 card

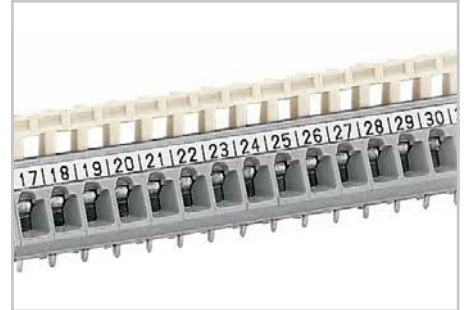
Pin spacing: 2.5 mm, 2.54 mm, 3.5 mm, 3.81 mm, 3.96 mm, 4 mm, 5 mm



MCS marking parallel to conductor entry



MCS marking perpendicular to conductor entry



Marking ... PCB terminal blocks (256 Series)

**Pin Spacing: 2.5 mm/0.098 in.**suitable for **MCS-MICRO** male and female connectors with conductor connection (perpendicular to conductor entry)

and Series:

**218 233 234 250**

Marking	Item No.	Pack. Unit
1 ... 16 ( 400 x )	<b>210-331/250-202</b>	<b>Marking strip height: 2.3 mm</b> 1 card / 100 strips
17 ... 32 ( 400 x )	<b>210-331/250-204</b>	1 card / 100 strips
33 ... 48 ( 400 x )	<b>210-331/250-206</b>	1 card / 100 strips
1 ... 48 ( 400 x )	<b>210-331/250-207</b>	1 card / 100 strips

**Pin Spacing: 2.54 mm/0.1 in.**

suitable for Series:

**218 233 234 250**

Marking	Item No.	Pack. Unit
1 ... 16 ( 400 x )	<b>210-331/254-202</b>	<b>Marking strip height: 2.3 mm</b> 1 card / 100 strips
17 ... 32 ( 400 x )	<b>210-331/254-204</b>	1 card / 100 strips
33 ... 48 ( 400 x )	<b>210-331/254-206</b>	1 card / 100 strips
1 ... 48 ( 100 x )	<b>210-331/254-207</b>	1 card / 100 strips

**Pin Spacing: 3.5 mm/0.138 in.**suitable for **MCS-MINI** male and female connectors with conductor connection (perpendicular to conductor entry)

and Series:

**250 252 739 805**

Marking	Item No.	Pack. Unit
1 ... 16 ( 240 x )	<b>210-332/350-202</b>	<b>Marking strip height: 3 mm</b> 1 card / 80 strips
17 ... 32 ( 240 x )	<b>210-332/350-204</b>	1 card / 80 strips
33 ... 48 ( 240 x )	<b>210-332/350-206</b>	1 card / 80 strips

**Pin Spacing: 3.81 mm/0.15 in.**

suitable for Series:

**235 734 735 739**

Marking	Item No.	Pack. Unit
1 ... 16 ( 160 x )	<b>210-332/381-202</b>	<b>Marking strip height: 3 mm</b> 1 card / 80 strips
17 ... 32 ( 160 x )	<b>210-332/381-204</b>	1 card / 80 strips
33 ... 48 ( 160 x )	<b>210-332/381-206</b>	1 card / 80 strips
1 ... 32 ( 80 x )	<b>210-332/381-205</b>	1 card / 80 strips

**Pin Spacing: 3.96 mm/0.156 in.**suitable for **235 Series**

Marking	Item No.	Pack. Unit
1 ... 16 ( 160 x )	<b>210-332/396-202</b>	<b>Marking strip height: 3 mm</b> 1 card / 80 strips
17 ... 32 ( 160 x )	<b>210-332/396-204</b>	1 card / 80 strips
33 ... 48 ( 160 x )	<b>210-332/396-206</b>	1 card / 80 strips
1 ... 32 ( 80 x )	<b>210-332/396-205</b>	1 card / 80 strips

**Pin Spacing: 4 mm/0.157 in.**suitable for **235 Series**

Marking	Item No.	Pack. Unit
1 ... 16 ( 160 x )	<b>210-332/400-202</b>	<b>Marking strip height: 3 mm</b> 1 card / 80 strips
17 ... 32 ( 160 x )	<b>210-332/400-204</b>	1 card / 80 strips
33 ... 48 ( 160 x )	<b>210-332/400-206</b>	1 card / 80 strips
1 ... 32 ( 80 x )	<b>210-332/400-205</b>	1 card / 80 strips

**Pin Spacing: 5 mm/0.197 in.**suitable for **MCS-MIDI** male and female connectors with conductor connection (perpendicular to conductor entry)

and Series:

**235 236 250 253 254 255 256 257 736  
737 738 739 740 741 745 806 816**

Marking	Item No.	Pack. Unit
1 ... 16 ( 160 x )	<b>210-332/500-202</b>	<b>Marking strip height: 3 mm</b> 1 card / 80 strips
17 ... 32 ( 160 x )	<b>210-332/500-204</b>	1 card / 80 strips
33 ... 48 ( 160 x )	<b>210-332/500-206</b>	1 card / 80 strips
1 ... 32 ( 80 x )	<b>210-332/500-205</b>	1 card / 80 strips

suitable for **MCS-MIDI** male and female connectors with **CAGE CLAMP®** connection (parallel to conductor entry) and **804 Series**

Marking	Item No.	Pack. Unit
1 ... 12 ( 300 x )	<b>210-331/500-103</b>	<b>Marking strip height: 2.3 mm</b> 1 card / 100 strips
13 ... 24 ( 300 x )	<b>210-331/500-104</b>	1 card / 100 strips

## Self-adhesive marking strips on DIN A4 card

Pin spacing: 5.08 mm, 5.75 mm, 7 mm, 7.5 mm, 7.62 mm, 10 mm, 10.16 mm

Pin spacing: 5.08 mm/0.2 in.	Marking	Item No.	Pack. Unit
suitable for <b>MCS MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series: . . . <b>235 236 254 255 256 257</b> <b>736 737 738 739 741</b>	1 ... 16 ( 160 x )	<b>210-332/508-202</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
	17 ... 32 ( 160 x )	<b>210-332/508-204</b>	1 card / 80 strips
	33 ... 48 ( 160 x )	<b>210-332/508-206</b>	1 card / 80 strips
	1 ... 32 ( 80 x )	<b>210-332/508-205</b>	1 card / 80 strips
suitable for <b>MCS MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry)	1 ... 12 ( 200 x )	<b>210-331/508-103</b>	<b>Strip height: 2.3 mm</b> 1 card / 100 strips
	13 ... 24 ( 200 x )	<b>210-331/508-104</b>	1 card / 100 strips

Pin spacing: 5.75 mm/0.226 in.	Marking	Item No.	Pack. Unit
suitable for <b>243 Series</b>	1 ... 12 ( 160 x )	<b>210-332/575-103</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips

Pin spacing: 7 mm/0.275 in.	Marking	Item No.	Pack. Unit
suitable for <b>826 Series</b>	1 ... 12 ( 160 x )	<b>210-332/700-103</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
	12 ... 1 ( 160 x )	<b>210-332/700-102</b>	1 card / 80 strips

Pin spacing: 7.5 mm/0.295 in.	Marking	Item No.	Pack. Unit
suitable for <b>MCS MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series: . . . <b>235 236 239 250 254 255</b> <b>256 257 736 737 739 741 746 745</b>	1 ... 20 ( 80 x )	<b>210-332/750-020</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
suitable for <b>MCS MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry) and <b>804 Series</b>	1 ... 16 ( 100 x )	<b>210-331/750-202</b>	<b>Strip height: 2.3 mm</b> 1 card / 100 strips

Pin spacing: 7.62 mm/0.3 in.	Marking	Item No.	Pack. Unit
suitable for <b>MCS MIDI</b> male and female connectors with conductor connection (perpendicular to conductor entry) and Series: . . . <b>235 236 254 255 256</b> <b>257 736 737 739 741</b>	1 ... 20 ( 80 x )	<b>210-332/762-020</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
suitable for <b>MCS MIDI</b> male and female connectors with CAGE CLAMP® connection (parallel to conductor entry)	1 ... 16 ( 100 x )	<b>210-331/762-202</b>	<b>Strip height: 2.3 mm</b> 1 card / 100 strips
suitable for <b>MCS MAXI</b> male and female connectors	1 ... 16 ( 100 x )	<b>210-334/762-202</b>	<b>Strip height: 5 mm</b> 1 card / 48 strips

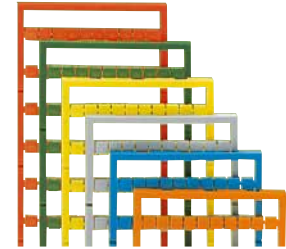
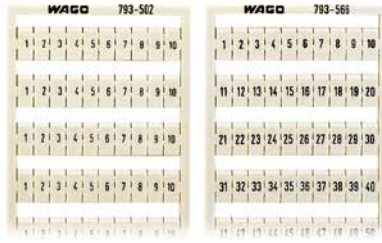
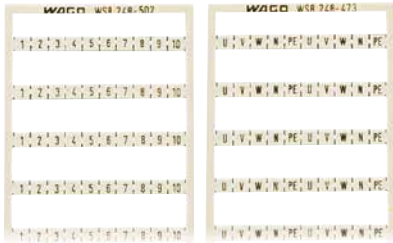
Pin spacing: 10 mm/0.394 in.	Marking	Item No.	Pack. Unit
suitable for Series: . . . <b>235 236 254 255 256 257</b> <b>736 737 741 745</b>	1 ... 16 ( 80 x )	<b>210-332/1000-202</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
	17 ... 32 ( 80 x )	<b>210-332/1000-204</b>	1 card / 80 strips
	33 ... 48 ( 80 x )	<b>210-332/1000-206</b>	1 card / 80 strips

Pin spacing: 10.16 mm/0.4 in.	Marking	Item No.	Pack. Unit
suitable for Series: . . . <b>235 236 254 255 256 257</b> <b>736 737 741</b>	1 ... 16 ( 80 x )	<b>210-332/1016-202</b>	<b>Strip height: 3 mm</b> 1 card / 80 strips
	17 ... 32 ( 80 x )	<b>210-332/1016-204</b>	1 card / 80 strips
	33 ... 48 ( 80 x )	<b>210-332/1016-206</b>	1 card / 80 strips

Available for all pin spacing dimensions:	Strip Height	Item No.	Pack. Unit
<b>plain*</b>	2.3 mm	<b>210-331</b>	1 card / 100 strips
	3 mm	<b>210-332</b>	1 card / 80 strips
	5 mm	<b>210-334</b>	1 card / 48 strips
<b>Only separators printed</b> (xxxx = pin spacing)	2.3 mm	<b>210-331/xxxx-001</b>	1 card / 100 strips
	3 mm	<b>210-332/xxxx-001</b>	1 card / 80 strips
	5 mm	<b>210-334/xxxx-001</b>	1 card / 48 strips

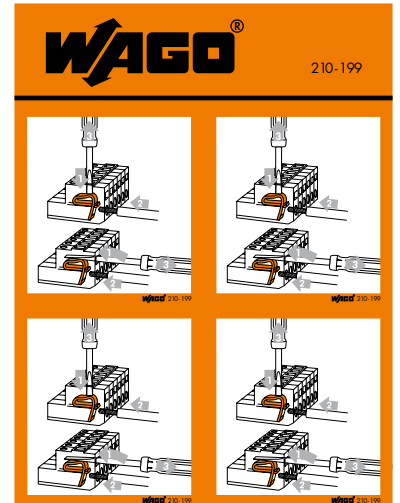
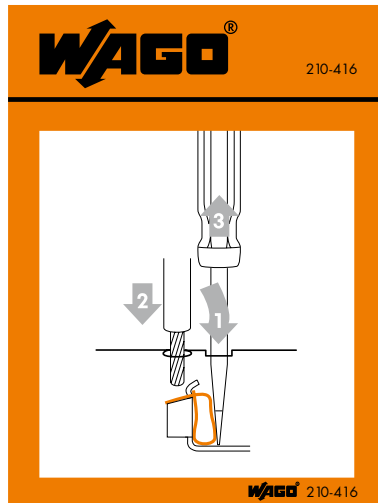
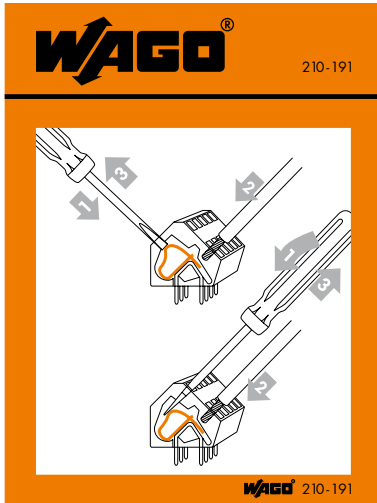
\* Plain marking cards can be printed using WAGO smartSCRIPT. WAGO smartSCRIPT is part of the WAGO ProServe® Software. You can download this software free of charge at [www.wago.com](http://www.wago.com).

<b>Horizontal marking</b> Consecutive numbers/letters each strip	<b>Horizontal marking</b> Consecutive numbers each strip	<b>Horizontal marking</b> In color
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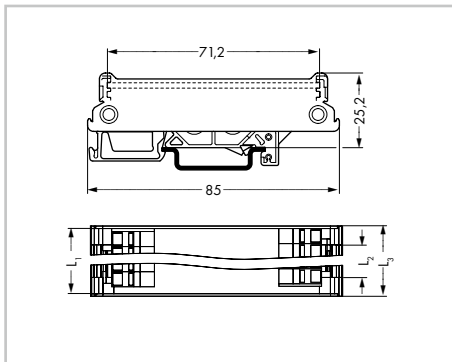
Marking per card	Item No.	Pack. Unit	Marking per card	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
<b>Mini-WSB marker card,</b> e.g., for 745 and 831 Series 10 strips with 10 makers per card			<b>WMB marker card,</b> e.g., for 745 Series (4 mm <sup>2</sup> /10 mm pin spacing) and 831 Series 10 strips with 10 makers per card			<b>Item no. suffixes for colored maker cards:</b> e.g., for 745 and 831 Series 10 strips with 10 makers per card		
1 ... 10 (10x)	<b>248-502</b>	5 cards	1 ... 10 (10x)	<b>793-502</b>	5 cards	yellow	.../000-002	
11 ... 20 (10x)	<b>248-503</b>	5 cards	11 ... 20 (10x)	<b>793-503</b>	5 cards	red	.../000-005	
21 ... 30 (10x)	<b>248-504</b>	5 cards	21 ... 30 (10x)	<b>793-504</b>	5 cards	blue	.../000-006	
31 ... 40 (10x)	<b>248-505</b>	5 cards	31 ... 40 (10x)	<b>793-505</b>	5 cards	gray	.../000-007	
41 ... 50 (10x)	<b>248-506</b>	5 cards	41 ... 50 (10x)	<b>793-506</b>	5 cards	orange	.../000-012	
51 ... 60 (10x)	<b>248-569</b>	5 cards	51 ... 60 (10x)	<b>793-569</b>	5 cards	light green	.../000-017	
61 ... 70 (10x)	<b>248-570</b>	5 cards	61 ... 70 (10x)	<b>793-570</b>	5 cards	green	.../000-023	
71 ... 80 (10x)	<b>248-571</b>	5 cards	71 ... 80 (10x)	<b>793-571</b>	5 cards	violet	.../000-024	
81 ... 90 (10x)	<b>248-572</b>	5 cards	81 ... 90 (10x)	<b>793-572</b>	5 cards			
91 ... 100 (10x)	<b>248-573</b>	5 cards	91 ... 100 (10x)	<b>793-573</b>	5 cards			
							<b>Ordering example: Mini-WSB</b>	
1 ... 50 (2x)	<b>248-566</b>	5 cards	1 ... 50 (2x)	<b>793-566</b>	5 cards		Marking on yellow card, 41 ... 50,	
51 ... 100 (2x)	<b>248-507</b>	5 cards	51 ... 100 (2x)	<b>793-507</b>	5 cards		<b>248-506/000-002</b>	
101 ... 150 (2x)	<b>248-508</b>	5 cards	101 ... 150 (2x)	<b>793-508</b>	5 cards			
151 ... 200 (2x)	<b>248-509</b>	5 cards	151 ... 200 (2x)	<b>793-509</b>	5 cards		<b>Ordering example: WMB</b>	
201 ... 300 (2x)	<b>248-510</b>	5 cards	201 ... 300 (2x)	<b>793-510</b>	5 cards		<b>793-506/000-002</b>	
301 ... 400 (2x)	<b>248-511</b>	5 cards	301 ... 400 (2x)	<b>793-511</b>	5 cards			
401 ... 500 (2x)	<b>248-512</b>	5 cards	401 ... 500 (2x)	<b>793-512</b>	5 cards			
501 ... 600 (2x)	<b>248-513</b>	5 cards	501 ... 600 (2x)	<b>793-513</b>	5 cards			
601 ... 700 (2x)	<b>248-514</b>	5 cards	601 ... 700 (2x)	<b>793-514</b>	5 cards			
701 ... 800 (2x)	<b>248-515</b>	5 cards	701 ... 800 (2x)	<b>793-515</b>	5 cards			
801 ... 900 (2x)	<b>248-516</b>	5 cards	801 ... 900 (2x)	<b>793-516</b>	5 cards			
901 ... 1000 (2x)	<b>248-517</b>	5 cards	901 ... 1000 (2x)	<b>793-517</b>	5 cards			
1 ... 9, ; (10x)	<b>248-565</b>	5 cards	1 ... 9, ; (10x)	<b>793-565</b>	5 cards			
U, V, W, N, PE, U, V, W, N, PE; (10x)	<b>248-474</b>	5 cards						
L1, L2, L3, N, PE, L1, L2, L3, N, PE; (10x)	<b>248-472</b>	5 cards						
plain, for self-marking	<b>248-501</b>	5 cards	plain, for self-marking	<b>793-501</b>	5 cards			
<b>Felt-tip pen, for permanent marking</b>			<b>210-110</b>		1			
							<b>Note:</b>	
							Please note that colored marker cards are normally on longer delivery and more expensive than standard cards.	

<p><b>Operating stickers</b></p> <p>for PCB terminal blocks with CAGE CLAMP® connection</p>	<p><b>Operating sticker</b></p> <p>for CAGE CLAMP® connection, universal</p>	<p><b>Operating sticker</b></p> <p>für MCS connectors</p>
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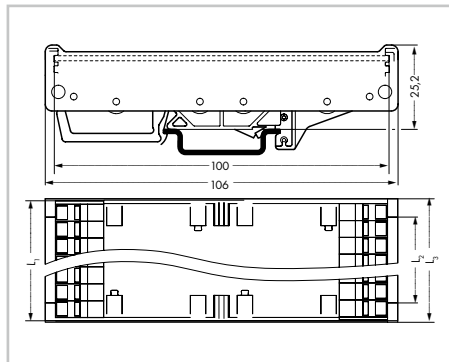


Series	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit		
<b>Operating stickers for PCB terminal blocks</b> Size: 60 mm x 63 mm			<b>Operating sticker for CAGE CLAMP®, universal</b> Size: 60 mm x 63 mm			<b>Operating sticker for MCS with CAGE CLAMP®</b> Size: (30 x 30) mm x 4 mm		
236	<b>210-191</b>	100	<b>210-416</b>	100	<b>210-199</b>	100		
736, 737 and 738	<b>210-406</b>	100						

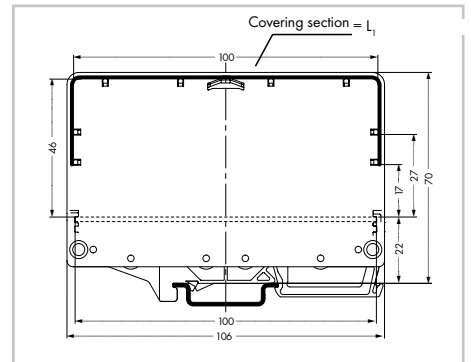
<b>DIN-rail mount PCB carrier</b> Size 1	<b>DIN-rail mount PCB carrier</b> Size 2	<b>DIN-rail mount PCB carrier</b> Size 2 with cover and end plates
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$L_1$  = PCB length  
 $L_2 = L_1 \dots 11 \text{ mm}$  ( $L_2$  = Carrier base length)  
 $L_3 = L_1 + 2 \text{ mm}$

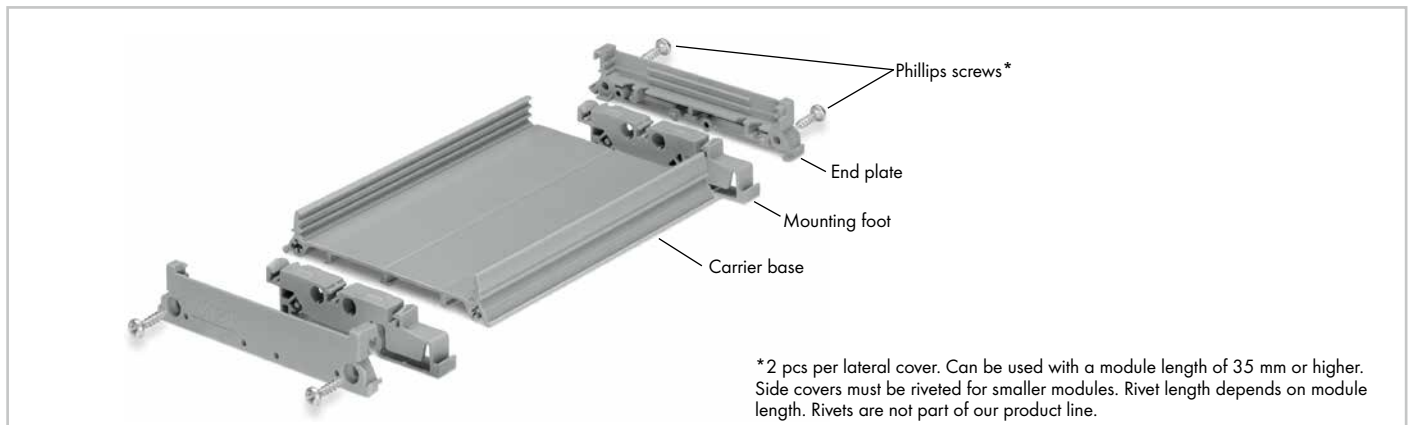


$L_1$  = PCB/Cover length  
 $L_2 = L_1 \dots 15.8 \text{ mm}$  ( $L_2$  = Carrier base length)  
 $L_3 = L_1 + 2 \text{ mm}$



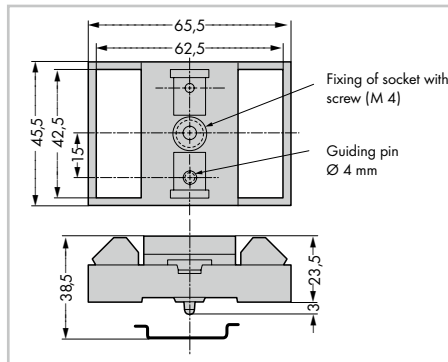
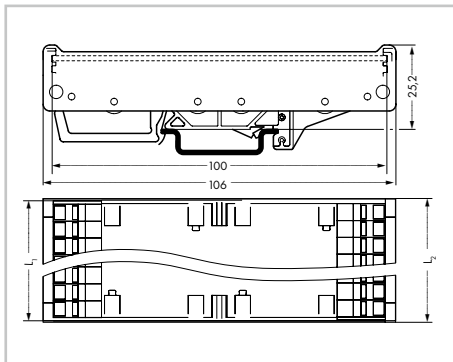
Item No.	Length	Pack. Unit	Item No.	Length	Pack. Unit	Item No.	Length	Pack. Unit
<b>DIN-rail mount PCB carrier, size 1</b>			<b>DIN-rail mount PCB carrier, size 2</b>			<b>DIN-rail mount PCB carrier, size 2 with cover</b>		
End plate, size 1			End plate, size 2			End plate, size 2		
<b>288-601</b>		1	<b>288-621</b>		1	<b>288-626</b>		1
Mounting foot for DIN 35 rail			Mounting foot for DIN 35 rail			Cover, size 2		
<b>288-602</b>		1	<b>288-622</b>		1	<b>288-627</b>	1 m	1
Carrier base, size 1			Carrier base, size 2					
<b>288-600</b>	1 m	1	<b>288-620</b>	1 m	1			
Phillips screw 2.9 x 13*			Phillips screw 2.9 x 13*					
<b>210-533</b>		25	<b>210-533</b>		25			
Marking strips 7.5 x 0.5 mm								
translucent <b>709-196</b> 1 m 1								
white <b>709-198</b> 1 m 1								
PCB is not included in the scope of delivery.			PCB is not included in the scope of delivery.			PCB is not included in the scope of delivery.		

Minimum PCB length without carrier base, size 1:  $L_1 = 11 \text{ mm}$ , size 2:  $L_1 = 15.8 \text{ mm}$   
 Free space between base and PCB bottom side: 5 mm  
 PCB tolerances: 1.5 mm  $\pm$  0.2 mm (thickness),  $\pm$  0.2 mm (length/width); -0.1/+0.3 for milling contours



\*2 pcs per lateral cover. Can be used with a module length of 35 mm or higher. Side covers must be riveted for smaller modules. Rivet length depends on module length. Rivets are not part of our product line.

<p><b>DIN-rail mount PCB carrier, complete assembly</b></p> <p>for 100 x 160 mm PCBs</p>	<p><b>DIN-rail mount PCB carrier</b></p>	
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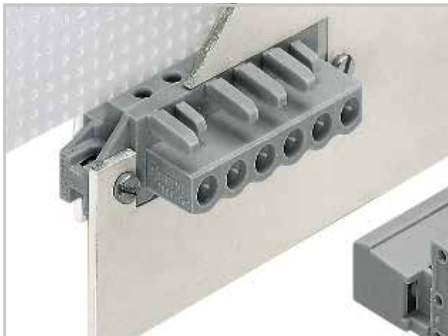
L<sub>1</sub> = 160 mm (PCB length)  
 L<sub>2</sub> = 162 mm

Item No.	Pack. Unit	Item No.	Pack. Unit
<b>DIN-rail mount PCB carrier, suitable for "Eurocard" PCBs (100 x 160 mm)</b>		<b>DIN-rail mount PCB carrier, for screw fixing or DIN-rail mounting via snap-fit type universal mounting feet, suitable for 42.5 x 62.5 mm PCBs</b>	
<b>288-003</b>	1	<b>288-001</b>	1
		Universal mounting foot, snap-fit type, suitable for DIN 15, 32 and 35 rails	
		<b>288-002</b>	10
PCB is not included in the scope of delivery.		PCB is not included in the scope of delivery.	

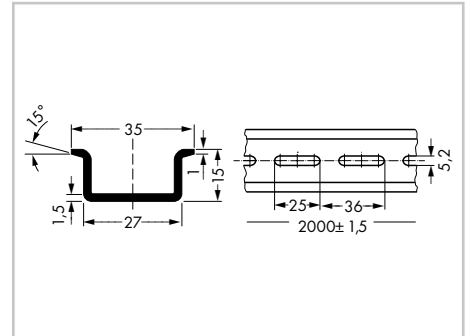
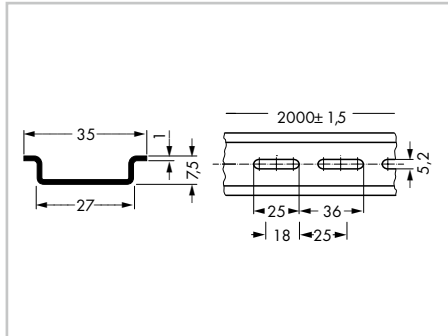
<b>Screws</b>	<b>Steel carrier rails 35 x 7.5 mm</b> to EN 60715	<b>Steel carrier rails 35 x 15 mm</b> to EN 60715
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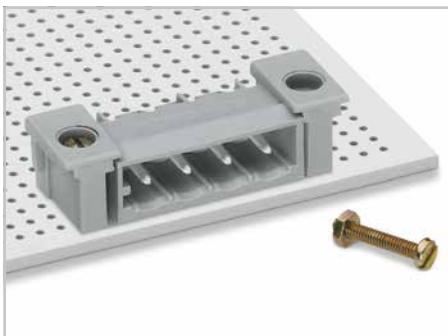
Dimensions	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<b>Tapping screws,</b> for 1.8 mm mounting hole diameter			<b>Steel carrier rail, I<sub>N</sub> 76 A</b> (based on 1 m length) 35 x 7.5 mm, 1 mm thick, 2 m long		<b>Steel carrier rail, I<sub>N</sub> 125 A</b> (based on 1 m length) 35 x 15 mm, 1.5 mm thick, 2 m long	
B 2.2 x 9.5 mm	<b>209-147</b>	200 ( 2 x 100 )	unslotted	<b>210-113</b> 10 (10x1)	unslotted	<b>210-114</b> 10 (10x1)
B 2.2 x 13 mm	<b>231-194</b>	200 ( 2 x 100 )	Hole width: 25 mm; hole spacing: 36 mm slotted	<b>210-112</b> 10 (10x1)	Hole width: 25 mm; hole spacing: 36 mm slotted	<b>210-197</b> 10 (10x1)
<b>Screws with nuts,</b> e.g., for fixing elements or fixing flanges			Hole width 18 mm; hole spacing 25 mm slotted	<b>210-115</b> 10 (10x1)		
M 2 x 12 mm	<b>231-195</b>	200 ( 2 x 100 )				
M 2.5 x 10 mm	<b>231-295</b>	200 ( 2 x 100 )				



M 2.5 x 10 screws with nuts (e.g., for fixing flanges)



For the entire range of WAGO carrier rails, refer to Full Line Catalog, Volume 1, Rail-Mounted Terminal Block Systems, or go to [www.wago.com](http://www.wago.com)



M 2 x 12 screws with nuts (e.g., for fixing elements)



# Pin Terminals, Crimping Tool

Insulated pin terminals, copper alloy, tin-plated, for 271, 272 Series	Insulated pin terminals, copper alloy, tin-plated, for 293 Series	Crimping tool for pin terminals
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Cross Section mm <sup>2</sup>	AWG	Color	Strip Length mm	I <sub>N</sub> A	L	L1	D	D1	D2	Item No.	Pack. Unit
Insulated pin terminal, for 271, 272 Series (white terminal block side only)											
0.5/0.75	20/18	green	4 <sup>+0.5</sup>	6/8	19.2	7.5	1.27	3	4.7	209-151	100
1/1.5	18/16	white	4 <sup>+0.5</sup>	10/16	19.2	7.5	1.73	3	4.7	209-164	100
2.5	14	blue	5 <sup>+0.5</sup>	20	18.2	7.5	2.3	3.8	5.5	209-157	100

Item No.	Pack. Unit
210-176	1



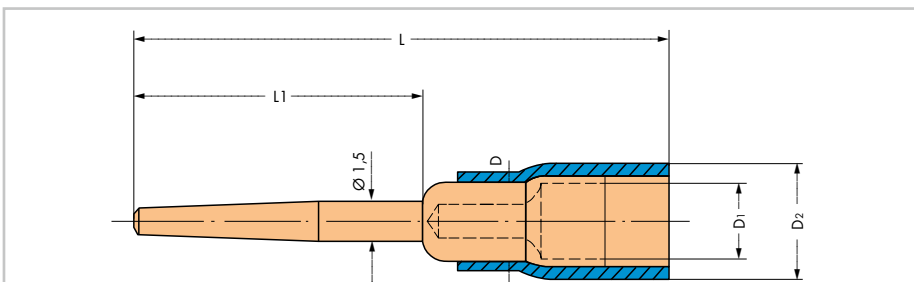
Push the pin terminal onto the conductor.

Cross Section mm <sup>2</sup>	AWG	Color	Strip Length mm	I <sub>N</sub> A	L	L1	D	D1	D2	Item No.	Pack. Unit
Insulated pin terminal, for 293 Series (white terminal block side only)											
0.5/0.75	20/18	green	4 <sup>+0.5</sup>	6/8	23.8	12.2	1.27	3	4.7	209-160	100
1/1.5	18/16	white	4 <sup>+0.5</sup>	10/16	23.8	12.2	1.73	3	4.7	209-161	100
2.5	14	blue	5 <sup>+0.5</sup>	20	23.2	12.2	2.3	3.8	5.5	209-162	100



Insert conductor with pin terminal into crimping position and hold it securely while crimping.

## Dimensions



For letters with the corresponding dimensions, see ordering information.



Squeeze the crimping tool beyond the lock-in position, then remove the conductor with crimped pin terminal.





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## Electrical Engineering Laboratory: Product Safety for Our Customers

The WAGO laboratory in Minden is an “accredited test lab for electrical and mechanical tests on terminal blocks and connectors, as well as for environment simulations.”

Accreditation, as ISO/IEC 17011:2004 defines, is a third party-attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

Accreditation, according to DIN EN ISO/IEC 17025, is granted by the Deutsche Akkreditierungsstelle GmbH DAKkS (German Accreditation Office GmbH DAKkS). This national accreditation office, which was established by the German Federal Ministry for Economics and Technology (BMWi), certifies that our test laboratory is officially recognized as possessing the necessary expertise to conduct defined tests and types of tests independently and objectively.

Through obtaining the accreditation, the following objectives were achieved:

- Customer requirements
- Workflow optimization
- Clearly defined processes
- Clear organization and structure
- Greater transparency
- Consistent, high-quality laboratory testing
- Maximum traceability
- Traceable measurement results
- Sustainable quality awareness

### Visitor center



**Conductor retention  
force testing**

### High-voltage test



### Vibration- and shock-resistance testing





## Deutsche Akkreditierungsstelle GmbH

**Beliehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV**  
Unterzeichnerin der Multilateralen Abkommen  
von EA, ILAC und IAF zur gegenseitigen Anerkennung

# Akkreditierung



Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium

**WAGO Kontakttechnik GmbH & Co. KG**  
**Hansastraße 27, 32423 Minden**

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

**Elektrische und mechanische Prüfungen an Klemmen und Steckverbinder  
sowie Umweltsimulation**



Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 18.12.2014 mit der Akkreditierungsnummer D-PL-19704-01 und ist gültig bis 17.12.2019. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 5 Seiten.

Registrierungsnummer der Urkunde: **D-PL-19704-01-00**

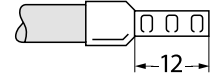
Frankfurt am Main, 18.12.2014



Siehe Hinweise auf der Rückseite

  
Im Auftrag Dipl.-Ing. (FH) Ralf Egner  
Abteilungsleiter

<p>0.25 ... 2.5 (4) mm<sup>2</sup> ①   AWG 22 ... 12              800 V/8 kV/3   600 V, 20 A <b>UL</b>              I<sub>N</sub> 24 A   600 V, 20 A <b>CSA</b></p> <p>Terminal block width 5.2 mm / 0.205 in   10 ... 12 mm / 0.43 in</p> <p>② Approvals</p>	<p>Pin spacing 5 mm / 0.197 in              0.5 ... 2.5 mm<sup>2</sup> "s+f-st"   AWG 20 ... 12 "sol.+f-st"              250 V/4 kV/3, 16 A   300 V, 10 A              500 V/4 kV/2, 16 A</p> <p> 10 ... 11 mm / 0.41 in</p> <p>② Approvals</p>	<p><b>Connection technologies</b></p>
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- ② Conductor sizes: 0.25 ... 4 mm<sup>2</sup> "s+f-st";  
 Push-in conductor sizes: 0.75 ... 4 mm<sup>2</sup> "s" and 0.75 ... 2.5 mm<sup>2</sup> "insulated ferrule, 12 mm"  
 (Length on ferrule is ONLY related to metallic part)



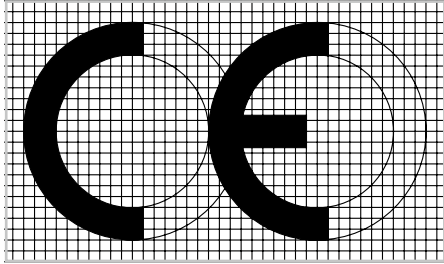
<p><b>Pin spacing 5 mm/0.197 in:</b> Terminal block pin spacing              (e.g., for PCB terminal blocks and <i>MULTI CONNECTION SYSTEM</i>)</p> <p><b>0.25 ... 2.5 (4) mm<sup>2</sup> / AWG 22 ... 12 :</b> Min. ... max. conductor size,              ferrules reduce cross section to 2.5 mm<sup>2</sup>/AWG 14 (see ①)</p> <p><b>800 V/250 V/500 V:</b> Rated voltage (see Full Line Catalog 1, Section 15)</p> <p><b>8 kV/4 kV:</b> Rated surge voltage (see Full Line Catalog 1, Section 15)</p> <p><b>3/2:</b> Degree of pollution (see Full Line Catalog 1, Section 15)</p> <p><b>I<sub>N</sub> 24 A/16 A:</b> Maximum current</p> <p><b>600 V, 20 A <b>UL</b>:</b> Voltage and current values according to UL approval</p> <p><b>600 V, 20 A <b>CSA</b>:</b> Voltage and current values according to CSA approval</p> <p><b>300 V, 10 A:</b> Voltage and current values according to applied UL and CSA approvals</p> <p><b>Terminal block width 5.2 mm/0.205 in:</b> Width of modular terminal blocks (e.g., rail-mounted terminal blocks)</p> <p> 10 ... 12 mm / 0.43 in: Strip length (here, fine-stranded conductor)</p> <p> 10 ... 11 mm / 0.41 in: Strip length (here, solid conductor)</p> <p>② Approvals (Current approvals are available online at: <a href="http://www.wago.com">www.wago.com</a>)</p>
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<h3>Abbreviations</h3>			
"sol.":	solid conductor	I <sub>N</sub> 32 A:	Nominal current 32 A (e.g., for jumpers)
"f-st":	fine-stranded conductor	WSB:	WAGO Quick marking system
"sol.+f-st":	solid and fine-stranded conductors	WCB:	WAGO Combi marking system
AWG:	American Wire Gauge	WMB:	WAGO Multi marking system

## CE Marking and EC Directives

### CE Conformity Marking:

The CE conformity marking consists of the characters "CE" with the following script:



Communauté Européenne  
(European Community)

EC directives are legally binding specifications for the European Community. Their goal is aligning legal and administrative specifications in the various EC member countries, in order to prevent trading hindrances arising from different national specifications.

In order to launch a product on the market, it must comply with the relevant directives. Several directives may apply for one single product, for example EMC and low voltage directives.

For WAGO products the following EC directives apply:

2006/95/EC  
– Low Voltage Directive

This directive covers electrical equipment designed for use with a voltage rating between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current.

This directive applies to products such as rail-mounted terminal blocks, terminal blocks, modular terminal blocks, terminal strips, etc. which comply with the specifications of the coordinated European standards and their specific parts (e.g., EN 60947 for rail-mounted terminal blocks and EN 60998 for terminal blocks).

The CE conformity marking must be applied to all electrical equipment, or, should this not be possible, to the smallest packing unit. With the CE marking, manufacturers attest conformity of their products to relevant directives.

In addition to the CE marking, the manufacturer provides an EC "Declaration of Conformity" for the product. The manufacturer must retain this declaration of conformity and present it on request to a national surveillance authority.

2004/108/EC  
– EMC Directive

This directive applies to any apparatuses, equipment and systems containing electric or electronic components. The BAPT (Bundesamt für Post und Telekommunikation / Federal Office for Post and Telecommunications) is authorized to draw a distinction between elementary and complex components. Elementary components such as resistors, transformers, ICs, relays, etc. are not provided with marking. For complex components, such as electro-motors, electronic cards, thermostats, etc., the EMC directives apply only if these components are sold directly to the end user.

All products subject to the application range of the EMC directive must display the CE marking on their housing. This marking proves conformity with the corresponding standards.

2006/42/EC  
– Machinery Directive

This directive applies to "complete" machines or equipment.

The manufacturers of machines or equipment are, however, obliged to use components which meet the corresponding EC directives (e.g., low voltage or EMC directives).

Fulfillment and conformity with these directives is required for the free exchange of goods within Europe.

94/9/EC Ex Protection Directive, ATEX 100a  
Explosion-proof devices.  
General technical information on electrical equipment used in hazardous environments.

In particular, the following standards apply to the design and application of the terminal blocks and connectors contained in this catalog:

- |   |   |  |
|---|---|--|
| IEC 60364-1<br>VDE 0100-100<br>/.. Erection of power installations with nominal voltages up to 1000 V<br>- Fundamental principles, assessment of general characteristics, definitions | IEC 60079-7<br>EN 60079-7<br>VDE 0170 Part 6<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Increased safety "e"  | IEC 61439-1<br>EN 61439-1<br>VDE 0660 Part 600<br>/ Low-voltage switchgear and control-gear assemblies - General Rules   |
| EN 50110-1<br>VDE 0105 Part 1<br>/ Operation of electrical installations  | IEC 60079-11<br>EN 60079-11<br>VDE 0170 Part 7<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Intrinsic safety "i"  | IEC 60439-3<br>EN 60439-3<br>VDE 0660 Part 504<br>/- Particular requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access<br>- Distribution boards  |
| IEC 61140<br>EN 61140<br>VDE 0140 Part 1<br>/ Protection against electric shock<br>- Common aspects for installation and equipment  | IEC 60079-14<br>EN 60079-14<br>VDE 0165 Part 1<br>/ Erection of electrical installations in hazardous areas   | IEC 61643-1<br>EN 61643-11<br>VDE 0675 Part 6-11<br>/ Surge protective devices connected to low-voltage power distribution systems,<br>- Performance requirements and testing methods  |
| VDE 0100-482<br>HD 384.4.482S1<br>/Erection of power installations with nominal voltages up to 1000 V<br>Fire protection for special risks or hazards                                 | IEC 60079-15<br>EN 60079-15<br>VDE 0170 Part 16<br>/ Electrical apparatus for potentially explosive atmospheres<br>- Type of protection "n"   | IEC 60335-1<br>EN 60335-1<br>VDE 0700 Part 1<br>/ Safety of household and similar electrical appliances<br>- General requirements  |
| VDE 0100 Part 710<br>/- Requirements for special installations or locations Part 710: Medically used areas  | IEC 60038<br>HD 472 S1<br>VDE 0175<br>/ IEC standard voltages   | IEC 60598-1<br>EN 60598-1<br>VDE 0711 Part 1<br>/ Lighting fixtures<br>- General requirements and tests  |
| VDE 0100-718<br>/- Requirements for special installations or locations<br>Part: 718: Institutional facilities   | DIN VDE 0298 Part 4<br>/ Application of cables and flexible cords in power installations<br>- Recommended values for current carrying capacities of cables for fixed installation in and on buildings and for flexible cables | IEC 60715<br>EN 60715<br>/- Standardized carrier rails for mechanical attachment of electrical devices in switchgear units   |
| IEC 60664-1<br>EN 60664-1<br>VDE 0110 Part 1<br>/ Insulation coordination for equipment within low-voltage systems<br>- Fundamental principles, requirements and tests                | IEC 60112<br>EN 60112<br>VDE 0303 Part 11<br>/ Method for determining the comparative and the proof tracking indices of solid insulating materials  | IEC 60999-1<br>EN 60999-1<br>VDE 0609 Part 1<br>/ Connecting devices -Electrical copper conductors- Safety requirements for screw-type and screwless-type clamping units<br>- General requirements and particular requirements for clamping units for conductors from 0.2 mm <sup>2</sup> up to 35 mm <sup>2</sup> |
| IEC 60204-1<br>EN 60204-1<br>VDE 0113 Part 1<br>/ Safety of machinery<br>- General requirements   | IEC 60529<br>EN 60529<br>VDE 0470 Part 1<br>/ Degrees of protection provided by enclosures (IP Code)<br>- Testing equipment and testing method  |  |
| IEC 60079-0<br>EN 60079-0<br>VDE 0170 Part 1<br>/ Electrical apparatus for potentially explosive atmospheres<br>- General requirements  |   |  |



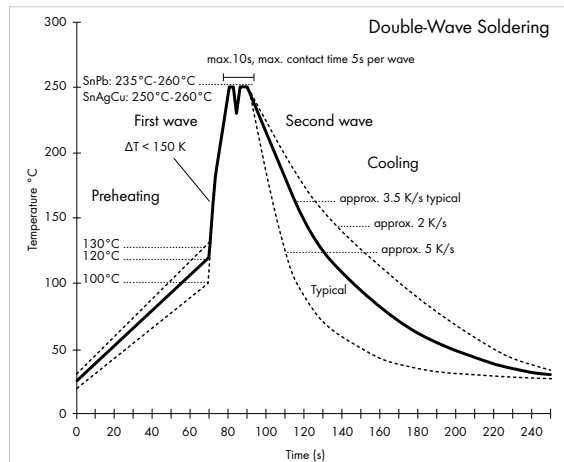
- IEC 60999-2  
EN 60999-2  
VDE 0609 Part 101  
/- General requirements and particular requirements for clamping units for conductors from 35 mm<sup>2</sup> up to 300 mm<sup>2</sup> (included)
- IEC 60998-1  
EN 60998-1  
VDE 0613 Part 1  
/ Connecting devices for low-voltage circuits for household and similar purposes  
- General requirements
- IEC 60998-2-1  
EN 60998-2-1  
VDE 0613 Part 2-1  
/- Special requirements for connecting devices as standalone devices with screw-type terminals
- IEC 60998-2-2  
EN 60998-2-2  
VDE 0613 Part 2-2  
/- Special requirements for connecting devices as standalone devices with screwless-type terminals
- IEC 60998-2-3  
EN 60998-2-3  
VDE 0613 Part 2-3  
/- Special requirements for connecting devices as standalone devices with insulation piercing clamping units
- IEC 60947-1  
EN 60947-1  
VDE 0660 Part 100  
/ Low-voltage switchgear and control gear  
- General rules
- IEC 60947-7-1  
EN 60947-7-1  
VDE 0611 Part 1  
/- Ancillary equipment, Terminal blocks for copper conductors
- IEC 60947-7-2  
EN 60947-7-2  
VDE 0611 Part 3  
/- Ancillary equipment; Ground (earth) conductor terminal blocks
- DIN VDE 0611 Part 4  
/ Rail-mounted terminal blocks for connection of copper conductors;  
- Multi-level distribution rail-mounted terminal blocks up to 6 mm<sup>2</sup>
- IEC 60947-7-3  
EN 60947-7-3  
VDE 0611 Part 6  
/- Ancillary equipment; Safety requirements for fuse terminal blocks
- IEC 61984  
EN 61984  
VDE 0627  
/ Connectors - Safety requirements and tests
- IEC 60512-1  
EN 60512-1  
/ Connectors for electronic equipment – Tests and measurements  
- General
- IEC 60320-1  
EN 60320-1  
VDE 0625 Part 1  
/ Appliance couplers for household and similar general purposes  
- General requirements
- IEC 60352-1  
EN 60352-1  
/ Solderless connections;  
Wrapped connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-2  
EN 60352-2  
/ Solderless connections;  
Solderless crimped connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-3  
EN 60352-3  
/ Solderless connections;  
Solderless accessible insulation displacement connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-4  
EN 60352-4  
/ Solderless connections;  
Solderless non-accessible insulation displacement connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-5  
EN 60352-5  
/ Solderless connections;  
Solderless press-in connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-6  
EN 60352-6  
/ Solderless connections;  
Insulation piercing connections  
- General requirements,  
Test methods and practical guidance
- IEC 60352-7  
EN 60352-7  
/ Solderless connections;  
Spring clamp connections  
- General requirements,  
Test methods and practical guidance

**Soldering Information**

**Wave Soldering:**

WAGO's PCB terminal blocks and connectors comply with the 2011/65/EU Directive of June 8, 2011 and display the "RoHS compliant" logo on their packaging.

**In accordance with IEC 61760-1, the maximum double-wave soldering temperature is 260 °C for maximum 10 seconds or 5 seconds per wave.**

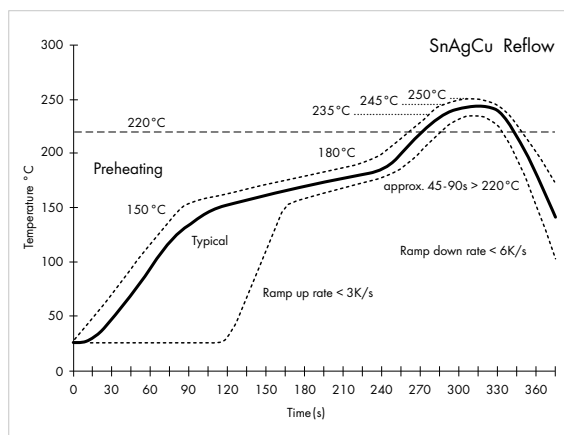


**Reflow Soldering:**

WAGO's THR and SMD PCB terminal blocks and connectors have high-temperature-resistant insulated housings and reflow solder contacts.

**In accordance with IEC 61760-1 or IEC 60068-2-58, the maximum soldering temperature is 260 °C (peak temperature).**

**Due to customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.**



**Insulating material**

WAGO primarily uses polyamide (PA66 and PA46) for housing current-conducting parts, as well as polyphthalamide (PPA) and polycarbonate (PC) for insulating material (see table). For more than 40 years, these materials have proven themselves in WAGO products and all are approved by the responsible test authorities.

**Table: Standard Insulating Materials**

Material	Nylon 66 (PA 66)	Glass fiber-reinforced nylon 66 (PA 66 GF)	Glass fiber reinforced polyphthalamide (PPA GF)	PA 46	PC	PC
Flammability UL 94 flammability test ratings	V0	V0	V0	V2	V2	V0
Glow-wire test per IEC 60695-2-12 GWFI	960 °C	960 °C	960 °C	750 °C	800 °C	960 °C
IEC 60695-2-13 GWIT	775 °C	775 °C	775 °C (725 °C)	725 °C	850 °C	850 °C
Comparative Tracking Index (CTI) per IEC 60112	600 V	600 V	600 V	375 V	225 V	225 V
RTI impact per UL 746B	105 °C	100 °C	115 °C	115 °C	125 °C	120 °C
Heat deflection temperature (HDT/B) per ISO 75 (at 0.45 MPa bending stress)	215 °C	235 °C	285 °C	280 °C	130 °C (1.8 MPa)	130 °C (1.8 MPa)
Surface resistivity per IEC 60093	10 <sup>12</sup> Ω	10 <sup>12</sup> Ω	10 <sup>15</sup> Ω	10 <sup>13</sup> Ω	10 <sup>15</sup> Ω	10 <sup>15</sup> Ω
Specific through resistance per IEC 60093	10 <sup>15</sup> Ω/cm	10 <sup>15</sup> Ω/cm	10 <sup>13</sup> Ω/cm	10 <sup>13</sup> Ω/cm	10 <sup>11</sup> Ω/cm	10 <sup>13</sup> Ω/cm
Dielectric strength per IEC 60243-1	30 kV/mm	40 kV/mm	26 kV/mm	25 kV/mm	25 kV/mm	29 kV/mm

**Polyamide (PA 66)**

WAGO uses modified, halogen-free, flame-retardant polyamides according to IEC 61249-2-2. These materials do not contain any heavy metals, silicone, asbestos, or formaldehyde as formulation components.

They not corrode, are difficult to ignite and self-extinguishing (V0 rating per UL 94).

Adhering to UL 746C, the polyamides used at WAGO have a continuous operating temperature of 105 °C based on the relative temperature index  $RTI_{imp}$  with sudden loading. This ensures that the necessary electrical and mechanical insulating properties are maintained at sufficient, guaranteed levels over a long period of time.

The short-term upper temperature limit is 200 °C (392 °F).

The insulation material can be handled at temperatures as low as -35 °C (-31 °F) without damage. WAGO products can even be used at temperatures down to -60 °C (-76 °F) when installed and wired.

Environmental humidity (up to 2.5 % in a standard atmosphere) is absorbed, providing the polyamides with optimum elasticity, strength and durability.

In practical use, basic stabilization of WAGO's polyamides has been proven over many years as sufficient to prevent damage caused by ozone or UV radiation exposure in intended applications. Resistance to adverse climate conditions is excellent and polyamides have also been used successfully in tropical areas.

Insulating parts made of polyamide are resistant to insects. The material does not provide oxygen or other biogenic elements to microorganisms.

The presence of anaerobic earth bacteria, mold, fungus and enzymes does not result in degradation of the material.

Polyamides are resistant to most fuels, greases and oils, as well as the most common cleaners, such as alcohol, Freon, Freon and carbon tetrachloride.

Acid resistance depends on the acid type and concentration, as well as the exposure time.

The use of insulating materials during in-house production at WAGO only occurs after acceptance of factory test certificates and specified material tests.

**Glass Fiber-Reinforced Polyamide (PA 66 GF)**

WAGO uses glass fiber-reinforced polyamides for components with increased mechanical demands, such as levers, push-buttons or housings exposed to high stresses, because glass-reinforced polyamides have significantly higher characteristic properties than non-reinforced polyamides.

In general, materials are used that have excellent creepage current resistance, flammability ratings and high temperature resistance.

More data can be found in the table.

**Polyphthalamide (PPA GF)**

This glass fiber-reinforced, high-performance polyamide is ideal for high-temperature applications, due to the material's high level of thermal dimensional stability, its low dependence on ambient conditions and its excellent strength properties. The material's outstanding tracking resistance permits short creepage distances to be implemented in miniature components. The halogen and heavy-metal-free fire protection equipment (according to IEC 61249-2-2) enables placement into flammability class V0 according to UL 94 - even for extremely thin walls. PPA GF absorbs minute amounts of moisture from the ambient air, making it ideal for THR applications and for thin-walled, dimensionally stable components.

**Polyamide (PA 46)**

In comparison with PA 66, PA 46 features a much higher dimensional stability under heat. The relative temperature index  $RTI_{imp}$  with sudden loading is 115 °C for PA 46. The reliable short-term temperature for the type used by WAGO is 280 °C (536 °F). More data can be found in the table.

**Polycarbonate (PC)**

Polycarbonate has excellent dimensional stability under heat. The mechanical properties of strength, hardness, rigidity and durability remain intact at extremely high temperatures up to approximately 135 °C (275 °F). Its excellent electrical insulating properties and dimensional stability are virtually independent of environmental conditions, such as humidity and temperature.

Highly precise components can be realized due to the low shrinkage of the material during injection molding.

Polycarbonate has excellent weather resistance and is also highly resistant to high-energy radiation.

If the PC is not colored, then the components are glass-clear.

Thanks to its desirable properties (e.g., dimensional stability, heat resistance, non-flammability, durability and transparency), PC is a proven and widely used material in the electrical industry.

Depending on the demands placed on the finished product, WAGO uses polycarbonates that carry flammability classifications V2 and V0 according to UL 94.

Medium-viscosity PC is used, and features excellent chemical resistance.

## Contact Materials

Hard and extra-hard electrolytic copper ( $E_{Cu}$ ), as well as extra-hard copper alloys are the standard materials used for the current-carrying parts of all WAGO products.

This material combines excellent conductivity and good chemical resistance without the risk of stress-induced cracking.

## Contact Plating

The special tin layer, which is the standard layer for all current-carrying parts in WAGO products, ensures perfect long-term protection against corrosive substances. Furthermore, these layers provide a gas-tight contact that ensures a durable transition resistance.

At the clamping unit the conductor is pressed with a high contact pressure into the soft tin layer. This protects the contact area against corrosion.

The thick tin layer also ensures good solderability of the solder pins for both PCB terminal blocks and connectors.

## Clamping Spring Material

All WAGO clamping springs are made of high-quality, accurately tested austenitic chrome nickel steel (CrNi) with high tensile strength, which boasts proven corrosion resistance through long-term usage.

It is resistant to salt sea air, city pollutants and industrial emissions (e.g., sulfur dioxide, hydrogen sulfide).

At room temperatures of approximately 20 °C (68 °F), the material is resistant to salt solutions up to 30 % and dilute phosphoric acids up to 30 %.

Even after decades of use, no galvanic corrosion between the chrome nickel spring steel (in connection with the contact materials used by WAGO) and the connected copper conductors has been detected to date.

The relaxation of the material as a function of time and surrounding temperatures up to 105 °C (221 °F) can be ignored. Samples loaded with 500 N/mm<sup>2</sup> at a temperature of 250 °C (482 °F) showed a relaxation of only 1.5 %.

In certain product lines, the clamping springs are thermally treated at temperatures between 350 °C (662 °F) and 420 °C (788 °F) after production.

This treatment reduces internal stress due to the material's mechanical deformation, which may result in a slight brown discoloration of the spring surface.

WAGO only accepts deliveries of chrome nickel spring steel against certificates of conformity and after select material tests.

# General Technical Information on Electrical Equipment Used in Hazardous Areas

A prerequisite for a potentially explosive hazard is the formation of an explosive atmosphere. Such an atmosphere can be produced at any location where flammable gases or liquids are manufactured, processed, transported and/or stored. Such hazardous areas can be found in a wide range of industries, including chemical plants, refineries, power plants, paint producing facilities, painting shops, filling stations, vehicles, sewage treatment plants, airports, grain mills or harbor facilities.

THE FOLLOWING APPLY AS A GUIDELINE FOR THE UNDERLYING PRINCIPLE FOR EXPLOSION PROTECTION:

## - General Provisions

European Standard EN 60079-0 - Classification VDE 0170, Part 1 - contains the "General provisions" for the design and testing of electrical equipment to be used in hazardous areas.

This ensures this equipment does not cause an explosion in the surrounding atmosphere.

EN 60079-0 is supplemented or revised by the European standards indicated on the right which refer to the specifically standardized types of protection.

## Electrical Equipment

Electrical equipment includes all objects used in whole or in part with electricity. This includes items for generation, transport, distribution, storage, measurement, control, conversion and consumption of electrical power, as well as telecommunications.

## Ex Components

Ex components are elements of electrical equipment for potentially explosive areas that are marked with the letter "U". These components may not be used on their own in such areas and require an additional certificate when used in such areas when installed in the electrical equipment.

## Ignition Protection Categories

Only explosion-proof equipment must be used in areas where an explosive atmosphere may still be expected despite the implementation of prevention measures. Explosion-proof electrical equipment can have various types of protection in accordance with the construction specifications of the relevant standards.

Protection used by the manufacturer essentially depends on the type and function of the apparatus. From a safety point of view, all standardized types of protection should be viewed as equal.

Ignition protection category "n" describes exclusively the use of explosion-proof electrical components in Zone 2. This zone includes areas where explosive atmospheres can only be expected to occur rarely or for short duration. This represents a transition between Zone 1, in which explosion protection is required, and the safe area in which, for example, welding may be performed at any time.

Regulations covering these electrical components are being prepared worldwide. Organizations such as KEMA in the Netherlands, or PTB in Germany certify that the devices meet the requirements of the EN60079-15 standard.

Ignition protection category "n" also requires that electrical equipment be provided with additional ID markings as follows:

- A - non-sparking (function modules without relays/switches)
- AC - sparking, contacts protected with seals (function modules with relays / without switches)
- L - limited power (function modules with switches)

### Current Carrying Capacity for Carrier Rails as Ground Conductor Busbars

**Table A.1 – Maximum short-time withstand current capacities assigned to carrier rails and thermal rated current of a GN (Ground-Neutral) busbar**

Rail profile	Material	Equivalent Electrolytic copper cross section mm <sup>2</sup>	Short-time current withstand capacity 1 s kA	Thermal rated current of a GN busbar A
DIN rail IEC 60715/TH 15 – 5.5	Steel <sup>b</sup>	10	1.2	–
	Copper <sup>a</sup>	25	3.0	101
	Aluminum <sup>a</sup>	16	1.92	76
DIN rail IEC 60715/TH 35 – 7.5	Steel <sup>b</sup>	16	1.92	–
	Copper <sup>a</sup>	50	6.0	150
	Aluminum <sup>a</sup>	35	4.2	125
DIN rail IEC 60715/TH 35 – 15	Steel <sup>b</sup>	50	6.0	–
	Copper <sup>a</sup>	150	18.0	309
	Aluminum <sup>a</sup>	95	11.4	232

<sup>a</sup> Copper and aluminum alloys selected by the rail-mount terminal block manufacturer for compliance with the listed values.  
<sup>b</sup> Ground conductor busbars made of steel shall not be used as GN conductor.  
(EN 60947-7-2/VDE 0611, part 3, section 7.1.7)

## IP Ratings

### IP Ratings for Electrical Equipment to IEC/EN 60529

Alphanumeric nomenclature for type of protection			
Code letters IP	Protection against touch and solid objects or water	IP (Ingress Protection)	
First digit 0 to 6	Indicates degrees of protection against touch or solid objects.	If indicating the degree of protection requires only one digit, the other (second) digit must be substituted for with an X.	
Second digit 0 to 8			
First digit:		Second digit:	
IPOX	No protection against touch, or solid objects	IPX0	No protection against water
IP1X	Protected against solid objects > 50 mm	IPX1	Protected against vertically falling water
IP2X	Protection against solid objects > 12 mm (e.g. finger)	IPX2	Protected against dripping water - 15° angle
IP3X	Protected against solid objects > 2.5 mm	IPX3	Protected against water spray
IP4X	Protected against solid objects > 1 mm	IPX4	Protection against water splash
IP5X	Dust-protected (limited ingress, no harmful deposits)	IPX5	Protected against water jet, e.g., from a nozzle
IP6X	Dust-tight (totally protected against dust)	IPX6	Protected against flooding
		IPX7	Protected against temporary immersion
		IPX8	Protected against continuous immersion

IP vs. NEMA	
IP Code	NEMA
10	1
11	2
54	3
14	3R
54	3S
55	4&4X
52	5
67	6&6P
52	12&12K
54	13

## Pollution degree

Pollution factors are all solid, liquid or gaseous foreign matter which may reduce the dielectric strength or the specific surface resistance. Factors are divided into 4 classes based on expected environmental conditions:

		Examples of pollution degrees for assigned areas:
Pollution degree 1:	No pollution, or only dry, non-conductive pollution occurs. The pollution has no influence.	Open, unprotected insulated equipment in air-conditioned or clean, dry rooms.
Pollution degree 2:	Only non-conductive pollution occurs; occasional, temporary conductivity caused by condensation can also be expected.	Open, unprotected insulated equipment in occupied areas, shops, laboratories, mechanical workshops and medical rooms.
Pollution degree 3:	Conductive pollution occurs, or dry, non-conductive pollution occurs which will become conductive due to condensation.	Open, unprotected insulated equipment in industrial, business and farming areas, e.g., unheated rooms, workshops and boiler rooms.
Pollution degree 4:	The pollution generates persistent conductivity caused by conductive dust, rain or wet conditions.	Open, unprotected insulated equipment for outdoor use.

## International Certification Organizations – Overview

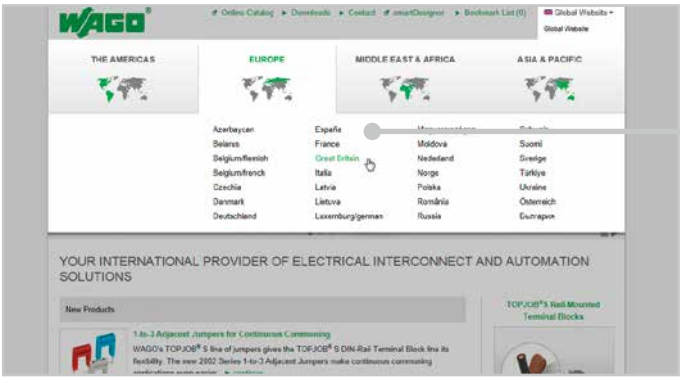
	Abbreviation for online search		Abbreviation for online search
 <b>Underwriters Laboratories USA</b> <a href="http://www.ul.com">http://www.ul.com</a>	UL	 <b>Danmarks Elektriske Materielkontrol Dänemark</b> <a href="http://www.demko.dk">http://www.demko.dk</a>	<b>DEMKO</b>
 <b>Underwriters Laboratories USA</b> <a href="http://www.ul.com">http://www.ul.com</a>	UL	<b>CENELEC CERTIFICATION AGREEMENT</b>	
 <b>Underwriters Laboratories USA</b> <a href="http://www.ul.com">http://www.ul.com</a>	cURus	 <b>CCA</b> <b>Danmarks Elektriske Materielkontrol Dänemark</b> <a href="http://www.cenelec.org">http://www.cenelec.org</a>	<b>CCA Zul.-Nr. mit DK</b>
 <b>Underwriters Laboratories USA</b> <a href="http://www.ul.com">http://www.ul.com</a>	cULus	 <b>SETI – FEMKO Sähköarkastuskeskus Elinspektionscentralen Finnland</b> <a href="http://www.seti.fi">http://www.seti.fi</a>	
 <b>Canadian Standards Association Kanada</b> <a href="http://www.csa.ca">http://www.csa.ca</a>	CSA	 <b>Sähköarkastuskeskus Elinspektionscentralen Finnland</b> <a href="http://www.fimko.com">http://www.fimko.com</a>	<b>FIMKO</b>
 <b>VDE-Gutachten mit Fertigungsüberwachung Bundesrepublik Deutschland</b> <a href="http://www.vde.de/vde/html/e/home.htm">http://www.vde.de/vde/html/e/home.htm</a>	VDE	<b>SABS</b> <b>South African Bureau of Standards Süd-Afrika</b> <a href="http://www.sabs.co.za">http://www.sabs.co.za</a>	<b>SABS</b>
 <b>VDE – Deutscher Verband für Elektrotechnik Bundesrepublik Deutschland</b> <a href="http://www.vde.de">http://www.vde.de</a>		 <b>RosTest Russland</b> <a href="http://www.rostest.ru">http://www.rostest.ru</a>	<b>ROSTEST</b>
<b>VDE</b> <b>VDE – Prüfbericht Bundesrepublik Deutschland</b>		 <b>Departamentul Moldovastandard Moldawien</b> <a href="http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm">http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm</a>	<b>CSM</b>
 <b>Österreichischer Verband für Elektrotechnik Österreich</b> <a href="http://www.ove.at">http://www.ove.at</a>	ÖVE	 <b>Certificate of Registration Großbritannien</b> <a href="http://www.astacertification.com">http://www.astacertification.com</a>	<b>ASTA</b>
 <b>Schweizerischer Elektrotechnischer Verein Schweiz</b> <a href="http://www.sev.ch/">http://www.sev.ch/</a>	SEV	 <b>Rheinisch-Westfälischer Technischer Überwachungsverein e.V. Bundesrepublik Deutschland</b> <a href="http://www.rwtuv.de">http://www.rwtuv.de</a>	<b>RWTÜV</b>
 <b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b> <a href="http://www.kema.nl">http://www.kema.nl</a>	KEMA	 <b>Elektrotechnick ý v ýskumn ý a projektov ý ústav Tschechien</b> <a href="http://www.ezu.cz">http://www.ezu.cz</a>	<b>EZU</b>
<b>CENELEC CERTIFICATION AGREEMENT</b>		 <b>Stowarzyszenie Elektrykow Polskich Polen</b> <a href="http://www.bbj.pl">http://www.bbj.pl</a>	<b>BBJ</b>
 <b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b> <a href="http://www.cenelec.org">http://www.cenelec.org</a>	CCA Zul.-Nr. mit NL	 <b>Stowarzyszenie Elektrykow Polskich Polen</b> <a href="http://www.sep.com.pl">http://www.sep.com.pl</a>	<b>SEP</b>
 <b>Norges Elektriske Materialkontroll Norwegen</b> <a href="http://express.nemko.com">http://express.nemko.com</a>	NEMKO		
 <b>Svenska Elektriska Materielkontrollanstalten AB Schweden</b> <a href="http://www.semko.com">http://www.semko.com</a>	SEMKO		



	Abbreviation for online search		Abbreviation for online search	
<b>CNET</b> Centre National d'Etudes des Télécommunications Frankreich <a href="http://www.lannion.cnet.fr">http://www.lannion.cnet.fr</a>	<b>CNET</b>	 Ex	<b>Robbanásbiztos Villamos Berendezések Ungarn</b> <a href="http://www.bki.hu">http://www.bki.hu</a>	<b>BKI</b>
<b>LCIE</b> Laboratoire Central des Industries Electriques Frankreich <a href="http://www.lcie.fr">http://www.lcie.fr</a>	<b>LCIE</b>	<b>CB</b>	<b>CB – TEST CERTIFICATE Indien</b> <a href="http://www.ul-europe.com">http://www.ul-europe.com</a>	<b>CB</b>
 <b>Fyzikálne Technick ý Zkusebn í Ústav, Ostrava-Radvanice Tschechien</b> <a href="http://www.ftzu.cz">http://www.ftzu.cz</a>	<b>FTZU</b>	<b>CB</b>	<b>CB – TEST CERTIFICATE China</b> <a href="http://www.ul-europe.com">http://www.ul-europe.com</a>	<b>CB</b>
			<b>UL-International Demko A/S Dänemark</b> <a href="http://www.ul-europe.com">http://www.ul-europe.com</a>	<b>ENEC</b>
<b>Shipbuilding approvals</b>		<b>Ex approvals</b>		
 <b>Germanischer Lloyd Bundesrepublik Deutschland</b> <a href="http://www.gl-group.com">http://www.gl-group.com</a>	<b>GL</b>		<b>Physikalisch Technische Bundesanstalt Bundesrepublik Deutschland Ex e II</b> <a href="http://www.ptb.de">http://www.ptb.de</a>	<b>PTB</b>
<b>BV</b> Bureau Veritas Frankreich <a href="http://www.bureauveritas.fr">http://www.bureauveritas.fr</a>	<b>BV</b>		<b>Underwriters Laboratories USA</b> <a href="http://www.ul.com">http://www.ul.com</a>	<b>cURus-EX</b>
 <b>Lloyd's Register of Shipping Großbritannien</b> <a href="http://www.lloydsregister.com">http://www.lloydsregister.com</a>	<b>LR</b>		<b>N.V. tot Keuring van Elektrotechnische Materialen Niederlande</b> <a href="http://www.kemaquality.com">http://www.kemaquality.com</a>	<b>KEMA-EX</b>
 <b>NV – Det Norske Veritas Norwegen</b> <a href="http://www.dnv.com">http://www.dnv.com</a>	<b>DNV</b>	<b>GOSENERGO-Ex</b>	<b>GOSENERGONADZOR Russland</b>	<b>GOSENER GO-EX</b>
 <b>Russian Maritime Register of Shipping GUS</b> <a href="http://www.rs-head.spb.ru">http://www.rs-head.spb.ru</a>	<b>RMR</b>		<b>Fyzikálne Technick ý Zkusebn í Ústav, Ostrava-Radvanice Tschechien</b> <a href="http://www.ftzu.cz">http://www.ftzu.cz</a>	<b>FTZU</b>
 <b>Polski Rejestr Statków Polen</b> <a href="http://www.prs.pl">http://www.prs.pl</a>	<b>PRS</b>		<b>Robbanásbiztos Villamos Berendezések Ungarn</b> <a href="http://www.bki.hu">http://www.bki.hu</a>	<b>BKI-EX</b>
 <b>Korean Register of Shipping Korea</b> <a href="http://www.krs.co.kr">http://www.krs.co.kr</a>	<b>KR</b>	<b>ABS</b>		
<b>ABS</b> American Bureau of Shipping USA <a href="http://www.eagle.org">http://www.eagle.org</a>	<b>ABS</b>			

# Approvals – User Guide

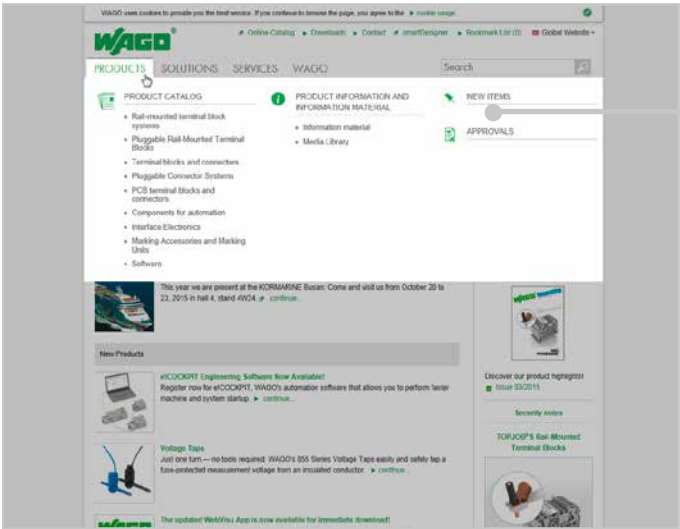
Updated approvals can be found at [www.wago.com](http://www.wago.com)



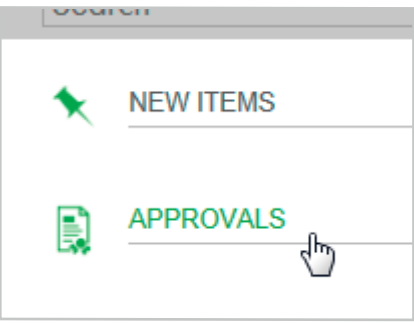
## 1: Select "Country" ①



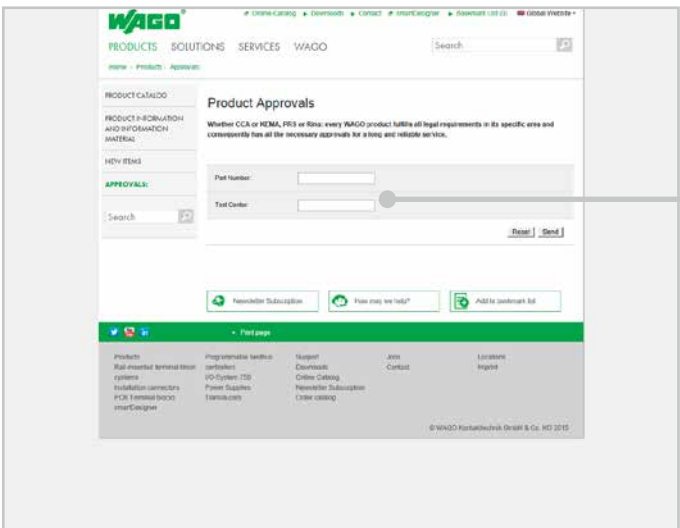
e.g., Great Britain



## 2: Select "Products"

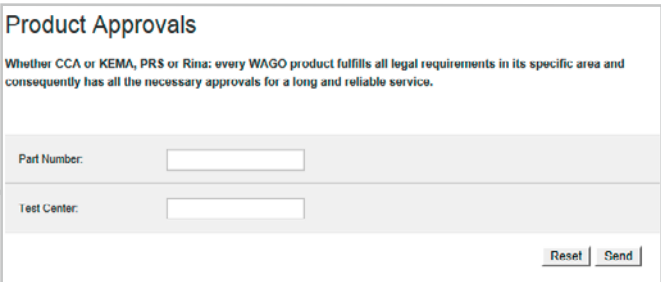


Select "Approvals"

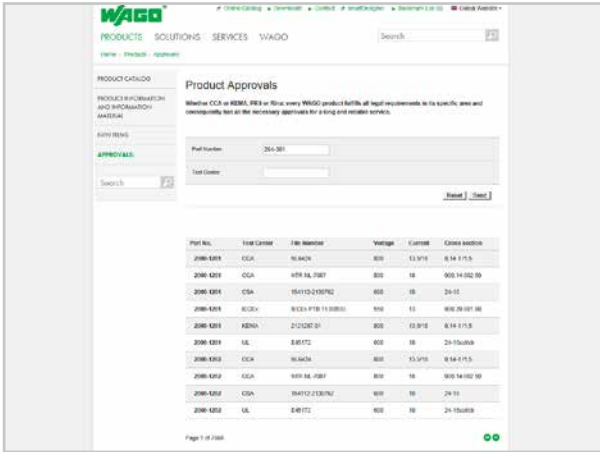


## 3: "Search for Approvals"

Here, you can search the approvals and items according to defined criteria.



① Step 1 is only required if the country has not been detected automatically.



● 4: Entry Options

a) Item Number  
e.g., 264-301

b) Certification Agency  
e.g., "UL"

c) Certification Agency and Item Number Range; e.g., "280- " and "UL"

Part No.	Test Center	File Number	Voltage	Current	Cross section
264-301	ABS	04-HG476174/1-PDA	800	24	2.5
264-301	BV	07436/C0			0.08-2.5
264-301	CCA	2110272.04	800	24	000.08-002.50
264-301	CCA	NL6511	800	24	2.5
264-301	CSA	10677-23	600	20	26-12
264-301	DNV	E-9215	800	24	2.5
264-301	GL	17295-00HH	800	24	2.5
264-301	KR	HMB05000-EL002	800	24	
264-301	LR	92/20242(E5)	800	24	2.5
264-301	LUL	E45172	300	20	28-12

Search Result a)  
Item Number:

All approvals related to that product will be displayed.

Part No.	Test Center	File Number	Voltage	Current	Cross section
2000-1201	LUL	E45172	600	10	24-16sq0/str
2000-1202	LUL	E45172	600	10	24-16sq0/str
2000-1203	LUL	E45172	600	10	24-16sq0/str
2000-1204	LUL	E45172	600	10	
2000-1205	LUL	E45172	600	10	24-16sq0/str
2000-1206	LUL	E45172	600	10	
2000-1207	LUL	E45172			
2000-1301	LUL	E45172	600	10	24-16sq0/str
2000-1302	LUL	E45172	600	10	24-16sq0/str
2000-1303	LUL	E45172	600	10	

Search Result b)  
Certification Agency:

All products approved by that agency will be displayed.

Part No.	Test Center	File Number	Voltage	Current	Cross section
280-101	LUL	E45172	600	20	28-12
280-104	LUL	E45172	600	20	28-12
280-107	LUL	E45172			28-12
280-510	LUL	E45172	300	15	28-12
280-513	LUL	E45172	300	15	28-12
280-515	LUL	E45172	300	15	28-12
280-519	LUL	E45172	300	15	28-12
280-520	LUL	E45172	300	15	28-12
280-521	LUL	E45172	300	15	28-12
280-522	LUL	E45172	300	15	28-12

Search Result c)  
Certification Agency and Item Numbers:

The whole range of products approved by that agency will be displayed.

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
<b>206 Series</b>		<b>210 Series</b>		<b>222 Series</b>		<b>232 Series</b>	
206-118	506	210-331/254-204	512	222-413	469	232-682	373
206-124	505	210-331/254-206	512	222-415	469	232-683	373
206-125	505	210-331/254-207	512			232-684	373
206-126	505	210-331/500-103	512	222-500	469	232-685	373
206-127	505	210-331/500-104	512	222-505	469	232-687	373
206-128	505	210-331/508-103	513	222-510	469		
206-170	504	210-331/508-104	513			<b>233 Series</b>	
206-171	504	210-331/750-202	513	<b>224 Series</b>		233-331	292
206-173	504	210-331/762-202	513	224-101	457	233-332	292
206-174	504	210-332	513	224-104	457	233-335	293
		210-332/0508-001	513	224-112	457		
206-204	506	210-332/1000-202	513	224-114	457	<b>235 Series</b>	
206-216	506	210-332/1000-204	513			235-100	411
206-225	507	210-332/1000-206	513	224-201	457		
206-250	507	210-332/1016-202	513			235-200	411
206-294	502	210-332/1016-204	513	<b>231 Series</b>			
		210-332/1016-206	513	231-129	368	235-300	411
206-804	509	210-332/350-202	512	231-130	368		
206-806	508	210-332/350-204	512	231-131	366	235-400	411
206-807	508	210-332/350-206	512	231-159	366	235-401	427
206-808	508	210-332/381-202	512	231-160	368	235-401/331-000	411
206-810	509	210-332/381-204	512	231-193	369	235-402	429
206-811	509	210-332/381-205	512	231-194	334	235-402/331-000	413
206-815	509	210-332/381-206	512	231-195	334	235-403	429
206-830	502	210-332/396-202	512			235-403/331-000	413
206-831	497	210-332/396-204	512	231-231	366	235-404	429
206-840	502	210-332/396-205	512	231-291	366	235-404/331-000	413
206-841	423	210-332/396-206	512	231-295	334	235-405	429
206-859	383	210-332/400-202	512			235-405/331-000	413
206-859	499	210-332/400-204	512	231-393	369	235-406	429
206-860	499	210-332/400-205	512			235-406/331-000	413
206-861	499	210-332/400-206	512	231-500	368	235-407	429
206-880	498	210-332/500-202	512			235-407/331-000	413
		210-332/500-204	512	231-661	374	235-408	429
		210-332/500-205	512	231-662	374	235-408/331-000	413
		210-332/500-206	512	231-668	369	235-409	429
<b>209 Series</b>		210-332/508-202	513	231-669	369	235-409/331-000	413
209-120	375	210-332/508-204	513	231-670	369	235-410	429
209-122	484	210-332/508-205	513	231-671	369	235-410/331-000	413
209-123	478	210-332/508-206	513	231-672	369	235-412	429
209-130	498	210-332/575-103	513	231-673	369	235-412/331-000	413
209-132	498	210-332/700-102	513	231-674	369	235-416	429
209-137	375	210-332/700-103	513	231-675	369	235-416/331-000	413
209-147	518	210-332/750-020	513			235-424	429
209-148	375	210-332/762-020	513	231-902	376	235-424/331-000	413
209-151	519	210-333	52	231-903	376	235-436	429
209-157	519	210-334	513	231-905	376	235-436/331-000	413
209-160	519	210-334/762-202	513	231-907	376	235-448	429
209-161	519			231-910	376	235-448/331-000	413
209-162	519	210-406	515			235-452/331-000	439
209-164	519	210-416	515	<b>232 Series</b>		235-453/331-000	439
209-172	330			232-602	372	235-454/331-000	439
209-173	372	210-533	516	232-603	372	235-455/331-000	439
209-174	372			232-604	372	235-456/331-000	439
209-176	372	210-647	496	232-605	372	235-457/331-000	439
209-177	330	210-648	496	232-606	372	235-458/331-000	439
		210-657	496	232-607	372	235-459/331-000	439
		210-658	496	232-608	372	235-460/331-000	439
<b>210 Series</b>				232-609	372	235-462/331-000	439
210-110	28	210-719	496	232-610	372	235-466/331-000	439
210-112	518	210-720	496	232-612	372	235-474/331-000	439
210-113	518	210-721	496	232-632	372	235-486/331-000	439
210-114	518	210-722	496	232-633	372	235-498/331-000	439
210-115	518			232-634	372		
210-136	34	<b>215 Series</b>		232-635	372	235-500	411
210-137	34	215-212	487	232-636	372	235-501	427
210-154	484			232-637	372	235-501/331-000	411
210-176	519	215-311	487	232-638	372	235-502	429
210-191	515			232-639	372	235-502/331-000	413
210-197	518	215-711	487	232-640	372	235-503	429
210-199	515			232-642	372	235-503/331-000	413
		<b>221 Series</b>		232-646	372	235-504	429
210-213	392	221-412	467	232-662	373	235-504/331-000	413
210-250	366	221-413	467	232-663	373	235-505	429
210-251	292	221-415	467	232-664	373	235-505/331-000	413
				232-665	373	235-506	429
210-331	513	<b>222 Series</b>		232-665	373	235-506/331-000	413
210-331/250-202	512	222-412	469	232-667	373	235-507	429
210-331/250-204	512			232-670	373	235-507/331-000	413
210-331/250-206	512						
210-331/250-207	512						
210-331/254-202	512						

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
<b>235 Series</b>		<b>235 Series</b>		<b>236 Series</b>		<b>236 Series</b>	
235-508	429	235-765/331-000	411	236-308	443	236-752	441
235-508/331-000	413	235-766	427	236-312	443	236-753	441
235-509	429	235-766/331-000	411	236-316	443	236-754	441
235-509/331-000	413	235-767	427	236-324	443	236-755	441
235-510	429	235-767/331-000	411	236-332	497	236-756	441
235-510/331-000	413	235-768/331-000	411	236-335	497	236-757	441
235-512	429					236-762	441
235-512/331-000	413	235-800	411	236-400	441	236-763	441
235-516	429	235-801	427	236-401	441	236-764	441
235-516/331-000	413	235-801/331-000	411	236-402	443	236-765	441
235-524	429	235-802	429	236-402/334-604	445	236-766	441
235-524/331-000	413	235-802/331-000	413	236-402/334-604/997-405	445	236-767	441
235-550	411	235-803	429	236-403	443	236-800	441
235-551/331-000	437	235-803/331-000	413	236-403/334-604	445	236-850	441
235-552/331-000	439	235-804	429	236-403/334-604/997-405	445	236-851	441
235-553/331-000	439	235-804/331-000	413	236-404	443	236-852	441
235-554/331-000	439	235-805	429	236-404/334-604	445	236-853	441
235-555/331-000	439	235-805/331-000	413	236-404/334-604/997-406	445	236-854	441
235-556/331-000	439	235-806	429	236-405/334-604	445	236-855	441
235-557/331-000	439	235-806/331-000	413	236-405/334-604/997-406	445	236-856	441
235-558/331-000	439	235-807	429	236-406	443	236-881	441
235-559/331-000	439	235-807/331-000	413	236-406/334-604	445	236-882	441
235-560/331-000	439	235-808	429	236-406/334-604/997-406	445	236-884	441
235-562/331-000	439	235-808/331-000	413	236-408	443	236-885	441
235-566/331-000	439	235-809	429	236-412	443	236-891	441
235-574/331-000	439	235-809/331-000	413	236-416	443	236-894	441
		235-810	429	236-424	443		
235-600	411	235-810/331-000	413	236-436	443		
235-650	411	235-812	429	236-448	443		
		235-812/331-000	413			<b>243 Series</b>	
235-700	411	235-816	429	236-500	441	243-110	471
235-701	411	235-816/331-000	413	236-501	441	243-112	471
235-711/331-000	437	235-824	429	236-502	443	243-113	471
235-712/331-000	437	235-824/331-000	413	236-503	443	243-113	472
235-713/331-000	437	235-850	411	236-504	443	243-204	471
235-714/331-000	437	235-851/331-000	437	236-506	443	243-208	471
235-716/331-000	437	235-852/331-000	439	236-508	443	243-211	471
235-717/331-000	437	235-853/331-000	439	236-512	443	243-212	471
235-722/331-000	437	235-854/331-000	439	236-516	443		
235-723/331-000	437	235-855/331-000	439	236-524	443	243-304	471
235-724/331-000	437	235-856/331-000	439			243-308	471
235-726/331-000	437	235-857/331-000	439	236-600	441		
235-727/331-000	437	235-858/331-000	439	236-601	441	243-504	471
235-732/331-000	437	235-859/331-000	439	236-602	443	243-508	471
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721-132/001-000	351	721-320/031-000	343	721-609	355	722-114/026-000	341
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721-163/100-000	351	721-463/001-040	352	721-614/114-000	357	722-137	359
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721-306/008-000	343	721-604/019-042	355	721-2112/037-000	349	722-145/047-000	361
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721-309/031-000	343	721-605/019-000	355	721-2116/026-000	349	722-150/039-000	359
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<b>2003 Series</b>		2061-602/998-404	395	2734-103/031-000	303	2734-208	304
2003-499	492	2061-603/998-404	395	2734-103/037-000	304	2734-208/031-000	305
2003-500	492	2061-621/998-404	395	2734-103/107-000	304	2734-208/037-000	305
		2061-622/998-404	395	2734-104	303	2734-209	304
2003-6640	492	2061-623/998-404	395	2734-104/031-000	303	2734-209/031-000	305
2003-6641	492			2734-104/037-000	304	2734-209/037-000	305
2003-6642	492	<b>2273 Series</b>		2734-104/107-000	304	2734-210	304
2003-6643	492	2273-202	459	2734-105	303	2734-210/027-000	305
2003-6645	492	2273-203	459	2734-105/031-000	303	2734-210/037-000	305
2003-6646	492	2273-204	459	2734-105/037-000	304	2734-212	304
2003-6649	492	2273-205	459	2734-105/107-000	304	2734-212/027-000	305
2003-6650	492	2273-208	459	2734-106	303	2734-212/037-000	305
2003-6651	492			2734-106/031-000	303	2734-214	304
2003-6692	493	2273-500	459	2734-106/037-000	304	2734-214/027-000	305
				2734-106/107-000	304	2734-214/037-000	305
<b>2004 Series</b>		<b>2721 Series</b>		2734-107	303	2734-216	304
2004-433	490	2721-102/008-000	345	2734-107/031-000	303	2734-216/027-000	305
2004-434	490	2721-102/026-000	344	2734-107/037-000	304	2734-216/037-000	305
2004-435	490	2721-102/026-000	345	2734-107/107-000	304	2734-218	304
2004-440	490	2721-102/031-000	346	2734-108	303	2734-218/027-000	305
		2721-102/037-000	345	2734-108/031-000	303	2734-218/037-000	305
<b>2009 Series</b>		2721-102/037-000	345	2734-108/033-000	331	2734-219	304
2009-110	486	2721-103/008-000	345	2734-108/037-000	304	2734-219/027-000	305
2009-115	493	2721-103/026-000	345	2734-108/107-000	304	2734-219/037-000	305
2009-174	487	2721-103/031-000	346	2734-109	303	2734-220	304
2009-182	487	2721-103/037-000	345	2734-109/031-000	303	2734-220/027-000	305
		2721-104/008-000	345	2734-109/037-000	304	2734-220/037-000	305
2009-304	493	2721-104/026-000	345	2734-109/107-000	304		
2009-305	493	2721-104/031-000	346	2734-110	303		
2009-309	493	2721-104/037-000	345	2734-110/027-000	303		
2009-310	493	2721-105/008-000	345	2734-110/037-000	304		
		2721-105/026-000	345	2734-110/107-000	304		
2009-412	493	2721-105/031-000	346	2734-111	303		
2009-414	493	2721-105/037-000	345	2734-111/027-000	303		
2009-416	493	2721-106/008-000	345	2734-111/037-000	304		
		2721-106/026-000	345	2734-111/107-000	304		
<b>2059 Series</b>		2721-106/031-000	346	2734-112	303		
2059-189	499	2721-106/037-000	345	2734-112/027-000	303		
		2721-107/008-000	345	2734-112/037-000	304		
2059-301/998-403	383	2721-107/026-000	345	2734-112/107-000	304		
2059-302/998-403	383	2721-107/031-000	346	2734-113	303		
2059-303/998-403	383	2721-107/037-000	345	2734-113/027-000	303		
		2721-108/008-000	345	2734-113/037-000	304		
<b>2060 Series</b>		2721-108/026-000	345	2734-113/107-000	304		
2060-189	499	2721-108/031-000	346	2734-114	303		
		2721-108/037-000	345	2734-114/027-000	303		
2060-451/998-404	385	2721-109/008-000	345	2734-114/037-000	304		
2060-452/998-404	385	2721-109/026-000	345	2734-114/107-000	304		
2060-453/998-404	385	2721-109/031-000	346	2734-116	303		
2060-471/998-404	385	2721-109/037-000	345	2734-116/027-000	303		
2060-472/998-404	385	2721-110/008-000	345	2734-116/037-000	304		
2060-473/998-404	385	2721-110/026-000	345	2734-116/107-000	304		
		2721-110/031-000	346	2734-118	303		
2060-852/998-404	387	2721-110/037-000	345	2734-118/027-000	303		
2060-872/998-404	387	2721-111/008-000	345	2734-118/037-000	304		
		2721-111/026-000	345	2734-118/107-000	304		
2060-951/028-000	393	2721-111/037-000	345	2734-120	303		
2060-952/028-000	393	2721-112/008-000	345	2734-120/027-000	303		
2060-953/028-000	393	2721-112/026-000	345	2734-120/037-000	304		
2060-954/028-000	393	2721-112/031-000	346	2734-120/107-000	304		
2060-962/028-000	393	2721-112/037-000	345	2734-124	303		
		2721-114/008-000	345	2734-124/027-000	303		
		2721-114/026-000	345	2734-124/037-000	304		
		2721-114/031-000	346	2734-124/107-000	304		
		2721-114/037-000	345				

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**Algeria**  
please contact WAGO France

**Argentina**  
Bruno Schillig S.A.  
Arenales 4030, B1604CFD  
Florida, PBA  
Phone +54 11 4730 1100  
Fax +54 11 4761 7244  
wago@schillig.com.ar

**Austria**  
WAGO Kontakttechnik Ges.m.b.H.  
Europaring F15 602  
Campus 21  
2345 Brunn am Gebirge  
Phone +43 1 6150780  
Fax +43 1 6150775  
info.at@wago.com

**Azerbaijan**  
AZ Technics LTD  
Zulfi V. Alizade  
Y.Safarov str.33, AZ1025,  
Baku  
Republic of Azerbaijan  
Phone +994 12 496 8335  
Fax +994 12 496 8334  
info@AZtechnics.az

**Australia**  
WAGO Pty. Ltd.  
2-4 Overseas Drive  
Noble Park, Victoria, 3174  
Phone +61 03 8791 6300  
Fax +61 03 9701 0177  
sales@wago.com.au

**NHP ELECTRICAL ENGINEERING  
PRODUCTS PTY LTD**  
43-67 River Street  
Richmond, Victoria, 3121  
P.O. Box 199  
Phone +61 3 9429 2999  
Fax +61 3 9429 1075  
export@wago.com

**Bangladesh**  
please contact WAGO India

**Belarus**  
OOO FEK  
pr-t Pushkina 29/B  
220015 Minsk  
Phone +375 17 2102189  
Fax +375 17 2102189  
wago@fek.by

UP ATAVA  
ul. Denisovskaya, 47, office 1  
220006 Minsk  
Phone +375 17 2054015  
Fax +375 17 2851759

**Belgium**  
WAGO Belux nv  
Excelsiorlaan 11  
1930 Zaventem  
Phone +32 2 717 9090  
Fax +32 2 717 9099  
info-be@wago.com

**Bolivia**  
ISOTEK S.R.L.  
Zona Casco Viejo  
Calle Isso #578, B/San Roque  
Santa Cruz  
Phone +591 721 000 27

**Bosnia and Herzegovina**  
please contact WAGO Bulgaria

**Brazil**  
WAGO Eletroeletrônicos Ltda  
Rua Américo Simões 1470  
São Roque da Chave  
Itupeva SP Brasil 13295-000  
Phone +55 11 4591 0199  
Fax +55 11 4591 0190  
info.br@wago.com

**Bulgaria**  
WAGO Kontakttechnik GmbH & Co. KG/  
Representative Office Sofia  
Business Center Serdika  
2E Akad. Ivan Geshov Blvd.  
Building 1, Floor 4, Office 417  
1330 Sofia  
Phone +359 2 489 46 09/10  
Fax +359 2 928 28 50  
info-BG@wago.com

**Canada**  
please contact WAGO USA

**Chile**  
Desimat Chile  
Av Puerto Vespuccio 9670  
Pudahuel Santiago  
Phone +56 2 747 0152  
Fax +56 2 747 0153  
ventaschile@desimat.cl

**China**  
WAGO ELECTRONIC (TIANJIN) Co. LTD  
No.5, Quan Hui Road  
Wuqing Development Area  
Tianjin 301700  
Phone +86 22 5967 7688  
Fax +86 22 5961 7668  
info-cn@wago.com

**Colombia**  
T.H.L. Ltda.  
Cra. 49 B # 91-33  
Bogotá  
Phone +57 1 621 85 50  
Fax +57 1 621 60 28  
ventas-thl@thltda.com

**Croatia**  
M.B.A. d.o.o.  
Frana Supila 5  
51211 Matulji  
Phone +385 51 275-736  
Fax +385 51 275-066  
mba@ri.hinet.hr

MICROSTAR d.o.o.  
Siget 18 b  
10020 Zagreb  
Phone +385 1 3647 849  
Fax +385 1 3636 662  
wago@microstar.hr

**Czech Republic**  
WAGO Elektro spol. sr. o.  
Rozvadova 1116/36  
143 00 Praha 4 - Modřany  
Phone +420 261 090 143  
Fax +420 261 090 144  
info.cz@wago.com  
wago-cz@wago.com

**Denmark**  
WAGO Denmark A/S  
Lejvej 17  
3500 Værløse  
Phone +45 44 357 777  
info.dk@wago.com

**Egypt**  
IBN Engineering Instrumentation & Control  
71 a El Shaheed Ahmed Hamdi St.  
King Faisal, Giza  
Phone +20 2 721 4350  
Fax +20 2 722 1709  
sales@ibnengineering.com

**Germany**  
WAGO Kontakttechnik GmbH & Co. KG  
Postfach 28 80, 32385 Minden  
Hansastraße 27  
32423 Minden  
Phone +49 571 887-0  
Fax +49 571 887-169  
info@wago.com

WAGO Kontakttechnik GmbH & Co. KG  
Waldstraße 1  
99706 Sondershausen  
Phone +49 3632 659-0  
Fax +49 3632 659-100  
info@wago.com

**Ecuador**  
ECUAINSETEC CIA LTDA  
El Zurriago E9-32 y el Vengador  
Quito  
Phone +593 2 2 26 91 48  
Fax +593 2 2 46 18 33  
g.castro@ecuainsetec.com.ec

**Estonia**  
Eltarko OÜ  
Laki 14 - 502  
10621 Tallinn  
Phone +372 651 7731  
Fax +372 651 7786  
andres@eltarko.ee

**Finland**  
WAGO Finland Oy  
Vellamonkatu 30 B  
00550 Helsinki  
Phone +358 9 7744 060  
Fax +358 9 7744 0660  
tilaus@wago.fi

**France**  
WAGO Contact SAS  
Paris Nord 2  
83 Rue des Chardonnerets  
B.P. 55065 - Tremblay en France  
95947 - ROISSY CDG CEDEX  
Phone +33 1 4817 2590  
Fax +33 1 4863 2520  
info-fr@wago.com

**Great Britain**  
WAGO Limited  
Triton Park, Swift Valley Industrial Estate  
RUGBY  
Warwickshire, CV21 1SG  
Phone +44 1788 568 008  
Fax +44 1788 568 050  
uksales@wago.com

**Greece**  
PANAGIOTIS SP. DIMOULAS - BIOMAT  
DIMOULAS AUTOMATIONS  
Kriti Str. 26  
10439 Athen  
Phone +30 210 883 3337  
Fax +30 210 883 4436  
wago.info@dimoulas.com.gr

**Honduras**  
CILASAS S.A. de C.V.  
Barrio Los Andes  
7 Calle entre 14 y 15 Ave. N.O.  
P.O. Box. 1061  
San Pedro Sula  
Phone +504 2557 1146/7  
Fax +504 2557 1149

**Hong Kong**  
National Concord Eng., Ltd.  
Unit A-B, 5/F.  
Southeast Industrial Building  
611-619 Castle Peak Road  
Tsuen Wan, N.T.  
Phone +852 2429 2611  
Fax +852 2429 2164  
sales@nce.com.hk

**Hungary**  
WAGO Hungária KFT  
Ipari Park, Gyár u. 2  
2040 Budapest  
Phone +36 23 502-170  
Fax +36 23 502-166  
info.hu@wago.com

**Iceland**  
S. Gudjonsson ehf.  
Audbrekku 9-11  
202 Kopavogur  
Phone +354 520-4500  
Fax +354 520-4501  
export@wago.com

**India**  
WAGO Private Limited  
C-27, Sector-58, Phase-III  
Noida-201 301  
Gautam Budh Nagar (U.P.)  
Phone +91 120 438 8700  
Fax +91 120 438 8799  
info.india@wago.com

**Indonesia**  
please contact WAGO Singapore

**Iraq**  
please contact WAGO Middle East

**Ireland**  
Drives & Controls  
Unit F4, Riverview Business Park  
Nangor Road  
Dublin 12  
Phone +353 1 4604474  
Fax +353 1 4604507  
wago@drivesandcontrols.ie

**Israel**  
Comtel Israel Electronic Solutions Ltd.  
Bet Hapaamon  
20 Hataas Street  
P.O. Box 66  
44425 Kefar-Saba  
Phone +972 9 76 77 240  
Fax +972 9 76 77 243  
sales@comPhoneco.il

**Italy**  
WAGO ELETTRONICA SRL a Socio Unico  
Via Parini 1  
40033 Casalecchio di Reno (BO)  
Phone +39 051 6132112  
Fax +39 051 6272174  
info-ita@wago.com

**Japan**  
WAGO Co. of JAPAN Ltd.  
Kinshicho Prime Tower  
5-7, Kameido, Koto-Ku  
Tokyo 136-0071  
Phone +81 3 5627 2059  
Fax +81 3 5627 2055  
info-jp@wago.com

**Jordan**  
please contact WAGO Middle East

**Kazakhstan**  
TOO INTANT  
232/2, Ryskulov avenue  
050061 Almaty  
Phone +7 727 356 52 91/92/93  
Fax +7 727 327 14 92/93  
ee@intant.net  
ees\_sm1@intant.net

TOO Technik-Trade  
ul. i. A. Protosanova, 81  
070004 Ust-Kamenogorsk  
Phone +7 7232 254 064  
Fax +7 7232 253 251  
info@technik.kz

**Korea**  
WAGO Korea Co., Ltd.  
Room 205 AnyangMegaValley,  
268, Hagui-ro, Dongan-gu, Anyang-si,  
Gyeonggi-do, 14056, South Korea  
Phone +82 31 421 9500  
info.korea@wago.com

**Kosovo**  
please contact WAGO Bulgaria

**Latvia**  
INSTABALT LATVIA SIA  
Vestienas iela 6  
Riga, LV-1035  
Phone +371 790 1188  
Fax +371 790 1180  
info@instabalt.lv

**Lebanon**  
Gemayel Trading & Contracting  
Antoninis Project  
P.O. BOX 70-1096  
Antelias  
Lebanon  
Phone +961 4 521 029  
Fax +961 4 521 029  
indo@uae.com

**Lithuania**  
INSTABALT LIT UAB  
Savanoriu 187  
Vilnius, 2053  
Phone +370 52 322 295  
Fax +370 52 322 247  
info@instabalt.lt

**Luxembourg**  
please contact WAGO Belgium

**Macedonia**  
please contact WAGO Bulgaria

Kompjnet Inzenering  
Vladimir Komarov 1A-3/9  
1000 Skopje  
Republic of Macedonia  
Phone +389 2 521 12 00  
Phone +389 2 246 11 08

**Malaysia**  
WAGO Representative Office Malaysia  
No 806, Block A4, Leisure Commerce Square,  
No 9, Jalan PJS 8/9, 46150 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia  
Phone +60 3 7877 1776  
Fax +60 3 7877 2776  
kian.guan.tan@wago.com

HPH Materials (M) Sdn Bhd  
No. 4, Jalan Nilam 1/6  
Suban Hi-Tech Industrial Park  
40000 Shah Alam  
Selangor, D.E. Malaysia  
Phone +60 3 5638 2213  
Fax +60 3 5638 8213  
info@hphmaterials.com

**Maledives**  
please contact WAGO India

**Mexico**  
WAGO SA de CV  
Av. Del Marques 38 Bodega 3  
P. I. Bernardo Quintana  
76240 El Marques, Querétaro  
Phone +52 442 221 5946  
Fax +52 442 221 5063  
info.mx@wago.com



**Moldova**

Electroservice Slavinski T.T.  
str. Bolgarskaia 9, office 6  
2001 Kishinev  
Phone +373 22 274427  
Fax +373 22 224481  
es@es.mldnet.com

**Morocco**

Automatisme & Connection Maroc  
23, Rue Boured  
2ème étage, appt4  
Roche Noire  
20300 Casablanca  
Phone +212 522 24 21 72/73  
Fax +212 522 24 21 75

**Nepal**

please contact WAGO India

**Netherlands**

WAGO Nederland B.V.  
Laan van de Ram 19  
7234 BW APELDOORN  
Phone +31 55 36 83 500  
Fax +31 55 36 83 599  
info-nl@wago.com

**New Zealand**

please contact WAGO Australia

**NHP NZ**

7 Lockhart Place  
Mt Wellington  
New Zealand  
Phone +64 9 2761967  
Fax +64 9 2761992  
export@wago.com

**Nigeria**

Gil Automations Ltd.  
Daily Times Complex  
2 Lateef Jakande Rd., Agidingbi  
100271 Ikeja, Lagos State  
Phone +234 17132672335  
sales@gilautomation.com

**Norway**

WAGO Norge AS  
Jerikoveien 20  
1067 Oslo  
Phone +47 22 30 94 50  
Fax +47 22 30 94 51  
info.no@wago.com

**Oman**

please contact WAGO Middle East

**Pakistan**

FuziLogiX Automation & Control  
Suit No. 14, 5th Floor, Shan Arcade  
New Garden Town, Lahore  
Pakistan  
Phone +92 42 594 1503 - 4  
Fax +92 42 585 1431  
info@fuzilogix.com

**Peru**

Manufacturas Eléctricas S.A.  
Av O.R. Benavides 1215  
15000 Lima  
Phone +511 6196200  
Fax +511 6196247

**Philippines**

please contact WAGO Singapore

**Poland**

WAGO ELWAG sp. z o. o.  
ul. Piękna 58 a  
50-506 Wrocław  
Phone +48 71 3602970  
Fax +48 71 3602999  
wago.elwag@wago.com

**Portugal**

MORGADO & CA. LDA - SEDE  
Estrada Exterior da  
Circunvalação 3558/3560  
Apartado 1057  
4435 Rio Tinto  
Phone +351 22 9770600  
Fax +351 22 9770699  
geral@morgadocl.pt

**Qatar**

please contact WAGO Middle East

**Romania**

WAGO Kontakttechnik GmbH & Co. KG/  
Representative Office Bukarest  
Str. Nicolae G. Caramfil Nr. 26  
Bl. 1D, Et. 3, Ap. 7, Sect. 1, OP 52  
014144-Bucuresti  
Phone +40(0)31 421 85 68  
info-RO@wago.com

**Romania**

VDR & Servicii srl  
Str. Valeriu Braniste, nr. 60, ap.1, sector 3  
Romania  
Phone +40 21 3225074/76  
Fax +40 21 3225075  
office@componente-automatizari.ro

**Russia**

OOO WAGO Contact Rus  
Dmitrovskoe shosse, 157,  
bldg. 12/5  
127411 Moscow  
Russia  
Phone +7 495 663-3305  
Fax +7 495 663-3308  
info.ru@wago.com

**OOO Decima**

Projesd 4922, d. 4, str. 1  
124460 Moscow / Selenograd  
Phone +7 495 988 4858  
Fax +7 495 988 4858

**OOO Prosoft**

ul. Profsoznaya, 108  
117437 Moscow  
Phone +7 495 2340636  
Fax +7 495 2340640  
info@prosoft.ru

**ITC Electronics: Moscow**

Radio str. 24  
105005 Moscow  
Phone +7 495 775 1845  
Fax +7 495 775 1848  
moscow@itc-electronics.com

**WAGO Branch office**

Ekaterinburg  
Phone +7 343 216 3426

**WAGO Branch office**

Novosibirsk  
Phone +7 383 217 9244

**WAGO Branch office**

St. Petersburg  
Phone +7 812 312 1918

**Saudi Arabia**

Saudi Electronic Trading Company (SETRA)  
P.O. Box 60712  
11555-Riyadh  
Phone +966 1 2062277  
Fax +966 1 2062277  
khaled.wafai@setra.com.sa

**Serbia**

please contact WAGO Bulgaria

**Avalon Partners doo**

Patrijarha Dimitrija 24  
11000 Beograd  
Phone +381 11 268 5311  
Fax +381 11 268 5311  
office@avalon.rs

**Sigma doo**

Balzakova 3  
21000 Novi Sad  
Phone +381 21 468 431  
Fax +381 21 636 1785  
office@sigmadoo.co.rs

**Singapore**

WAGO Electronic Pte Ltd  
No. 10 Upper Aljunied Link #04-04  
Singapore 367904  
Phone +65 62866776  
Fax +65 62842425  
info-sing@wago.com

**Slovakia**

Proelektro spol. s r.o.  
Na barine 22  
841 03 Bratislava - Lamač  
Phone +421 2 4569 2503  
info@wago.sk

**Slovenia**

IC elektronika d.o.o.  
Vodovodna cesta 100  
1000 Ljubljana  
Phone +386 1568 0126  
Fax +386 1568 9107  
info@ic-elect.si

**GENERA d.o.o.**

Prevale 10  
1236 Trzin  
Phone +386 14393050  
Fax +386 14393090  
genera@genera.si

**Slovenia**

Elektronabava d.o.o.  
Cesta 24 junija 3  
1231 Ljubljana  
Phone +386 1 58 99 300  
Fax +386 1 58 99 409  
info@elektronabava.si

**South Africa**

Shorrock Automation (Pty) Ltd  
Postnet Suite # 219  
Private Bag X 8, Elardus Park  
0047 PRETORIA  
Phone +27 12 4500300  
Fax +27 12 4500322  
sales@shorrock.co.za

**Spain**

DICOMAT S.L.  
Avda. de la Industria, 36  
Apartado Correos, 1.178  
28108-Alcobendas (Madrid)  
Phone +34 91 662 1362  
Fax +34 91 661 0089  
info@dicomat.com

**Sweden**

WAGO Sverige AB  
Tyskland Filial  
Box 11127, 161 11 BROMMA  
Besöksadress: Adolfsbergsv. 31  
Phone +46 858410680  
Fax +46 858410699  
info.se@wago.com

**Switzerland**

WAGO CONTACT SA  
Rte. de l'Industrie 19  
Case Postale 168  
1564 Dombidier  
Phone +41/26 676 75 00  
Fax +41/26 676 75 01  
info.switzerland@wago.com

**Sri Lanka**

please contact WAGO India

**Syria**

Zahabi Co.  
8/5 Shouhadaa St., P.O. Box 8262  
Aleppo  
Phone +963 21 21 22 235 / 6  
Fax +963 21 21 22 23 7  
info.uae@wago.com

**Taiwan R.O.C.**

WAGO Contact, Ltd.  
5F., No. 168, Jiankang Rd  
Zhonghe City  
Taipei County 23585, Taiwan  
Phone +886 2 2225 0123  
Fax +886 2 2225 1511  
info.taiwan@wago.com

**Thailand**

WAGO Representative Office Thailand  
4th Floor, KS Building  
213/6-8 Rachada-Phisek Road  
Dingdaeng, Bangkok 10400  
Phone +66 2 6935611  
Fax +66 2 6935612  
warongkon.khankham@wago.com

**US Power Distribution Co., Ltd.**

4th Floor, KS Building  
213/6-8 Rachada-Phisek Road  
Dingdaeng, Bangkok 10400  
Phone +66 2 2763040  
Fax +66 2 2763049  
uspowers2014@gmail.com

**Tunisia**

please contact WAGO France

**Turkey**

WAGO Elektronik Sanayi ve Ticaret Ltd. Şti.  
Yukan Dudullu Mahallesi Bayraktar Bulvarı  
Cad. Hattat Sok. No. 10  
34775 Ümraniye - İstanbul  
Phone +90 216 472 1133  
Fax +90 216 472 9910  
info.tr@wago.com

**Ukraine**

NPP Logicon  
Predslavinskaya street, 39, office 303  
03150 Kiev  
Phone +380 44 5228019  
Fax +380 44 2611803  
info@logicon.ua

**OOO Micropribor**

ul. Kotelnikova, 4  
03115 Kiev  
Phone +380 44 5369386  
Fax +380 44 5369387  
sales@micropribor.kiev.ua

**United Arab Emirates (UAE)**

WAGO Middle East (FZC)  
SAIF Zone, G4-282  
P.O. Box 120665  
Sharjah, UAE  
Phone +971 6 5579920  
Fax +971 6 5579921  
info.uae@wago.com

**Uruguay**

Fivisa Electricidad  
Avda. Uruguay 1274  
11100 Montevideo  
Phone +59 829 020 808  
Fax +59 829 021 230  
info@fivisa.com.uy

**USA**

WAGO CORPORATION  
N120 W19129 Freistadt Road  
Germantown, WI 53022  
Phone +1 262 255 6222  
Fax +1 262 255 3232  
Toll-Free: 1-800 DIN Rail (346-7245)  
info.us@wago.com

**Venezuela**

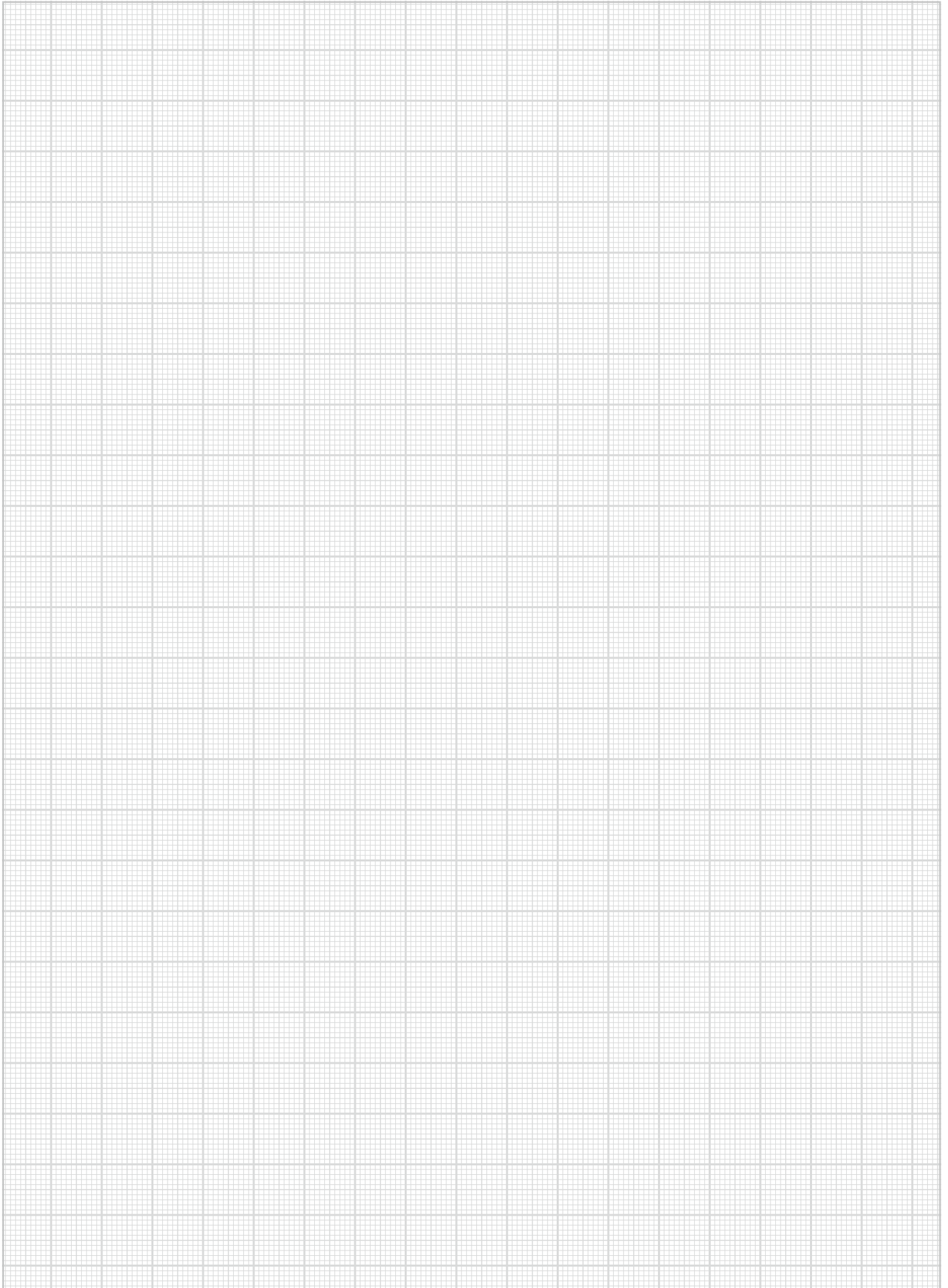
PETROBORNAS, C.A.  
C.C. PLAZA AEROPUERTO - PISO 1 - LOCAL  
P1 - B - 03  
(8015) UNARE - PUERTO ORDAZ - ESTADO  
BOLÍVAR  
REPÚBLICA BOLIVARIANA DE VENEZUELA  
Phone +58 286 951 3382  
Fax +58 286 951 3382  
info@petrobornas.com

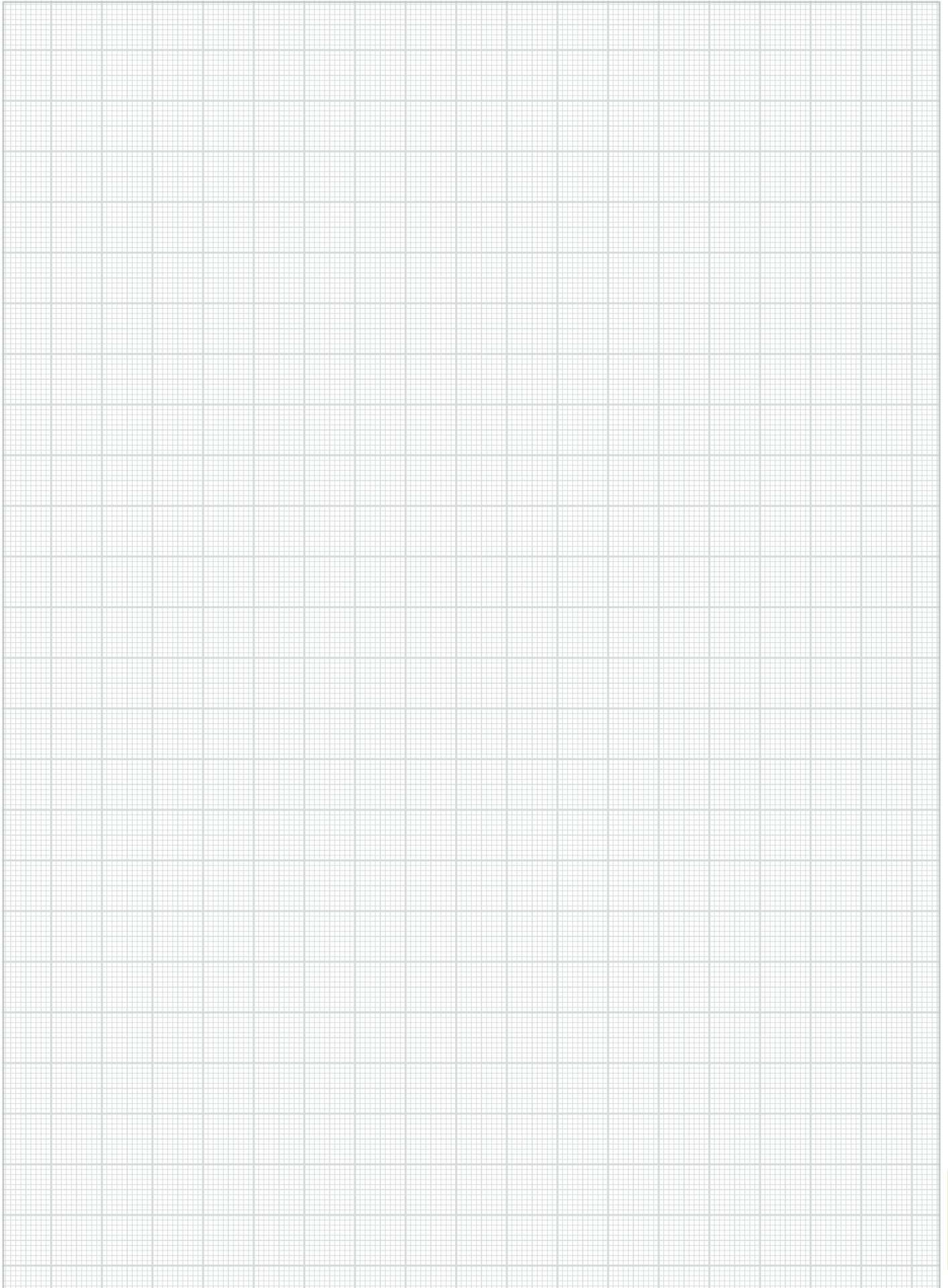
**Vietnam**

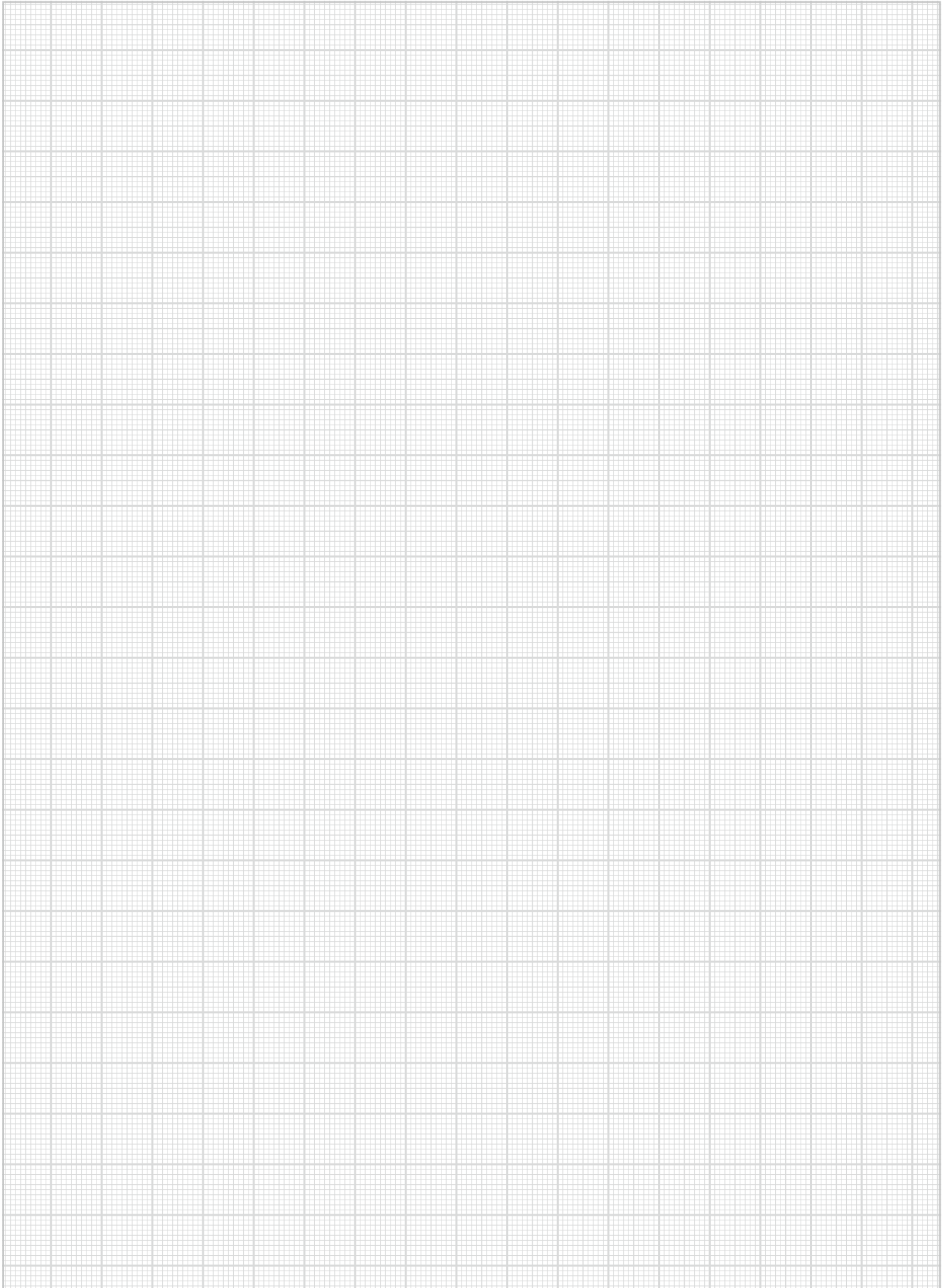
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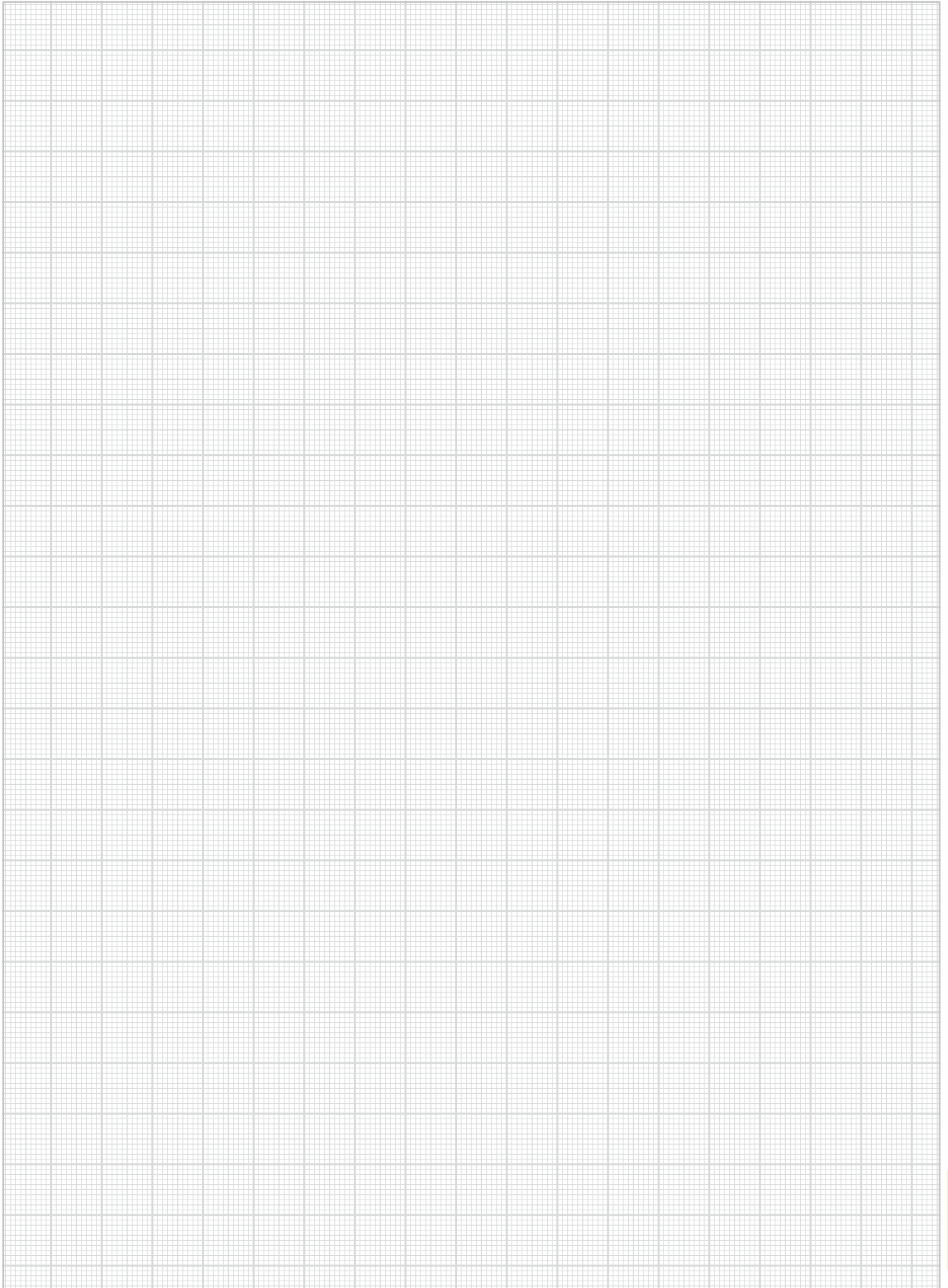
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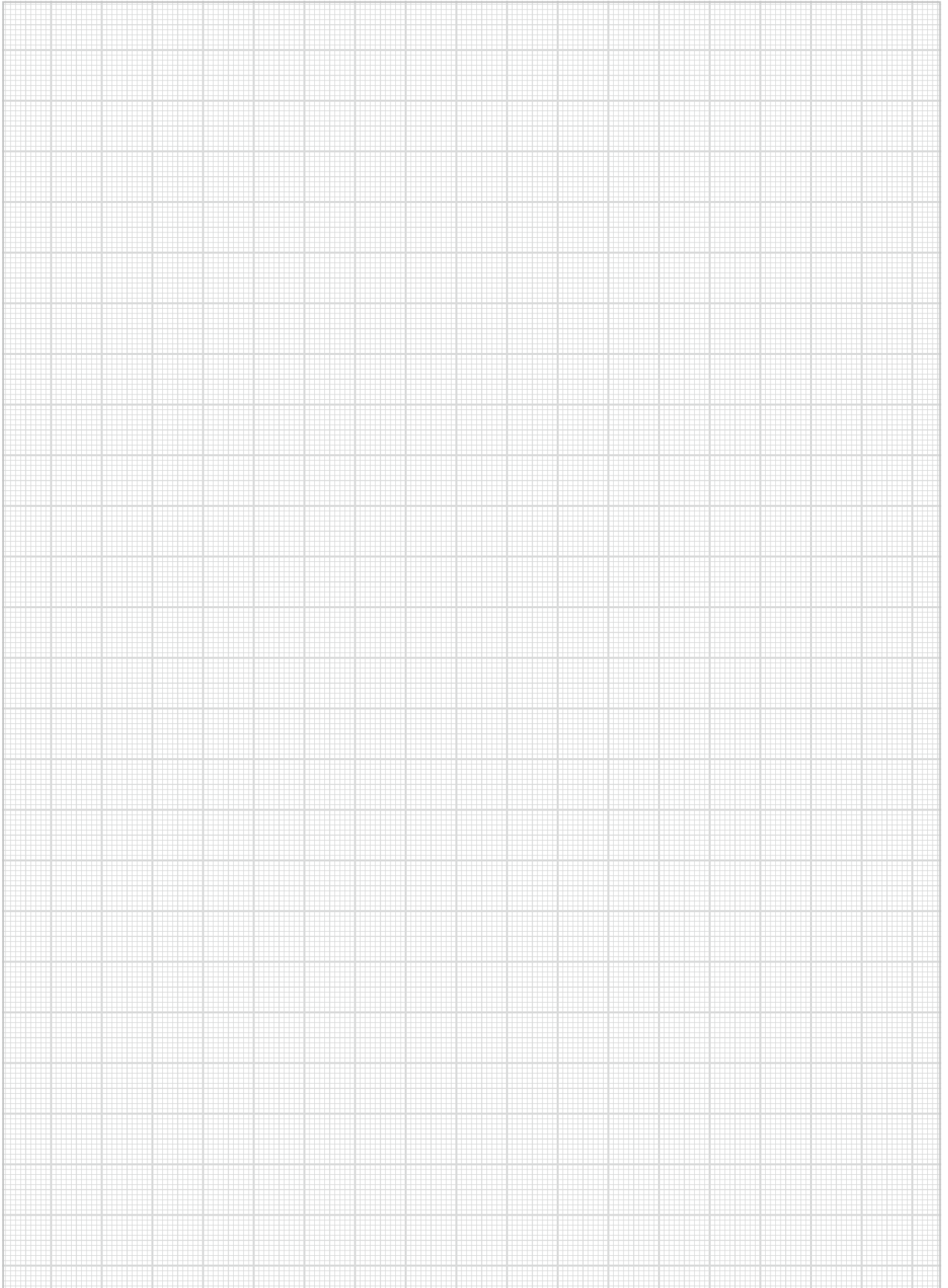
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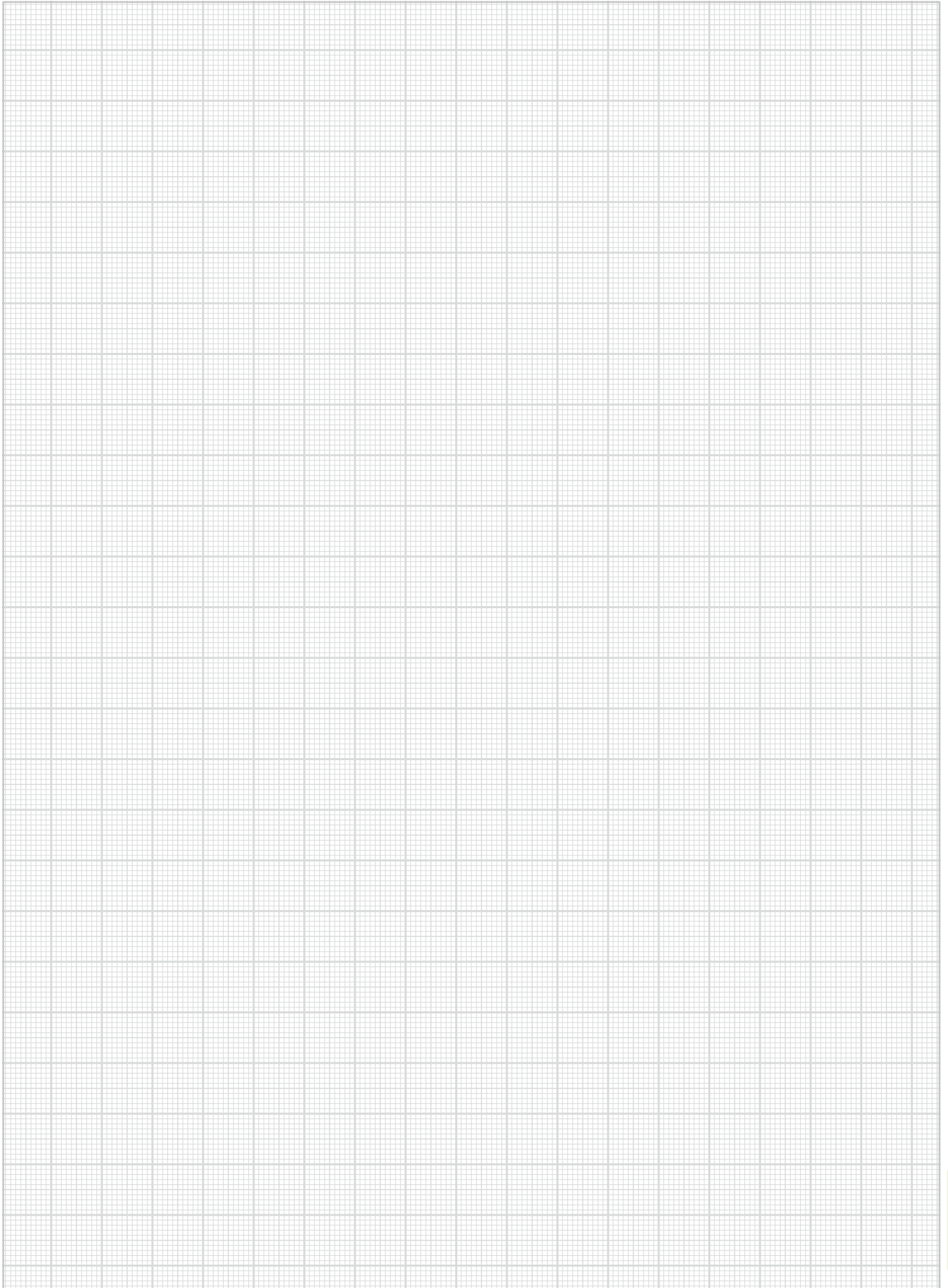


















**WAGO Kontakttechnik GmbH & Co. KG**  
Postfach 2880 · D · 32385 Minden  
Hansastraße 27 · D · 32423 Minden  
[info@wago.com](mailto:info@wago.com)  
[www.wago.com](http://www.wago.com)

Headquarters	+49 571 887 - 0
Sales	+49 571 887 - 222
Order Service	+49 571 887 - 333
Fax	+49 571 887 - 169