

Technical Data

RoHS

Panel connector



Cable connector



Coupler connector



Panel connector, cable connector and coupler connector

Locking

rectangular housing

screw up the knurled ring on the cable connector 1/6 of a turn on the panel connector barrel, for frequent mating

Protection

IP 50 to IP 54 with conexil in the housing, flat-gasket for panel connector

Contacts

12 to 55 contacts \varnothing 1 mm, crimp or solder removable contacts

Max. current

7 A \varnothing 1 mm

Mechanical endurance

over 1000 locking and mating cycles, vibration: 10 g, 500 Hz (NF-C 20706[CEI68-2-6])

Contact resistance between pin and socket

< 0,0020 Ω

Breakdown voltage between adjacent contacts

at 20 °C, at sea-level: 19 or 37 contacts >2000 Volts (RMS), 12, 27 or 55 contacts >2500 Volts (RMS)

Insulation resistance

> 5000 M Ω

Operating temperature

-40 °C to +100 °C (500 hours at +125 °C)

Materials

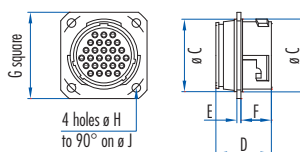
Nickel-plated light alloy, gold-plated brass contacts, neoprene insert

Max. conductor cross-section

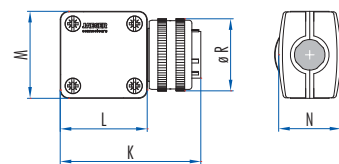
0,93 mm² for 12 – 27 or 55 contacts
0,60 mm² for 19 or 37 contacts

Dimensional Data

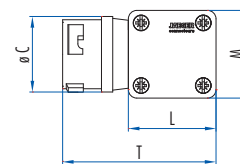
Panel connector



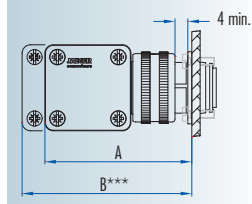
Cable connector



Coupler connector



Cable connector – Panel connector assembly



Housing	Number of Contacts	Assembly		Panel connector								Cable connector and Coupler connector					
		A	B	\varnothing C	D	E	F	G	\varnothing H	\varnothing J	K	L	M	N	\varnothing R	T	
1	12-19	54	63	21	20,5	1,5	11,5	27	3,2	28	50	32,2	32,2	20,2	25	50,3	
2	27-37	58	67	27	20,5	1,5	11,5	32	3,2	34	54	36,4	36,4	23,5	32,5	54,2	
3	55	66	75	39	23	2	11,5	43	4,2	48	61	42,6	47,6	31,3	44	62,1	

*** B: minimum disconnection distance

Part Number

Housing	1	1	2	2	3
Number of Contacts \varnothing 1 mm	12	19	27	37	55

Male panel connectors – Female cable connectors – Male coupler connectors

Square male panel connector	#533 503 006	#533 514 006	#533 513 006	#533 525 006	#533 523 006
Female cable connector	530 502 006	530 504 006	530 512 006	530 520 006	530 522 006
Male coupler connector	530 507 006	530 514 006	530 517 006	530 525 006	530 527 006
Type 2 cable clamp	532 328 006	532 328 006	532 329 006	532 329 006	532 350 006
Housing for panel connector	533 550 006	533 550 006	533 558 006	533 558 006	533 559 006
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 720 006	632 720 006	532 214 006	532 214 006	532 218 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small tool: \varnothing 1 mm), 579 481 006 (large tool: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

Female panel connectors – Male cable connectors – Female coupler connectors

Square female panel connector	#533 502 006	#533 515 006	#533 512 006	#533 524 006	#533 522 006
Male cable connector	530 503 006	530 505 006	530 513 006	530 521 006	530 523 006
Female coupler connector	530 506 006	530 515 006	530 516 006	530 524 006	530 526 006
Type 2 cable clamp	532 328 006	532 328 006	532 329 006	532 329 006	532 350 006
Housing for panel connector	533 550 006	533 550 006	533 558 006	533 558 006	533 559 006
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 720 006	632 720 006	532 214 006	532 214 006	532 218 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

- # Square panel connectors are generally of the „Waterproof Miniature“ type. See page 54.

- Sealable tamper-evident connectors for housings 1 and 2. See: Accessories.

- **Important:** All the contacts must be mounted in the insert using our tool.

- For assembly, wiring, panel connector installation and contact arrangement instructions, see: Technical guides;

- Other accessories, see: Accessories.

- Polarisation: Polarisation systems are available to prevent incorrect connection between identical connectors (same series and same contact arrangement). See: Technical guides;

- All connectors are delivered with their contacts.

- Thermocouple contacts can be fitted. See: Accessories.

Technical Data

RoHS

Panel connector



Cable connector



Coupler connector



Panel connector, cable connector
and coupler connector

circular housing

Locking

screw up the knurled ring on the cable connector 1/6 of a turn on the panel connector barrel,
for frequent locking and unlocking

Protection

IP 65 with flat-gasket for panel connector

Contacts

12 to 55 contacts \varnothing 1 mm, crimp or solder removable contacts

Max. current

7A \varnothing 1 mm

Mechanical performance

< 1000 locking and mating cycles,
vibration: 10 g, 500Hz (NF-C 20706[CEI68-2-6])

Contact resistance between pin and socket

< 0,0020 Ω

Breakdown voltage between adjacent contacts

at 20 °C, at sea-level: 19 or 37 contacts >2000 Volts (RMS), 12, 27 or 55 contacts >2500 Volts (RMS)

Insulation resistance

> 5000 M Ω

Operating temperature

-40 °C to +100 °C (500 hours at +125 °C)

Materials

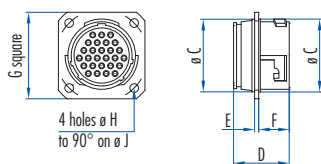
Nickel-plated light alloy, gold-plated brass contacts, neoprene insert

Max. conductor cross-section

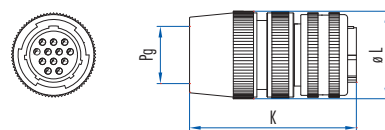
0,93 mm² for 12 – 27 or 55 contacts
0,60 mm² for 19 or 37 contacts

Dimensional Data

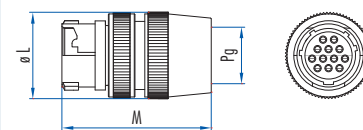
Panel connector



Cable connector

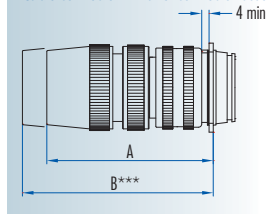


Coupler connector



Housing	Number of Contacts	Assembly		Panel connector								Cable connector and Coupler connector			
		A	B	\varnothing C	D	E	F	G	\varnothing H	\varnothing J	K	\varnothing L	PG	M	
1	12-19	53,5	70	21	20,5	1,5	11,5	27	3,2	28	42	26	11	52	
2	27-37	63,5	82,5	27	20,5	1,5	11,5	32	3,2	34	59,5	34	16	55	
3	55	72,5	100	39	23	2	11,5	43	4,2	48	68,5	44	21	59	

Cable connector – Panel connector assembly



*** B: minimum disconnection distance

Part Number

Housing	1	1	2	2	3
Number of Contacts \varnothing 1 mm	12	19	27	37	55

Male panel connectors – Female cable connectors – Male coupler connectors

Square male panel connector	#533 503 006	#533 514 006	#533 513 006	#533 525 006	#533 523 006
Female cable connector	637 612 006	637 619 006	637 627 006	637 637 006	637 655 006
Male coupler connector	637 762 006	637 769 006	637 777 006	637 787 006	637 795 006
PG	PG 11	PG 11	PG 16	PG 16	PG 21
Cable clamps	633 421 006	633 421 006	633 422 006	633 422 006	633 423 006
L Capacity of the cable clamp in mm	\varnothing 7 – 12	\varnothing 7 – 12	\varnothing 9 – 17	\varnothing 9 – 17	\varnothing 12,5 – 23
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 725 006	632 725 006	632 726 006	632 726 006	632 728 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

Female panel connectors – Male cable connectors – Female coupler connectors

Square female panel connector	#533 502 006	#533 515 006	#533 512 006	#533 524 006	#533 522 006
Male cable connector	637 712 006	637 719 006	637 727 006	637 737 006	637 755 006
Female coupler connector	637 662 006	637 669 006	637 677 006	637 687 006	637 695 006
PG	PG 11	PG 11	PG 16	PG 16	PG 21
Cable clamps	633 421 006	633 421 006	633 422 006	633 422 006	633 423 006
L Capacity of the cable clamp in mm	\varnothing 7 – 12	\varnothing 7 – 12	\varnothing 9 – 17	\varnothing 9 – 17	\varnothing 12,5 – 23
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 725 006	632 725 006	632 726 006	632 726 006	632 728 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

- Moulded watertight rubber boots for cables are delivered with the connectors. They must be mounted in the cable connectors or coupler connector.
- Boots for wire-to-wire cables and assemblies are available on request.
- # Square panel connectors are also of the „Miniature“ type. See page 52.
- Other sizes of PG available. Consult us.
- **Important:** All the contacts must be mounted in the insert using our tool.
- For assembly, wiring, panel connector installation and contact arrangement instructions, see: Technical guides;
- Other accessories, see: Accessories.
- Polarisation: Polarisation systems are available to prevent incorrect connection between identical connectors (same series and same contact arrangement). See: Technical guides;
- All connectors are delivered with their contacts.
- Thermocouple contacts can be fitted. See: Accessories.

Technical Data

RoHS

Panel connector



Cable connector



Coupler connector



Panel connector, cable connector
and coupler connector

rectangular housing

Locking

screw up the knurled ring on the cable connector 1/6 of a turn on the panel connector barrel,
for frequent locking and unlocking

Protection

IP 50 to IP 54 with conexil in the housing, flat-gasket for panel connector

Contacts

12 to 55 contacts \varnothing 1 mm, crimp or solder removable contacts

Max. current

7 A \varnothing 1 mm

Mechanical performance

1000 locking and mating cycles

Contact resistance between pin and socket

< 0,0020 Ω

Breakdown voltage between adjacent contacts

at 20 °C, at sea-level: 19 or 37 contacts >2000 Volts (RMS), 12, 27 or 55 contacts >2500 Volts (RMS)

Insulation resistance

> 5000 M Ω

Operating temperature

-40 °C to +100 °C (500 hours at +125 °C)

Materials

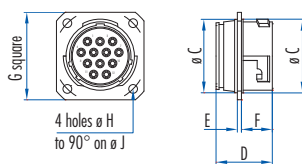
Nickel-plated light alloy, gold-plated brass contacts, neoprene insert

Max. conductor cross-section

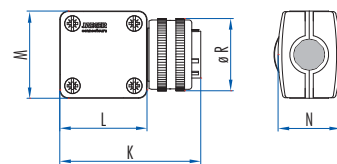
0,93 mm² for 12–27 or 55 contacts
0,60 mm² for 19 or 37 contacts

Dimensional Data

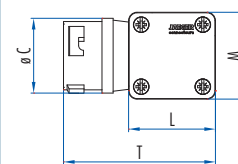
Panel connector



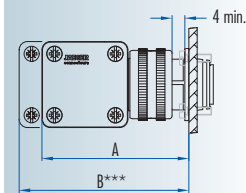
Cable connector



Coupler connector



Cable connector – Panel connector assembly



Housing	Number of Contacts	Assembly		Panel connector							Cable connector and Coupler connector						
		A	B	\varnothing C	D	E	F	G	\varnothing H	\varnothing J	K	M	N	L	\varnothing R	T	
1	12-19	54	63	21	20,5	1,5	11,5	27	3,2	28	50	32,2	32,2	20,2	25	50,3	
2	27-37	58	67	27	20,5	1,5	11,5	32	3,2	34	54	36,4	36,4	23,5	32,5	54,2	
3	55	66	75	39	23	2	11,5	43	4,2	48	61	42,6	47,6	31,3	44	62,1	

*** B: minimum disconnection distance

Part Number

Housing	1	1	2	2	3
Number of Contacts \varnothing 1 mm	12	19	27	37	55

Male panel connectors – Female cable connectors – Male coupler connectors

Square male panel connector	◇533 503 506	◇533 514 506	◇533 513 506	◇533 525 506	◇533 523 506
Female cable connector	530 502 506	530 504 506	530 512 506	530 520 506	530 522 506
Male coupler connector	530 507 506	530 514 506	530 517 506	530 525 506	530 527 506
Type 2 cable clamp	532 328 006	532 328 006	532 329 006	532 329 006	532 350 006
Housing for panel connector	533 550 006	533 550 006	533 558 006	533 558 006	533 559 006
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 720 006	632 720 006	532 214 006	532 214 006	532 218 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

Female panel connectors – Male cable connectors – Female coupler connectors

Square female panel connector	◇533 502 506	◇533 515 506	◇533 512 506	◇533 524 506	◇533 522 506
Male cable connector	530 503 506	530 505 506	530 513 506	530 521 506	530 523 506
Female coupler connector	530 506 506	530 515 506	530 516 506	530 524 506	530 526 506
Type 2 cable clamp	532 328 006	532 328 006	532 329 006	532 329 006	532 350 006
Housing for panel connector	533 550 006	533 550 006	533 558 006	533 558 006	533 559 006
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 720 006	632 720 006	532 214 006	532 214 006	532 218 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

- ◇ Square panel connectors are generally of the „Waterproof Miniature“ type. See page 58.

- Sealable tamper-evident connectors for housings 1 and 2. See: Accessories.

- **Important:** All the contacts must be mounted in the insert using our tool.

- For assembly, wiring, panel connector installation and contact arrangement instructions, see: Technical guides;

- Other accessories, see: Accessories.

- Polarisation: Polarisation systems are available to prevent incorrect connection between identical connectors (same series and same contact arrangement). See: Technical guides;

- All connectors are delivered with their contacts.

Technical Data

RoHS

Panel connector



Cable connector



Coupler connector



Panel connector, cable connector
and coupler connector

circular housing

Locking

screw up the knurled ring on the cable connector 1/6 of a turn on the panel connector barrel,
for frequent locking and unlocking

Protection

IP 65 with flat-gasket for panel connector

Contacts

12 to 55 contacts \varnothing 1 mm, crimp or solder removable contacts

Max. current

7 A \varnothing 1 mm

Mechanical performance

1000 locking and mating cycles

Contact resistance between pin and socket

< 0,0020 Ω

Breakdown voltage between adjacent contacts

at 20 °C, at sea-level: 19 or 37 contacts >2000 Volts (RMS), 12, 27 or 55 contacts >2500 Volts (RMS)

Insulation resistance

> 5000 M Ω

Operating temperature

-40 °C to +100 °C (500 hours at +125 °C)

Materials

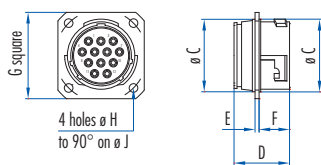
Nickel-plated light alloy, gold-plated brass contacts, neoprene insert

Max. conductor cross-section

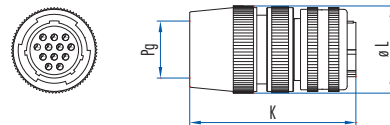
0,93 mm² for 12–27 or 55 contacts
0,60 mm² for 19 or 37 contacts

Dimensional Data

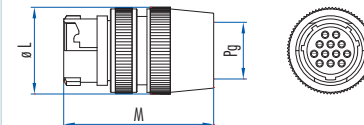
Panel connector



Cable connector

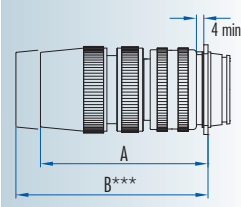


Coupler connector



Housing	Number of Contacts	Assembly		Panel connector							Cable connector and Coupler connector			
		A	B	\varnothing C	D	E	F	G	\varnothing H	\varnothing J	K	L	PG	M
1	12-19	53,5	70	21	20,5	1,5	11,5	27	3,2	28	42	26	11	52
2	27-37	63,5	82,5	27	20,5	1,5	11,5	32	3,2	34	59,5	34	16	55
3	55	72,5	100	39	23	2	11,5	43	4,2	48	68,5	44	21	59

Cable connector – Panel connector assembly



*** B: minimum disconnection distance

Miniature Series – Waterproof Miniature with ground contact

Part Number

Housing	1	1	2	2	3
Number of Contacts \varnothing 1 mm	12	19	27	37	55

Male panel connectors – Female cable connectors – Male coupler connectors

Square male panel connector	◇533 503 506	◇533 514 506	◇533 513 506	◇533 525 506	◇533 523 506
Female cable connector	637 612 506	637 619 506	637 627 506	637 637 506	637 655 506
Male coupler connector	637 762 506	637 769 506	637 777 506	637 787 506	637 795 506
PG	PG 11	PG 11	PG 16	PG 16	PG 21
Cable clamps	633 421 006	633 421 006	633 422 006	633 422 006	633 423 006
L Capacity of the cable clamp in mm	\varnothing 7 – 12	\varnothing 7 – 12	\varnothing 9 – 17	\varnothing 9 – 17	\varnothing 12,5 – 23
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 725 006	632 725 006	632 726 006	632 726 006	632 728 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

Female panel connectors – Male cable connectors – Female coupler connectors




Square female panel connector	◇533 502 506	◇533 515 506	◇533 512 506	◇533 524 506	◇533 522 506
Male cable connector	637 712 506	637 719 506	637 727 506	637 737 506	637 755 506
Female coupler connector	637 662 506	637 669 506	637 677 506	637 687 506	637 695 506
PG	PG 11	PG 11	PG 16	PG 16	PG 21
Cable clamps	633 421 006	633 421 006	633 422 006	633 422 006	633 423 006
L Capacity of the cable clamp in mm	\varnothing 7 – 12	\varnothing 7 – 12	\varnothing 9 – 17	\varnothing 9 – 17	\varnothing 12,5 – 23
Protective cap for panel connector	630 720 006	630 720 006	536 845 006	536 845 006	536 846 006
Protective cap for cable connector	632 725 006	632 725 006	632 726 006	632 726 006	632 728 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006	536 947 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

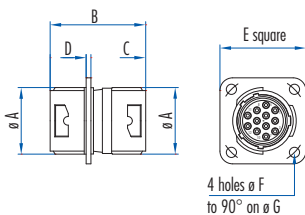
- ◇ Square panel connectors are generally of the „Miniature with ground contact“ type. See page 56.
- Moulded watertight rubber boots for cables are delivered with the connectors. They must be mounted in the cable connectors or coupler connectors.
- Boots for wire-to-wire cables and assemblies are available on request.
- **Important:** All the contacts must be mounted in the insert using our tool.
- For assembly, wiring, panel connector installation and contact arrangement instructions, see: Technical guides;
- Other accessories, see: Accessories.
- Polarisation: Polarisation systems are available to prevent incorrect connection between identical connectors (same series and same contact arrangement). See: Technical guides;
- All connectors are delivered with their contacts.

Miniature Series – Miniature with bulkhead connector

Technical Data		Miniature Series		Waterproof Miniature Series		
RoHS	Bulkhead connector		Cable connector		Coupler connector	
Bulkhead connector	male / female contacts					
Cable connector			rectangular housing		circular housing	
Locking	screw up the knurled ring on the cable connector 1/6 of a turn on the panel connector barrel, for frequent locking and unlocking					
Protection	Depending on the associated cable connector		IP 50 to IP 54 with elastomer in the housing and flat-gasket for panel connector		IP 65 with flat-gasket for panel connector	
Contacts	12 to 37 contacts \varnothing 1 mm, removable contacts		12 to 37 contacts \varnothing 1 mm, crimp or solder removable contacts			
Max. current	7 A \varnothing 1 mm					
Mechanical performance	1000 locking and mating cycles					
Contact resistance between pin and socket	< 0,0020 Ω					
Breakdown voltage	at 20 °C, at sea-level: 19 or 37 contacts >2000 Volts (RMS), 12, 27 or 55 contacts >2500 Volts (RMS)					
Insulation resistance	> 5000 M Ω					
Operating temperature	-40 °C to +100 °C (500 hours at +125 °C)					
Materials	Nickel-plated light alloy, gold-plated brass contacts, neoprene insert					
Max. conductor cross-section				0,93 mm ² for 12–27 or 55 contacts	0,60 mm ² for 19 or 37 contacts	

Dimensional Data

Bulkhead connector



Housing	Number of Contacts	Dimensions in mm							Weight in grams
		\varnothing A	B	C	D	E	\varnothing F	\varnothing G	
1	12-19	21	29	1,5	11,5	27	3,2	28	140
2	27-37	27	30	1,5	11,5	32	3,2	34	203

Miniature Series – Miniature with bulkhead connector

Part Number

Housing	1	1	2	2
Number of Contacts \varnothing 1 mm	12	19	27	37

Bulkhead connector

Bulkhead connector	632 112 006	632 119 006	632 127 006	632 137 006
Protective cap	630 720 006	630 720 006	536 845 006	536 845 006
Flat-Gasket for panel connector (pack of 10)	536 945 006	536 945 006	536 946 006	536 946 006

The electrical connection is made using a cable connector from our „Miniature“ or „Waterproof Miniature“ Series. Select the most appropriate type of cable connector.

Miniature Series – Female cable connectors – Male cable connectors (see page 48)

Male cable connector	530 503 006	530 505 006	530 513 006	530 521 006
Female cable connector	530 502 006	530 504 006	530 512 006	530 520 006
Type 3 cable clamp	630 135 006	630 135 006	630 138 006	630 138 006
Protective cap for cable connector	632 720 006	632 720 006	532 214 006	532 214 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

Waterproof Miniature Series – Female cable connectors – Male cable connectors (see page 50)

Male cable connector	637 712 006	637 719 006	637 727 006	637 737 006
Female cable connector	637 612 006	637 619 006	637 627 006	637 637 006
Cable clamps	633 421 006	633 421 006	633 422 006	633 422 006
Protective cap for cable connector	632 725 006	632 725 006	632 726 006	632 726 006

Complete crimp tool: 579 316 006 (small crimp: \varnothing 1 mm), 579 481 006 (large crimp: \varnothing 1 mm, \varnothing 1,6 mm, \varnothing 2,4 mm)

Tool for insertion and removing contacts 597 104 006

- The bulkhead connector fitted with male / female contacts allows the installation of a leadthrough which can be disconnected on either side of the partition.
- **Important:** All the contacts must be mounted in the insert using our tool.
- For assembly, wiring, panel connector installation and contact arrangement instructions, see: Technical guides;
- Other accessories, see: Accessories.
- All connectors are delivered with their contacts.