

Sonder Sensor

自动控制技术 - 各种标准

电源连接器、传感器连接器



## M12 Automatisierungstechnik - Sonder - B-Kodierung

### M12 Automation Technology - Special - B-Coding

#### Kabelsteckverbinder

- Schraubverriegelung nach DIN EN 61076-2-101
- Schutzart IP67/IP68 <sup>1)</sup>
- Am Kabel angespritzte Ausführungen
- Einfache Montage
- Sehr gute EMV Eigenschaften
- Ausführungen mit Schirmringen/Irisfeder
- Winkelsteckverbinder in 4 Positionen einstellbar

#### Flanschsteckverbinder

- Schraubverriegelung nach DIN EN 61076-2-101
- Schutzart IP67 <sup>1)</sup>
- Einfache Montage
- Löt-/Tauchlötanschluss/Litzen/Kabel
- Verschiedene Bauformen

#### Cable Connectors

- Screw locking according to DIN EN 61076-2-101
- Degree of protection IP67/IP68 <sup>1)</sup>
- Moulded versions
- Easy assembly
- Excellent EMC shielding
- Versions with shielding rings/iris type spring
- Angled connector adjustable in 4 positions

#### Panel Mount Connectors

- Screw locking according to DIN EN 61076-2-101
- Degree of protection IP67 <sup>1)</sup>
- Easy assembly
- Solder/dip solder termination/single wires/cables
- Various variants

<sup>1)</sup> Erläuterung der Schutzarten siehe technische Informationen./ <sup>1)</sup> Explanation of protection standards see technical information.

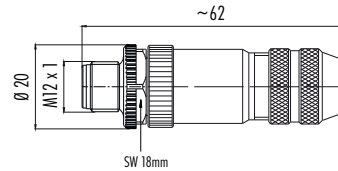
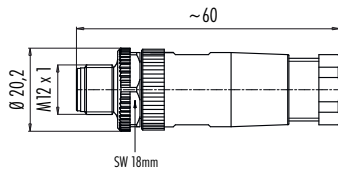
电缆连接器，针，金属锁紧系统，螺钉接线  
Male cable connector, metal locking system, screw clamp connection

电缆连接器，针，螺钉接线，带屏蔽环，屏蔽  
Male cable connector, screw clamp connection, with shielding ring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	4-6 mm	99 0429 15 04
	6-8 mm	99 0429 105 04
5	4-6 mm	99 0437 15 05
	6-8 mm	99 0437 105 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	6-8 mm	99 1429 810 04
5	6-8 mm	99 1437 810 05
	6,5-8,5 mm	99 1437 910 05
	8-10 mm	99 1437 935 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 6-8 mm, 6,5-8,5 mm, 8-10mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	CuSnZn (锡锌铜 / optalloy) >50插拔周期 / > 50 mating cycles 金 / gold >100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ (Gold/gold)		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	CuSnZn (锡锌铜 / optalloy) Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA, 铸锌镀镍 / zinc diecasting nickel plated		Material of housing

# 特殊标准连接器715系列

Automation Technology - Special - 715 Series

M12-B

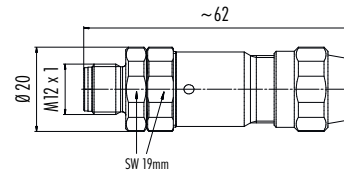
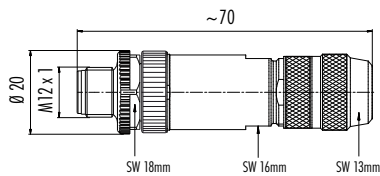
电缆连接器，针，螺钉接线，带IRIS弹簧，屏蔽  
Male cable connector, screw clamp connection, iris type spring, shieldable

电缆连接器，针，螺钉接线，带屏蔽环，不锈钢，屏蔽  
Male cable connector, screw clamp connection, with shielding ring, stainless steel version, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1439 810 05
	8-9 mm	99 1439 910 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	5,5-8,6 mm	99 1429 995 04
5	5,5-8,6 mm	99 1437 995 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	5-8 mm, 5,5-8,6 mm, 8-9 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / nickel plated 不锈钢1.4404 / stainless steel 1.4404		Material of housing

715-766

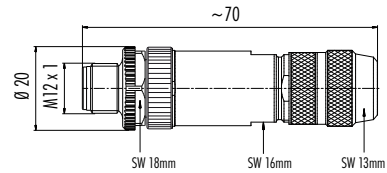
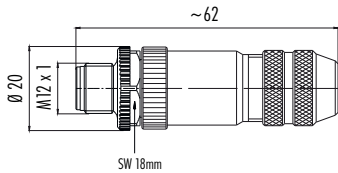
电缆连接器，针，笼式弹簧接线，带屏蔽环，屏蔽  
Male cable connector, wire clamp connection, with shielding ring, shieldable

电缆连接器，针，笼式弹簧接线，带IRIS弹簧，屏蔽  
Male cable connector, wire clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	6-8 mm	99 1535 810 05
	6,5-8,5 mm	99 1535 910 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1533 810 05
	8-9 mm	99 1533 910 05

技术参数 / Specifications

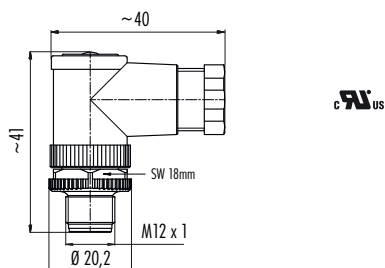
芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	笼式弹簧接线 / wire clamp	Termination
导线截面	max. 0,5 mm <sup>2</sup> (max. AWG 20)	Wire gauge
电缆出口直径	5-8 mm, 6-8 mm, 6,5-8,5 mm, 8-9 mm	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	III	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuZn (黄铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated	Material of housing

弯角电缆连接器，针，金属锁紧系统，螺钉接线  
Male angled connector, metal locking system, screw clamp connection

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	4-6 mm	99 0429 135 04
	6-8 mm	99 0429 145 04
5	4-6 mm	99 0437 135 05
	6-8 mm	99 0437 145 05

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技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 6-8 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	CuSnZn(锡锌铜 / optalloy) >50插拔周期 / > 50 mating cycles 金 / gold >100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ (Gold/gold)		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	CuSnZn (锡锌铜 / optalloy)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA		Material of housing

715-766

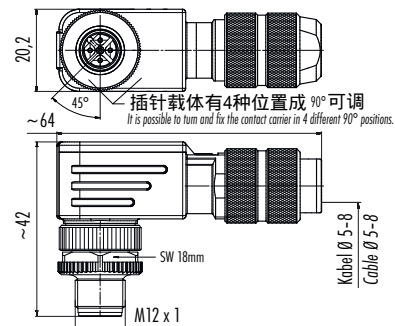
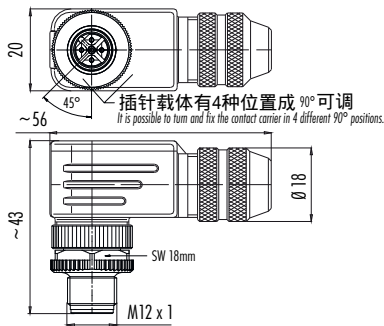
弯角电缆连接器，针，螺钉接线，带屏蔽环，屏蔽  
Male angled connector, screw clamp connection, with shielding ring, shieldable

弯角电缆连接器，针，螺钉接线，带IRIS弹簧，屏蔽  
Male angled connector, screw clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



US

US

订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	6-8 mm	99 1429 820 04
5	4-6 mm	99 1437 820 05
	6,5-8,5 mm	99 1437 920 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1439 820 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 5-8 mm, 6-8 mm, 6,5-8,5 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

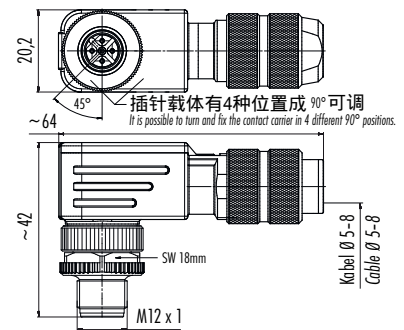
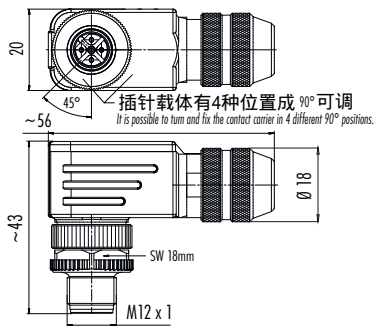
弯角电缆连接器，针，笼式弹簧接线，带屏蔽环，屏蔽  
Male angled connector, wire clamp connection, with shielding ring, shieldable

弯角电缆连接器，针，笼式弹簧接线，带 IRIS 弹簧，屏蔽  
Male angled connector, wire clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	6-8 mm	99 1535 820 05
	6,5-8,5 mm	99 1535 920 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1533 820 05

技术参数 / Specifications

芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	笼式弹簧接线 / wire clamp	Termination
导线截面	max. 0,5 mm <sup>2</sup> (max. AWG 20)	Wire gauge
电缆出口直径	5-8 mm, 6-8 mm, 6,5-8,5 mm	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuZn (黄铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated	Material of housing



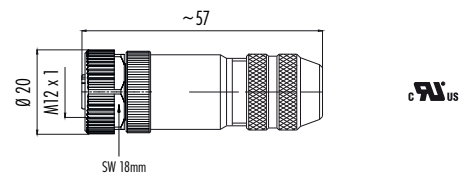
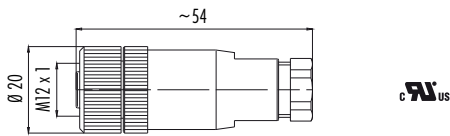
电缆连接器，孔，金属锁紧系统，螺钉接线  
Female cable connector, plastic locking system, screw clamp connection

电缆连接器，孔，螺钉接线，带屏蔽环，屏蔽  
Female cable connector, screw clamp connection, with shielding ring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	4-6 mm	99 0430 15 04
	6-8 mm	99 0430 110 04
5	4-6 mm	99 0436 15 05
	6-8 mm	99 0436 110 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	6-8 mm	99 1430 810 04
5	6-8 mm	99 1436 810 05
	6,5-8,5 mm	99 1436 910 05
	8-10 mm	99 1436 935 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 6-8 mm, 6,5-8,5 mm, 8-10 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	CuSn(锡青铜 / optalloy) > 50 插拔周期 / > 50 mating cycles 金 / gold > 100 插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ (Gold/gold)		Contact resistance
插针材料	CuSn (青铜 / brass)		Material of contact
插针表面材料	CuSnZn (锡青铜 / optalloy) Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA, 铸锌镀镍 / zinc diecasting nickel plated		Material of housing

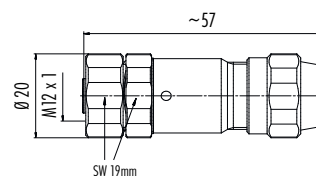
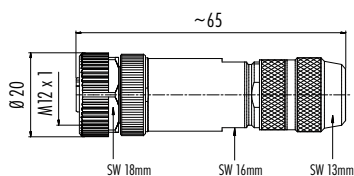
电缆连接器，孔，螺钉接线，带 IRIS 弹簧，屏蔽  
Female cable connector, screw clamp connection, iris type spring, shieldable

电缆连接器，孔，螺钉接线，带屏蔽环，不锈钢，屏蔽  
Female cable connector, screw clamp connection, with shielding ring, stainless steel version, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1438 810 05
	8-9 mm	99 1438 910 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	5,5-8,6 mm	99 1430 995 04
5	5,5-8,6 mm	99 1436 995 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	5-8 mm, 5,5-8,6 mm, 8-9 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuSn (青铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / nickel plated 不锈钢 1.4404 / stainless steel 1.4404		Material of housing

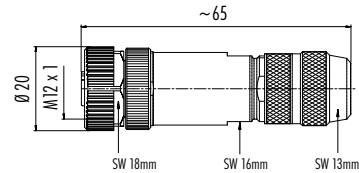
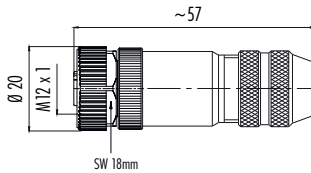
电缆连接器，孔，笼式弹簧接线，带屏蔽环，屏蔽  
Female cable connector, wire clamp connection, with shielding ring, shieldable

电缆连接器，孔，笼式弹簧接线，带IRIS弹簧，屏蔽  
Female cable connector, wire clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	6-8 mm	99 1536 810 05
	6,5-8,5 mm	99 1536 910 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1534 810 05
	8-9 mm	99 1534 910 05

技术参数 / Specifications

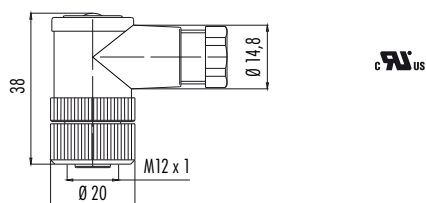
芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	笼式弹簧接线 / wire clamp	Termination
导线截面	max. 0,5 mm <sup>2</sup> (max. AWG 20)	Wire gauge
电缆出口直径	5-8 mm, 6-8 mm, 6,5-8,5 mm, 8-9 mm	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	III	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated	Material of housing

弯角电缆连接器，孔，塑料锁紧系统，螺钉接线  
Female angled connector, plastic locking system, screw clamp connection

图例 / Figure

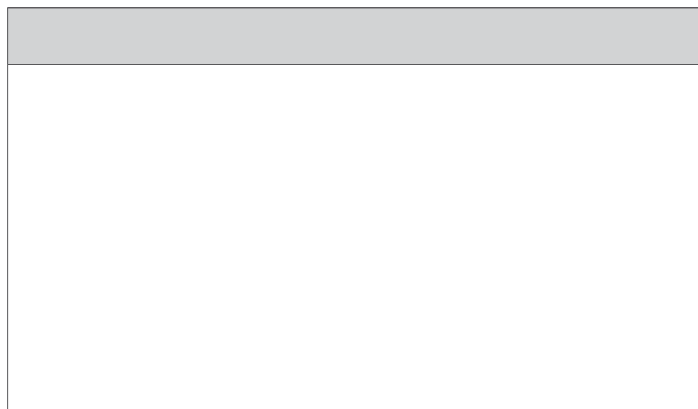


尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	4-6 mm	99 0430 05 04
	6-8 mm	99 0430 165 04
5	4-6 mm	99 0436 05 05
	6-8 mm	99 0436 165 05



技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0.75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 6-8 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>50插拔周期 / > 50 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 8 mΩ		Contact resistance
插针材料	CuSn (青铜 / brass)		Material of contact
插针表面材料	CuSnZn (锡锌铜 / optalloy)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA		Material of housing

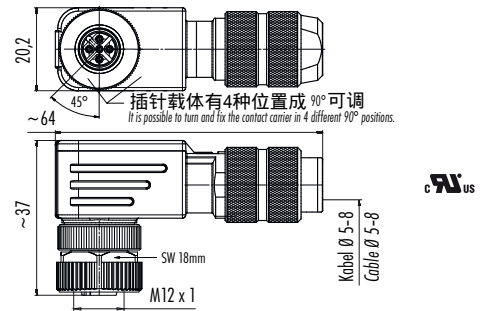
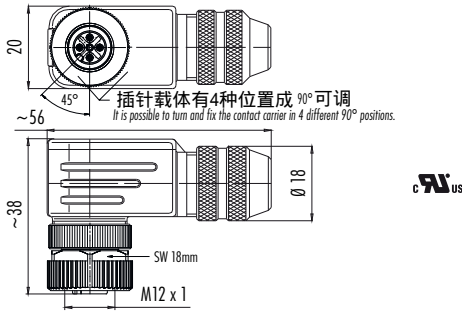
弯角电缆连接器，孔，螺钉接线，带屏蔽环，屏蔽  
Female angled connector, screw clamp connection, with shielding ring, shieldable

弯角电缆连接器，孔，螺钉接线，带IRIS弹簧，屏蔽  
Female angled connector, screw clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
4	6-8 mm	99 1430 820 04
5	4-6 mm	99 1436 820 05
	6,5-8,5 mm	99 1436 920 05

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1438 820 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	螺钉接线 / screw		Termination
导线截面	max. 0,75 mm <sup>2</sup> (max. AWG 20)		Wire gauge
电缆出口直径	4-6 mm, 5-8 mm, 6-8 mm, 6,5-8,5 mm		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuSn (青铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

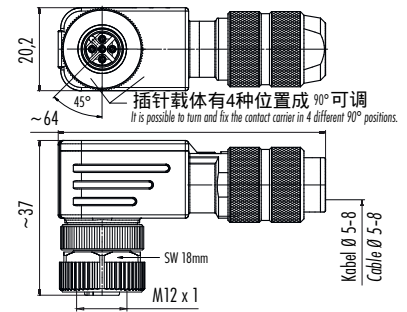
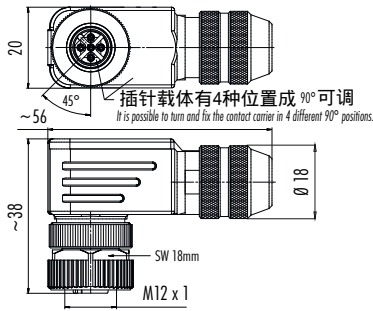
弯角电缆连接器，孔，笼式弹簧接线，带屏蔽环，屏蔽  
Female angled connector, wire clamp connection, with shielding ring, shieldable

弯角电缆连接器，孔，笼式弹簧接线，带IRIS弹簧，屏蔽  
Female angled connector, wire clamp connection, iris type spring, shieldable

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	6-8 mm	99 1536 820 05
	6,5-8,5 mm	99 1536 920 05

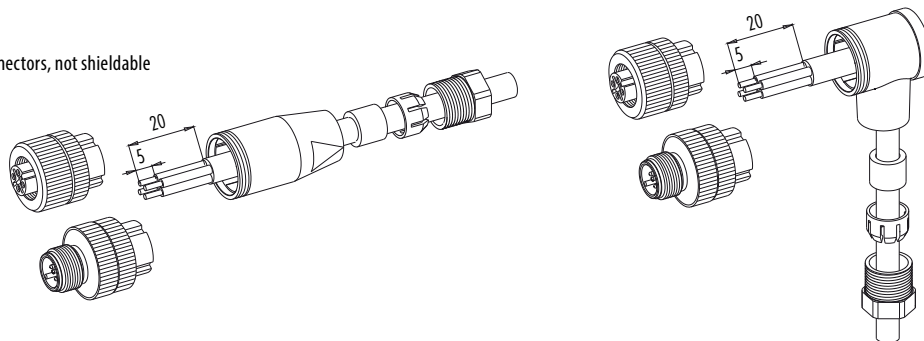
芯数 Contacts	电缆出口直径 Cable outlet	订货号 Ordering-No.
5	5-8 mm	99 1534 820 05

技术参数 / Specifications

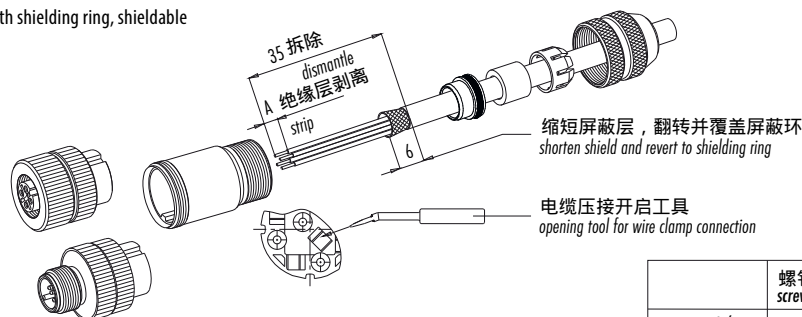
芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	笼式弹簧接线 / wire clamp	Termination
导线截面	max. 0,5 mm <sup>2</sup> (max. AWG 20)	Wire gauge
电缆出口直径	5-8 mm, 6-8 mm, 6,5-8,5 mm	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated	Material of housing

安装指南  
Assembly instruction

电缆连接器，不屏蔽  
Strip measures cable/angled connectors, not shieldable

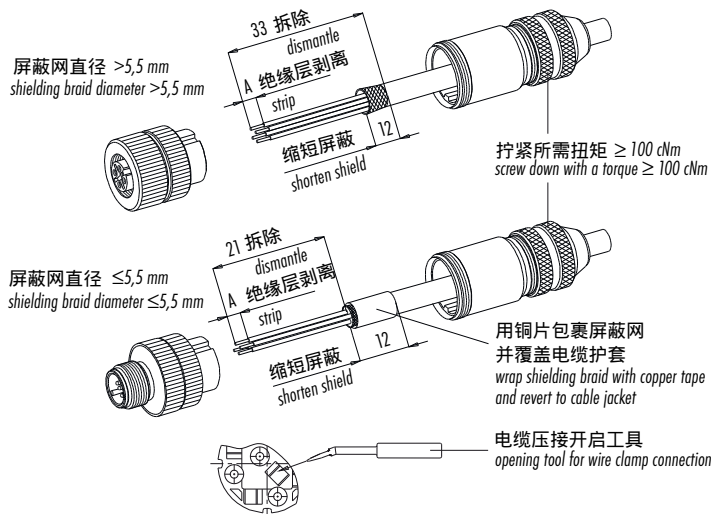


电缆连接器，带屏蔽环，屏蔽  
Strip measures cable connectors, with shielding ring, shieldable



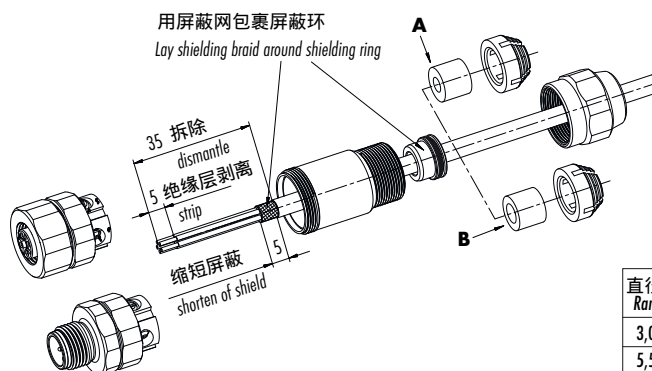
	螺钉压接 screw connection	压线压接 wire clamp connection
度量 A/mm measure A/mm	5	7

电缆连接器，带IRIS弹簧，带屏蔽  
Strip measures cable connectors, iris type spring, shieldable



	螺钉压接 screw connection	压线压接 wire clamp connection
度量 A/mm measure A/mm	5	7

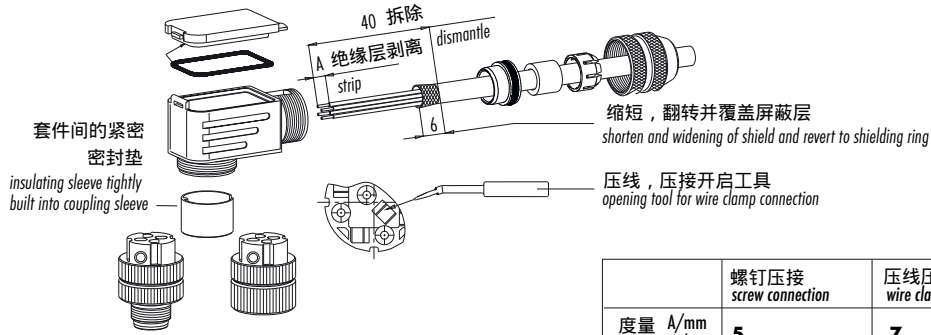
电缆连接器，不锈钢，带屏蔽  
Strip measures cable connectors, stainless steel version, shieldable



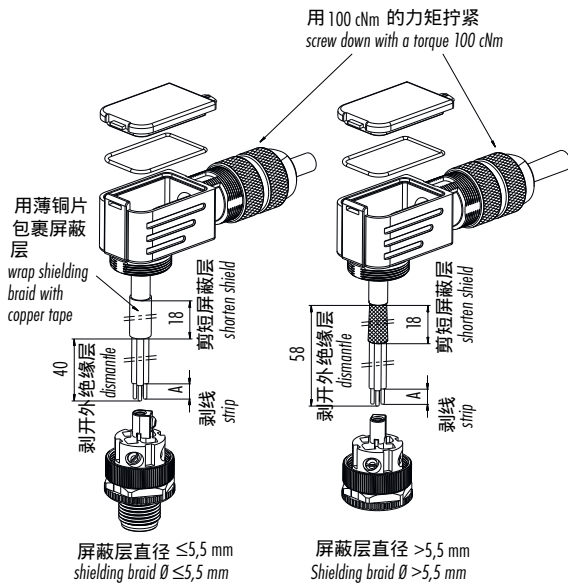
直径范围(mm) Range (mm)	电缆直径A(mm) Cable-Ø A (mm)	电缆直径B(mm) Cable-Ø B (mm)
3,0 - 5,5	3 - 4	4 - 5,5
5,5 - 8,6	5,5 - 7,5	7,5 - 8,6

安装指南  
Assembly instruction

弯角连接器，带屏蔽环，带屏蔽  
Strip measures angled connectors, with shielding ring, shieldable



弯角连接器，带IRIS弹簧，带屏蔽  
Strip measures angled connectors, iris type spring, shieldable



屏蔽层直径  $\leq 5,5$  mm

1. 将电缆穿入外壳。
2. 剥开内外绝缘层，并缩短屏蔽层，翻转覆盖并用铜片包裹。
3. 连接所有导线。
4. 安装插针或插孔。
5. 从电缆出口将电缆拉出，直至2mm屏蔽层裸露为止。
6. 垫上垫圈，盖上下盖并拧紧压紧螺丝。

Shielding braid diameter  $\leq 5,5$  mm

1. Bead housing to cable.
2. Cut off cable coating, strip single cores, shorten shielding braid, revert to cable jacket and wrap it with copper tape.
3. Connect single wires.
4. Screw housing to male or female contact carrier.
5. Pull back the cable through the outlet until only 2 mm of the shielding braid are visible.
6. Mount lid with seal and fix pressing screw.

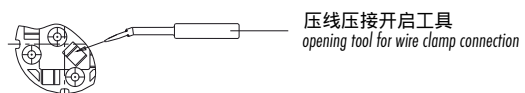
屏蔽层直径  $> 5,5$  mm

1. 将电缆穿入外壳。
2. 剥开内外绝缘层，并缩短屏蔽层。
3. 连接所有导线。
4. 安装插针或插孔。
5. 从电缆出口将电缆拉出，直至2mm屏蔽层裸露为止。
6. 垫上垫圈，盖上下盖并拧紧压紧螺丝。

Shielding braid diameter  $> 5,5$  mm

1. Bead housing to cable.
2. Cut off cable coating, strip single cores, shorten shielding braid.
3. Connect single wires.
4. Screw housing to male or female contact carrier.
5. Pull back the cable through the outlet until only 2 mm of the shielding braid are visible.
6. Mount lid with seal and fix pressing screw.

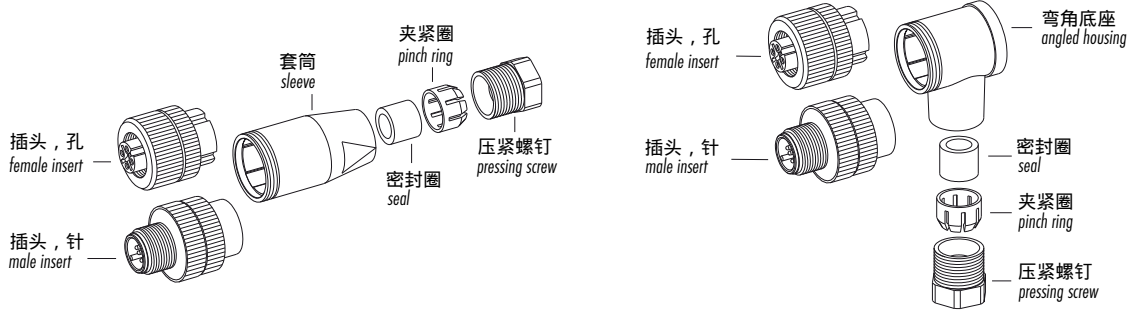
	螺钉压接 screw connection	压线压接 wire clamp connection
度量 A/mm measure A/mm	5	7



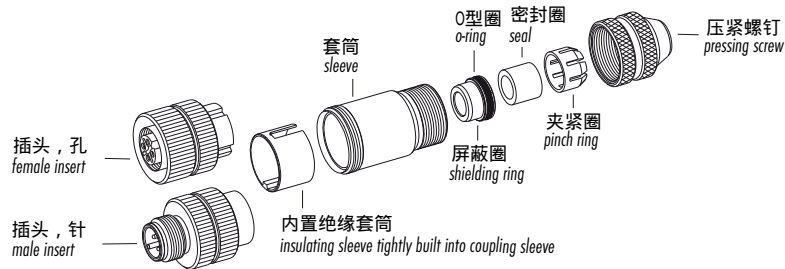


零件图样  
Component part drawing

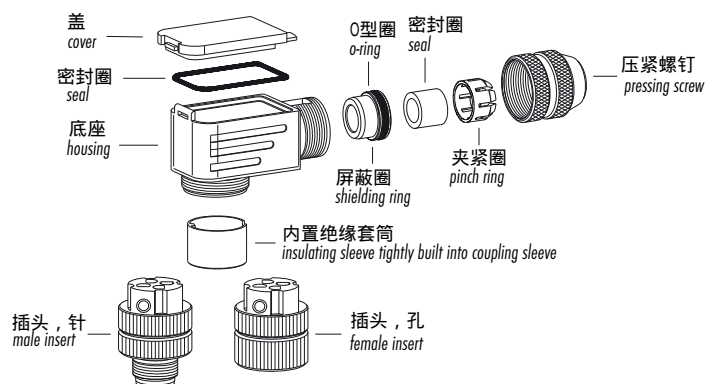
电缆/弯角连接器，不带屏蔽  
Cable/angled connectors, not shieldable



电缆连接器，带屏蔽环，屏蔽  
Cable connectors, with shielding ring, shieldable

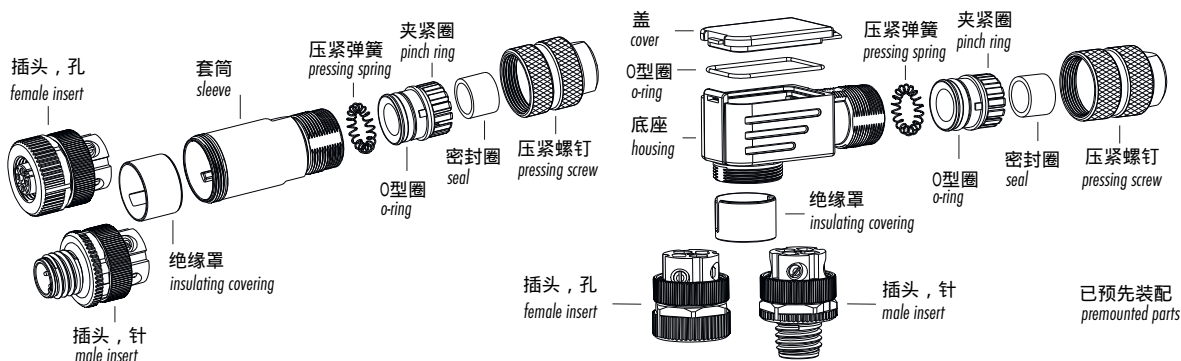


弯角连接器，带屏蔽环，屏蔽  
Angled connectors, with shielding ring, shieldable

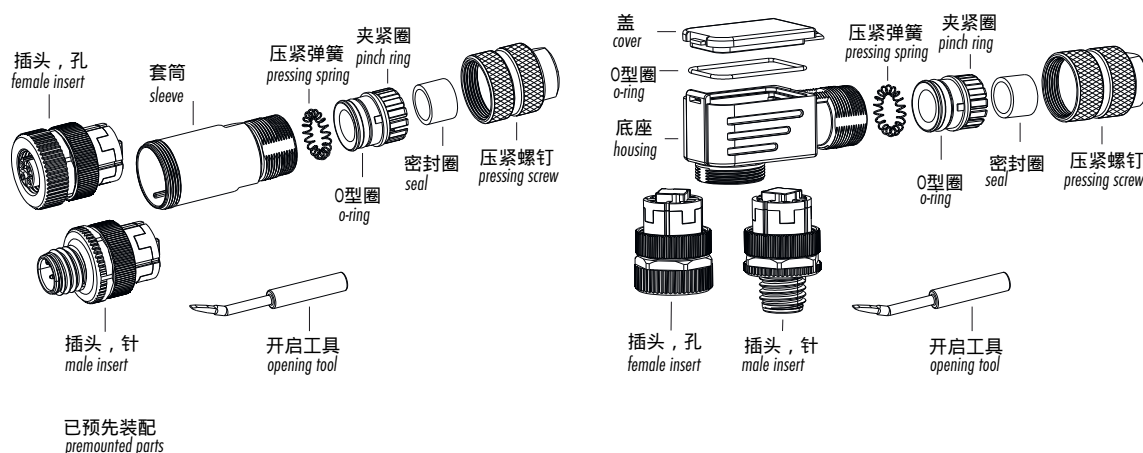


零件图样  
Component part drawing

电缆/弯角连接器，螺钉接线，带IRIS弹簧，屏蔽  
Cable/angled connectors, screw clamp connection, iris type spring, shieldable



电缆/弯角连接器，笼式弹簧接线，带IRIS弹簧，屏蔽  
Cable/angled connectors, wire clamp connection, iris type spring, shieldable

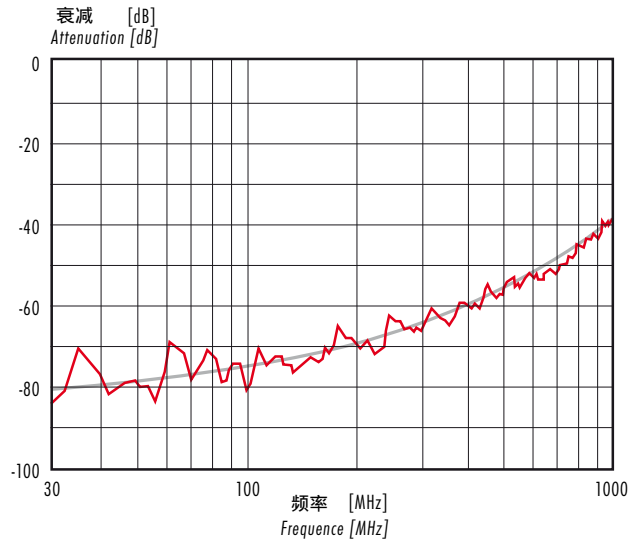


715-766

额定  
Ratings

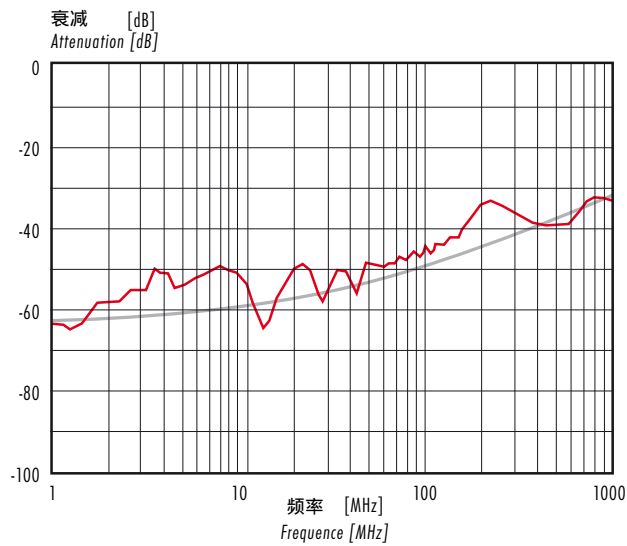
符合 DIN 47250-6 标准的衰变曲线  
适用于直头电缆连接器  
螺钉接线  
(电缆系列 IEEE 802.3)

Attenuation curve according to DIN 47250-6  
for straight cable connectors  
with screw clamp connection,  
(cable version IEEE 802.3)



符合 DIN 47250-6 标准的衰变曲线  
适用于直头电缆连接器  
螺钉接线  
(电缆系列 IEEE 802.3)

Attenuation curve according to DIN 47250-6  
for straight cable connectors  
with iris type spring,  
(cable version IEEE 802.3)



715.766



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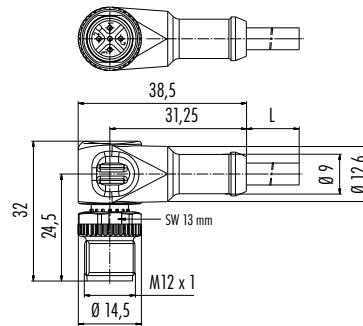
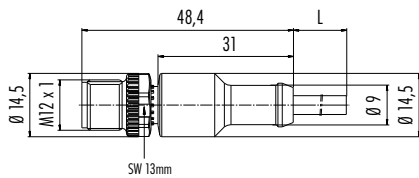
浇铸电缆连接器，针  
Male cable connector, moulded

浇铸弯角电缆连接器，针  
Male angled connector, moulded

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆护套 Cable jacket	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
3	PVC	2 m	77 4429 0000 20003-0200
		5 m	77 4429 0000 20003-0500
	PUR	2 m	77 4429 0000 50003-0200
		5 m	77 4429 0000 50003-0500
4	PVC	2 m	77 4429 0000 20004-0200
		5 m	77 4429 0000 20004-0500
	PUR	2 m	77 4429 0000 50004-0200
		5 m	77 4429 0000 50004-0500
5	PVC	2 m	77 4429 0000 20005-0200
		5 m	77 4429 0000 20005-0500
	PUR	2 m	77 4429 0000 50005-0200
		5 m	77 4429 0000 50005-0500

芯数 Contacts	电缆护套 Cable jacket	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
3	PVC	2 m	77 4427 0000 20003-0200
		5 m	77 4427 0000 20003-0500
	PUR	2 m	77 4427 0000 50003-0200
		5 m	77 4427 0000 50003-0500
4	PVC	2 m	77 4427 0000 20004-0200
		5 m	77 4427 0000 20004-0500
	PUR	2 m	77 4427 0000 50004-0200
		5 m	77 4427 0000 50004-0500
5	PVC	2 m	77 4427 0000 20005-0200
		5 m	77 4427 0000 20005-0500
	PUR	2 m	77 4427 0000 50005-0200
		5 m	77 4427 0000 50005-0500

技术参数 / Specifications

芯数	3	4	5	Number of contacts
锁紧方式	M12 螺母锁紧 / screw			Connector locking system
接线方式	压接，浇铸电缆 / crimp, moulded			Termination
导线截面	0,34 mm <sup>2</sup> (AWG 22)			Wire gauge
电缆出口直径	—			Cable outlet
防护等级	IP68			Degree of protection
插拔周期	>100 插拔周期 / > 100 mating cycles			Mechanical operation
最高工作温度	+ 85 °C			Upper temperature
最低工作温度	- 25 °C			Lower temperature
额定电压	250 V		125 V	Rated voltage
额定冲击电压	2500 V		1500 V	Rated impulse voltage
污染等级	3			Pollution degree
过电压等级	II			Overvoltage categorie
绝缘等级	II			Material group
额定电流 (40 °C)	4 A			Rated current (40 °C)
触点电阻	≤ 3 mΩ			Contact resistance
插针材料	CuZn(黄铜/brass)			Material of contact
插针表面材料	Au(金/gold)			Contact plating
插头主体材料	PUR			Material of contact body
外壳材料	PUR			Material of housing

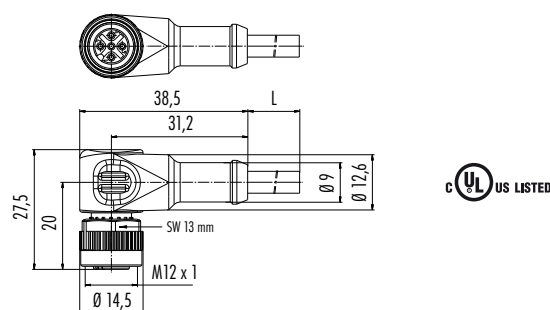
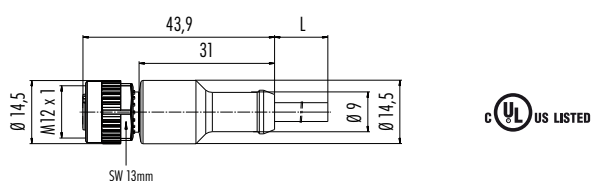
浇铸电缆连接器，孔  
Female cable connector, moulded

浇铸弯角电缆连接器，孔  
Female angled connector, moulded, PVC

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆护套 Cable jacket	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
3	PVC	2 m	77 4430 0000 20003-0200
		5 m	77 4430 0000 20003-0500
	PUR	2 m	77 4430 0000 50003-0200
		5 m	77 4430 0000 50003-0500
4	PVC	2 m	77 4430 0000 20004-0200
		5 m	77 4430 0000 20004-0500
	PUR	2 m	77 4430 0000 50004-0200
		5 m	77 4430 0000 50004-0500
5	PVC	2 m	77 4430 0000 20005-0200
		5 m	77 4430 0000 20005-0500
	PUR	2 m	77 4430 0000 50005-0200
		5 m	77 4430 0000 50005-0500

芯数 Contacts	电缆护套 Cable jacket	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
3	PVC	2 m	77 4434 0000 20003-0200
		5 m	77 4434 0000 20003-0500
	PUR	2 m	77 4434 0000 50003-0200
		5 m	77 4434 0000 50003-0500
4	PVC	2 m	77 4434 0000 20004-0200
		5 m	77 4434 0000 20004-0500
	PUR	2 m	77 4434 0000 50004-0200
		5 m	77 4434 0000 50004-0500
5	PVC	2 m	77 4434 0000 20005-0200
		5 m	77 4434 0000 20005-0500
	PUR	2 m	77 4434 0000 50005-0200
		5 m	77 4434 0000 50005-0500

技术参数 / Specifications

芯数	3	4	5	Number of contacts
锁紧方式	M12 螺母锁紧 / screw			Connector locking system
接线方式	压接，浇铸电缆 / crimp, moulded			Termination
导线截面	0,34 mm <sup>2</sup> (AWG 22)			Wire gauge
电缆出口直径	—			Cable outlet
防护等级	IP68			Degree of protection
插拔周期	>100 插拔周期 / > 100 mating cycles			Mechanical operation
最高工作温度	+ 85 °C			Upper temperature
最低工作温度	- 25 °C			Lower temperature
额定电压	250 V		125 V	Rated voltage
额定冲击电压	2500 V		1500 V	Rated impulse voltage
污染等级	3			Pollution degree
过电压等级	II			Overvoltage categorie
绝缘等级	II			Material group
额定电流 (40 °C)	4 A			Rated current (40 °C)
触点电阻	≤ 3 mΩ			Contact resistance
插针材料	CuSn (青铜 / bronze)			Material of contact
插针表面材料	Au (金 / gold)			Contact plating
插头主体材料	PUR			Material of contact body
外壳材料	PUR			Material of housing

<sup>1)</sup> 标准电缆长度2米和5米，其他电缆长度可以定制。<sup>1)</sup> Standard cable length is 2 m/5 m. Other length upon request.

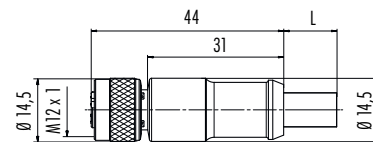
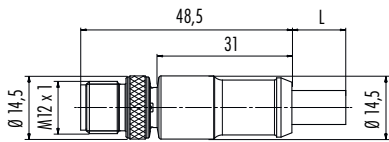
浇铸电缆连接器，针 PROFIBUS  
Male cable connector, PROFIBUS

浇铸电缆连接器，孔 PROFIBUS  
Female cable connector, PROFIBUS

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
2	2 m	77 4329 0000 60702-0200
	5 m	77 4329 0000 60702-0500
	10 m	77 4329 0000 60702-1000

芯数 Contacts	电缆长度 Cable length	订货号 <sup>1)</sup> Ordering-No. <sup>1)</sup>
2	2 m	77 4330 0000 60702-0200
	5 m	77 4330 0000 60702-0500
	10 m	77 4330 0000 60702-1000

技术参数 / Specifications

芯数	2	Number of contacts
锁紧方式	M12 螺母锁紧 / screw	Connector locking system
接线方式	压接，浇铸电缆 / crimp, moulded	Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100 插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 80 °C	Upper temperature
最低工作温度	- 25 °C	Lower temperature
额定电压	60 V	Rated voltage
额定冲击电压	2500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	1 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	针 / pin CuZn (黄铜 / brass) 孔 / socket CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PUR	Material of contact body
外壳材料	PUR	Material of housing

电缆技术参数  
Specifications

标准电缆  
Standard cable

芯数	3		4		5		Number of contacts
导线截面mm	3 x 0,34 mm <sup>2</sup> (AWG 22)		4 x 0,34 mm <sup>2</sup> (AWG 22)		5 x 0,34 mm <sup>2</sup> (AWG 22)		Wire gauge mm <sup>2</sup> <sup>1)</sup>
电缆护套材料	PVC grau/grey	PUR	PVC grau/grey	PUR	PVC grau/grey	PUR	Material jacket
导线绝缘层	PVC grau/grey	PP	PVC grau/grey	PP	PVC grau/grey	PP	Insulation wire
导线规格 (mm)	32 x 0,1						Design of wire (mm)
电缆外壳 (mm)	4,5	4,3	4,8	4,7	4,8	4,7	Cable jacket (mm)
导线电阻	57 Ω/Km (20 °C)	60 Ω/Km (20 °C)	79 Ω/Km (20 °C)	60 Ω/Km (20 °C)	79 Ω/Km (20 °C)	60 Ω/Km (20 °C)	Resistance of wire
工作温度范围 (电缆运动)	PVC: - 5 °C /+ 105 °C PUR: - 25 °C /+ 90 °C						Temperature range (cable in move)
工作温度范围 (电缆静止)	PVC: - 40 °C /+ 105 °C PUR: - 50 °C /+ 90 °C						Temperature range (cable not in move)
弯曲半径 (电缆运动)	min. 10 x D						Bending radius (cable in move)
弯曲半径 (电缆静止)	min. 5 x D						Bending radius (cable not in move)
弯曲周期	2 Mio.	5 Mio.	2 Mio.	5 Mio.	2 Mio.	5 Mio.	Bending cycles (at 10 x D)
允许加速度	5 m/s <sup>2</sup>						Permitted acceleration
水平移动 5 m/s	5 m						Traverse path horizontal 5 m/s <sup>2</sup>
垂直移动 5 m/s	2 m	5 m	2 m	5 m	2 m		Traverse path vertical 5 m/s <sup>2</sup>
移动速度	Bei 5 m horizontalem Weg bis 200 m/min./At 5 m horizontal traverse up to 200 m/min.						Traverse speed
备注	In der Schleppkette oder bei mechanischer Beanspruchung +60 °C./In chain flex application or when stressed mechanically +60 °C.						Remark
认证	UL/CSA						Approval
UL 类型	PVC: AWM 2517 PUR: AWM 20549						UL-style

电缆技术参数  
Specifications

PROFIBUS 电缆  
PROFIBUS cable

芯数	2		Number of contacts
导线截面mm	1 x 2 x 0,25 mm <sup>2</sup> (AWG 24)		Wire gauge mm <sup>2</sup> <sup>1)</sup>
电缆护套材料	PUR		Material jacket
导线绝缘层	PE-Schaum/PE foam		Insulation wire
导线规格 (mm)	19 x 0,127 (AWG 24 x 19)		Design of wire (mm)
电缆外壳 (mm)	7,8		Cable jacket (mm)
UL 类型	AWM 20236		UL-style

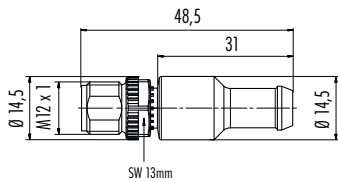


终端连接器，针 PROFIBUS  
Male terminating connector, PROFIBUS

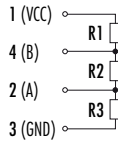
图例 / Figure



尺寸图 / Drawing



接线图  
Wire diagram



订货信息 / Order Data

芯数 Contacts	订货号 Ordering-No.
4	77 9835 0000 00004

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技术参数 / Specifications

芯数	4	Number of contacts
锁紧方式	M12 螺母锁紧 / screw	Connector locking system
接线方式	—	Termination
导线截面	—	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100 插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 25 °C	Lower temperature
额定电压	60 V	Rated voltage
额定冲击电压	2500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuZn (黄铜 / brass)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PUR	Material of contact body
外壳材料	PUR	Material of housing



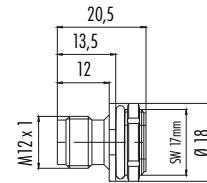
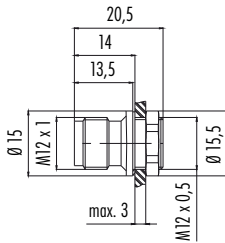
面板安装连接器，针，带固定螺纹  
Male panel mount connector, fixing thread

面板安装连接器，针，带固定螺纹  
Male panel mount connector, fixing thread

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	M12 x 0,5	09 0431 90 04

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 0431 160 04
	M16 x 0,5	09 0431 390 04
5	M16 x 0,5	09 0433 390 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	焊接 / solder		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA		Material of housing

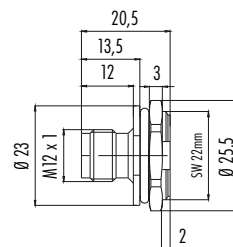
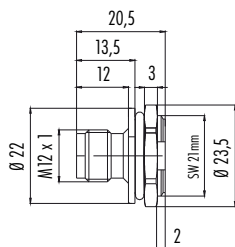
面板安装连接器，针，带固定螺纹  
Male panel mount connector, fixing thread

面板安装连接器，针，带固定螺纹  
Male panel mount connector, fixing thread

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 11	09 0435 90 04

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 13,5	09 0439 90 04
	M20 x 1,5	09 0439 390 04
5	M20 x 1,5	09 0449 390 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	焊接 / solder		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP67		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	III		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	PA		Material of housing

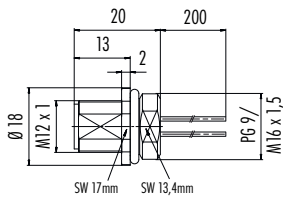
面板安装连接器，针，带连接线  
Male panel mount connector with single wires

面板安装连接器，针，位置可调，带连接线  
Male panel mount connector, positioning possible, with single wires

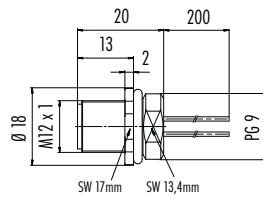
图例 / Figure



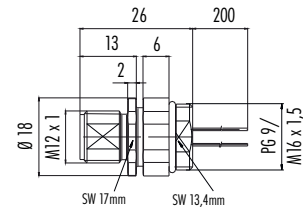
尺寸图 / Drawing



铸锌外壳系列  
Version with zinc diecast housing



不锈钢系列  
Stainless steel version



铸锌外壳系列  
Version with zinc diecast housing

订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4431 00 04
	M16 x 1,5	09 4431 700 04
	PG 9 不锈钢 / stainless steel	09 4431 282 04
5	PG 9	09 4441 00 05
	M16 x 1,5	09 4441 700 05
	PG 9 不锈钢 / stainless steel	09 4441 282 05

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4431 22 04
	M16 x 1,5	09 4431 722 04
5	PG 9	09 4441 22 05
	M16 x 1,5	09 4441 722 05

技术参数 / Specifications

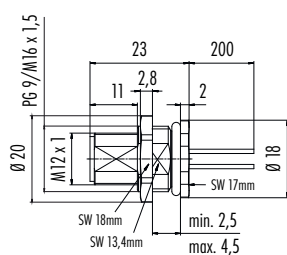
芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	已装配连接线 / single wires		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated 不锈钢 / stainless steel		Material of housing

面板安装连接器，针，板前固定，带连接线  
Male panel mount connector, front fastened, with single wires

图例 / Figure



尺寸图 / Drawing



铸锌外壳系列  
Version with zinc diecasted housing

订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4431 116 04
5	PG 9	09 4441 116 05

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技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	已装配连接线 / single wires		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

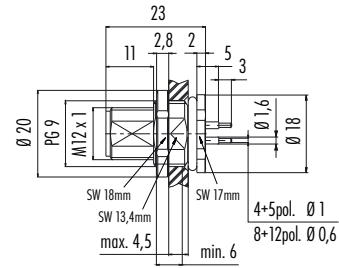
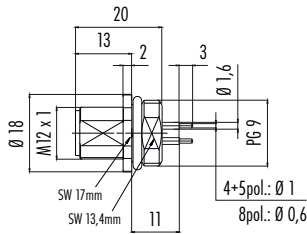
面板安装连接器，针，浸焊  
Male panel mount connector, dip solder

面板安装连接器，针，板前固定，浸焊  
Male panel mount connector, front fastened, dip solder

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
5	PG 9	09 4445 88 05

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4431 90 04
5	PG 9	09 4441 90 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	浸焊 / dip solder		Termination
导线截面	—		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

面板安装连接器，针，板前固定，浸焊  
Male panel mount connector, front fastened, dip solder

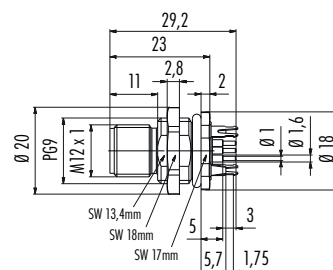
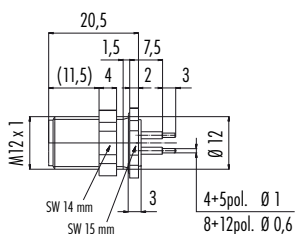
面板安装连接器，针，板前固定，浸焊，带屏蔽片  
Male panel mount connector, front fastened, dip solder, with shielding sheet

图例 / Figure



开孔图请见599页  
Drilling schemes see page 599

尺寸图 / Drawing



PCB 厚度: 1,6 mm 六角螺母可自由移动  
Thickness of PCB: 1,6 mm Hexagon nut enclosed loose

订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	M12 x 1	09 4431 550 04
5	M12 x 1	09 4441 550 05

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
5	PG 9	09 4441 500 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	浸焊 / dip solder		Termination
导线截面	—		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuZn (黄铜 / brass)		Material of contact
插针表面材料	Au (金 / gold) 屏蔽片 / shielding sheet Sn (锡 / tin)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass nickel plated)		Material of housing



PCB 面板安装连接器，针，直头  
Male receptacle for PCB assembly

PCB 面板安装连接器，针，弯头  
Male angled receptacle for PCB assembly

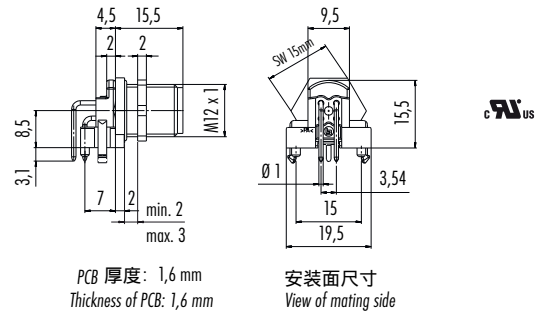
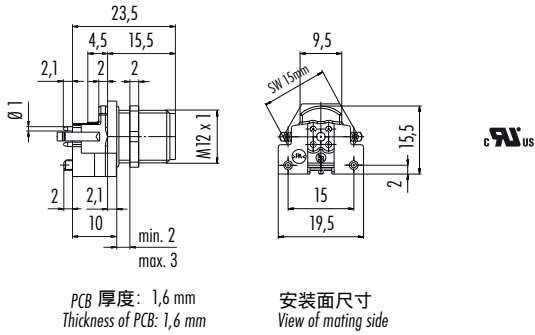
图例 / Figure



开孔图请见599页  
Drilling schemes see page 599

开孔图请见599页  
Drilling schemes see page 599

尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	订货号 Ordering-No.
5	99 4445 200 05
	99 4445 458 05 带屏蔽片 / with shielding sheet

芯数 Contacts	订货号 Ordering-No.
5	99 4445 202 05
	99 4445 601 05 带屏蔽片 / with shielding sheet

技术参数 / Specifications

芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	浸焊 / dip solder	Termination
导线截面	—	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuZn (黄铜 / brass)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass nickel plated)	Material of housing

面板安装连接器，针，M16，带 PROFIBUS 电缆，屏蔽  
Male panel mount connector M16, with PROFIBUS cable, shielded

面板安装连接器，针，板前固定，带 PROFIBUS 电缆，屏蔽  
Male panel mount connector, front fastened, with PROFIBUS cable, shielded

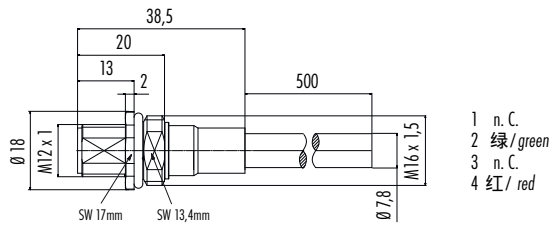
图例 / Figure



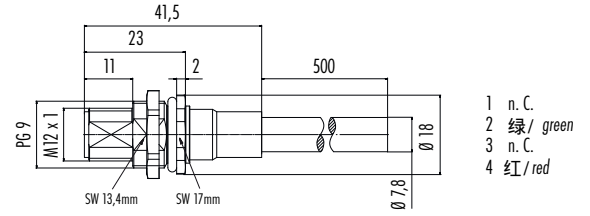
PROFIBUS 电缆技术参数见第 581 页  
Specifications of PROFIBUS-cable see page 581

PROFIBUS 电缆技术参数见第 581 页  
Specifications of PROFIBUS-cable see page 581

尺寸图 / Drawing



- 1 n. C.
- 2 绿 / green
- 3 n. C.
- 4 红 / red



- 1 n. C.
- 2 绿 / green
- 3 n. C.
- 4 红 / red

六角螺母可自由移动  
Hexagon nut enclosed loose

订货信息 / Order Data

芯数 Contacts	电缆长度 Cable length	安装螺纹规格 Fixing thread	订货号 Ordering-No.
2	0,5 m	M16 x 1,5	70 4433 246 04

芯数 Contacts	电缆长度 Cable length	安装螺纹规格 Fixing thread	订货号 Ordering-No.
2	0,5 m	PG 9	70 4433 247 04

技术参数 / Specifications

芯数	2	Number of contacts
锁紧方式	M12 螺母锁紧 / screw	Connector locking system
接线方式	PROFINET 电缆 / PROFINET-cable	Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)	Wire gauge
电缆出口直径	电缆直径 / cable diameter 7,8 mm	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100 插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 60 °C	Upper temperature
最低工作温度	- 20 °C	Lower temperature
额定电压	250 V	Rated voltage
额定冲击电压	2500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuZn (黄铜 / brass)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass) 铸锌镀镍 / zinc diecasting nickel plated	Material of housing

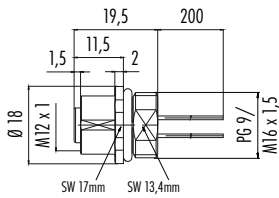
面板安装连接器，孔，带连接线  
Female panel mount connector with single wires

面板安装连接器，孔，位置可调，带连接线  
Female panel mount connector, positioning possible, with single wires

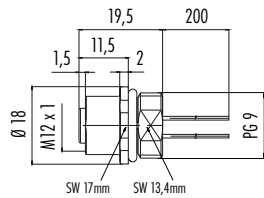
图例 / Figure



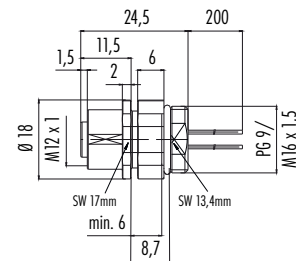
尺寸图 / Drawing



铸锌外壳系列  
Version with zinc diecast housing



不锈钢系列  
Stainless steel version



铸锌外壳系列  
Version with zinc diecast housing

订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4432 00 04
	M16 x 1,5	09 4432 700 04
	PG 9 不锈钢 stainless steel	09 4432 282 04
5	PG 9	09 4442 00 05
	M16 x 1,5	09 4442 700 05
	PG 9 不锈钢 stainless steel	09 4442 282 05

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4432 22 04
	M16 x 1,5	09 4432 722 04
5	PG 9	09 4442 22 05
	M16 x 1,5	09 4442 722 05

技术参数 / Specifications

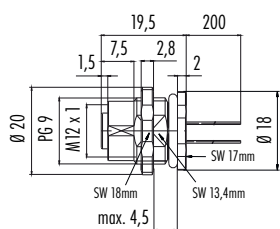
芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	已装配连接线 / single wires		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuSn (青铜 / bronze)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀锌 / zinc diecasting nickel plated 不锈钢 / stainless steel		Material of housing

面板安装连接器，孔，板前固定，带连接线  
Female panel mount connector, front fastened, with single wires

图例 / Figure



尺寸图 / Drawing



铸锌外壳系列  
Version with zinc diecasted housing

订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4432 116 04
5	PG 9	09 4442 116 05



技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	已装配连接线 / single wires		Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuSn (青铜 / bronze)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

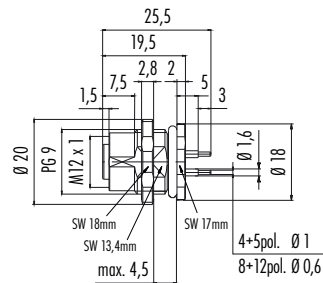
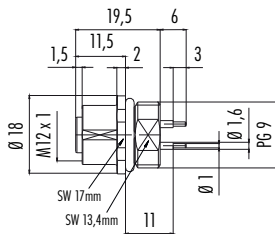
面板安装连接器，孔，浸焊  
Female panel mount connector, dip solder

面板安装连接器，孔，板前固定，浸焊，针长6mm  
Female panel mount connector, front fastened, dip solder, 6 mm contact length

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
5	PG 9	09 4446 88 05

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
4	PG 9	09 4432 90 04
5	PG 9	09 4442 90 05

技术参数 / Specifications

芯数	4	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw		Connector locking system
接线方式	浸焊 / dip solder		Termination
导线截面	—		Wire gauge
电缆出口直径	—		Cable outlet
防护等级	IP68		Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles		Mechanical operation
最高工作温度	+ 85 °C		Upper temperature
最低工作温度	- 40 °C		Lower temperature
额定电压	250 V	125 V	Rated voltage
额定冲击电压	2500 V	1500 V	Rated impulse voltage
污染等级	3		Pollution degree
过电压等级	II		Overvoltage categorie
绝缘等级	II		Material group
额定电流 (40 °C)	4 A		Rated current (40 °C)
触点电阻	≤ 3 mΩ		Contact resistance
插针材料	CuSn (青铜 / bronze)		Material of contact
插针表面材料	Au (金 / gold)		Contact plating
插头主体材料	PA		Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated		Material of housing

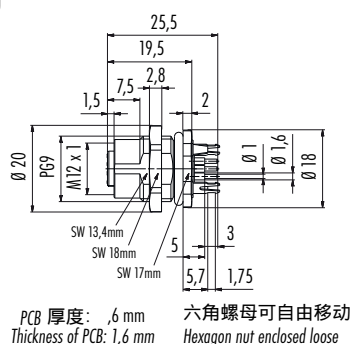
面板安装连接器，孔，板前固定，浸焊，带屏蔽片  
Female panel mount connector, front fastened, dip solder, with shielding sheet

图例 / Figure



开孔图请见599页  
Drilling schemes see page 599

尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	安装螺纹规格 Fixing thread	订货号 Ordering-No.
5	PG 9	09 4442 500 05

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技术参数 / Specifications

芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	浸焊 / dip solder	Termination
导线截面	—	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold) 屏蔽片 / shielding sheet Sn (锡 / tin)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass nickel plated)	Material of housing

PCB 面板安装连接器，孔，直头  
Female receptacle for PCB assembly

PCB 面板安装连接器，孔，弯头  
Female angled receptacle for PCB assembly

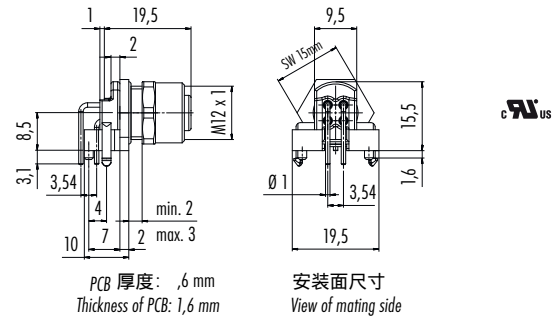
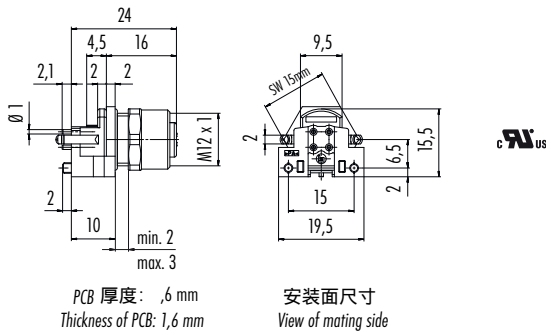
图例 / Figure



开孔图请见599页  
Drilling schemes see page 599

开孔图请见599页  
Drilling schemes see page 599

尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	订货号 Ordering-No.
5	99 4442 200 05
	99 4442 458 05 带屏蔽片 with shielding sheet

芯数 Contacts	订货号 Ordering-No.
5	99 4442 202 05
	99 4442 601 05 带屏蔽片 with shielding sheet

技术参数 / Specifications

芯数	5	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	浸焊 / dip solder	Termination
导线截面	—	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	125 V	Rated voltage
额定冲击电压	1500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass nickel plated)	Material of housing

面板安装连接器，孔，M16，带 PROFIBUS 电缆，屏蔽  
Female panel mount connector M16, with PROFIBUS-cable, shielded

面板安装连接器，孔，板前固定，带 PROFIBUS 电缆，屏蔽  
Female panel mount connector, front fastened, with PROFIBUS-cable, shielded

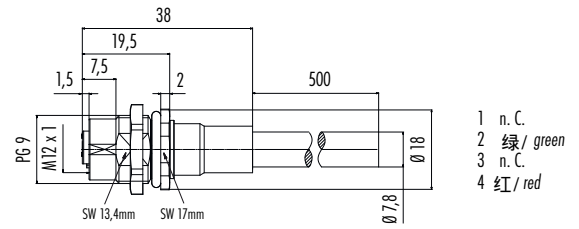
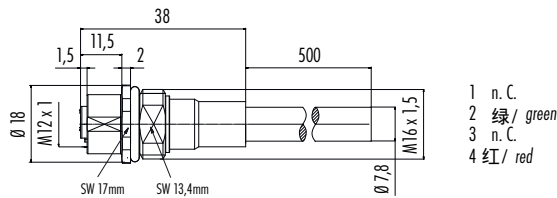
图例 / Figure



PROFIBUS 电缆技术参数见第 581 页  
Specifications of PROFIBUS-cable see page 581

PROFIBUS 电缆技术参数见第 581 页  
Specifications of PROFIBUS-cable see page 581

尺寸图 / Drawing



六角螺母可自由移动  
Hexagon nut enclosed loose

订货信息 / Order Data

芯数 Contacts	电缆长度 Cable length	安装螺纹规格 Fixing thread	订货号 Ordering-No.
2	0,5 m	M16 x 1,5	70 4434 246 04

芯数 Contacts	电缆长度 Cable length	安装螺纹规格 Fixing thread	订货号 Ordering-No.
2	0,5 m	PG 9	70 4434 247 04

技术参数 / Specifications

芯数	2	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	PROFINET 电缆 / PROFINET-cable	Termination
导线截面	0,25 mm <sup>2</sup> (AWG 24)	Wire gauge
电缆出口直径	电缆直径 / cable diameter 7,8 mm	Cable outlet
防护等级	IP68	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 60 °C	Upper temperature
最低工作温度	- 20 °C	Lower temperature
额定电压	250 V	Rated voltage
额定冲击电压	2500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	II	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / bronze)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	CuZn (黄铜镀镍 / brass) 铸锌镀镍 / zinc diecasting nickel plated	Material of housing

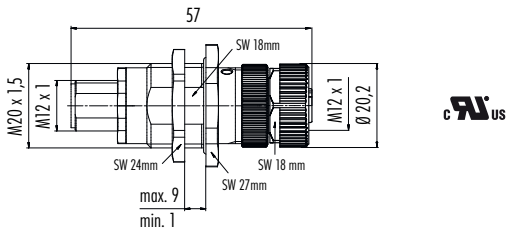


转接头，可贯穿控制柜，带屏蔽  
Adapter lead-through for control cabinet, shielded

图例 / Figure



尺寸图 / Drawing



订货信息 / Order Data

芯数 Contacts	订货号 Ordering-No.
4	09 5242 00 04

芯数 Contacts	订货号 Ordering-No.

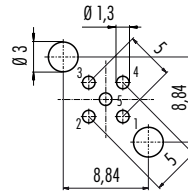
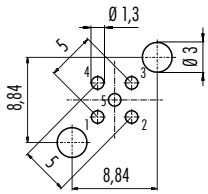
技术参数 / Specifications

芯数	4	Number of contacts
锁紧方式	M12螺母锁紧 / screw	Connector locking system
接线方式	—	Termination
导线截面	—	Wire gauge
电缆出口直径	—	Cable outlet
防护等级	IP67	Degree of protection
插拔周期	>100插拔周期 / > 100 mating cycles	Mechanical operation
最高工作温度	+ 85 °C	Upper temperature
最低工作温度	- 40 °C	Lower temperature
额定电压	250 V	Rated voltage
额定冲击电压	2500 V	Rated impulse voltage
污染等级	3	Pollution degree
过电压等级	II	Overvoltage categorie
绝缘等级	III	Material group
额定电流 (40 °C)	4 A	Rated current (40 °C)
触点电阻	≤ 3 mΩ	Contact resistance
插针材料	CuSn (青铜 / brass)	Material of contact
插针表面材料	Au (金 / gold)	Contact plating
插头主体材料	PA	Material of contact body
外壳材料	铸锌镀镍 / zinc diecasting nickel plated      CuZn (黄铜镀镍 / brass nickel plated)	Material of housing

插针钻孔分布图(PCB), 针, 带屏蔽片  
Drilling schemes male insert (PCB), shielding sheet

插针钻孔分布图(PCB), 孔, 带屏蔽片  
Drilling schemes female insert (PCB), shielding sheet

5 芯  
5 contacts



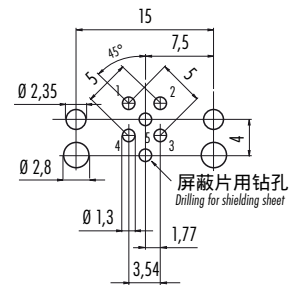
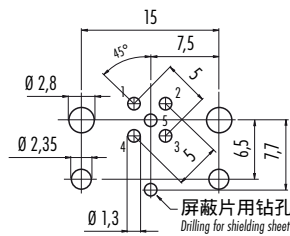
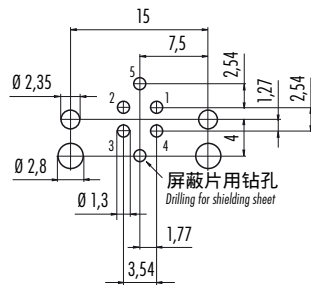
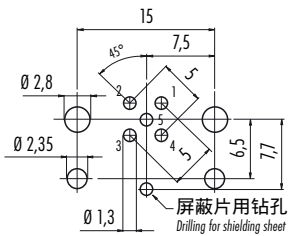
插针钻孔分布图(PCB), 针  
Drilling schemes male insert (PCB), receptacles

插针钻孔分布图(PCB), 孔  
Drilling schemes female insert (PCB), receptacles

5 芯  
5 contacts

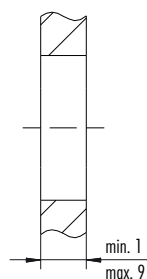
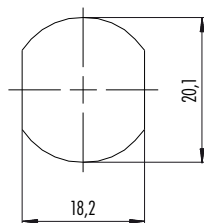
弯角系列  
Angled version

弯角系列  
Angled version



安装截面  
Panel cut out

控制柜开孔  
Lead-through for control cabinet with bore hole

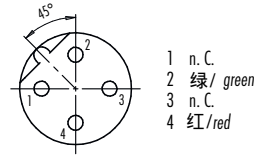
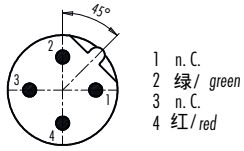


针位图  
Contact arrangements

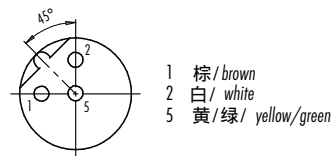
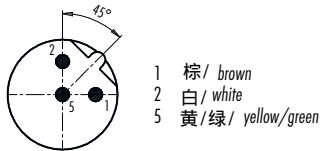
插孔，针（接触面）  
Male insert (mating side)

插孔，孔（接触面）  
Female insert (mating side)

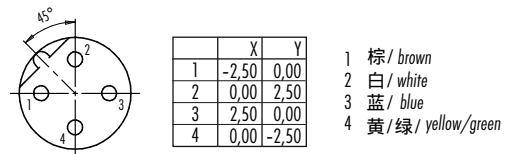
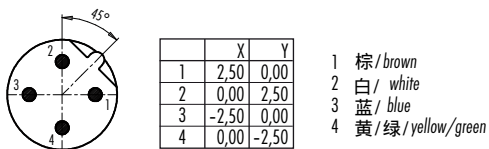
2/4 芯  
2/4 contacts



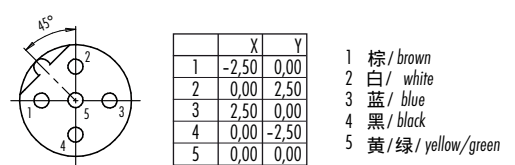
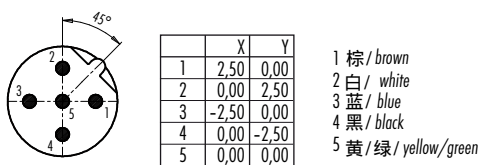
3 芯  
3 contacts



4 芯  
4 contacts



5 芯  
5 contacts



安装截面  
Panel cut out

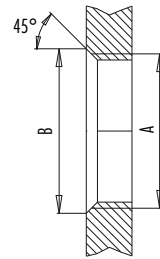
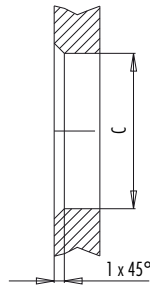
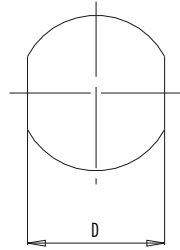
面板安装连接器  
Panel mount connectors

带平面抗旋转装置  
With flats as anti-rotation device

带钻孔  
With bore hole

带螺纹  
With thread to screw in

PG 9/M16 x 1,5/M20 x 1,5



	A	B	C	D
PG 9	PG 9	16,2	15,3	13,5
PG 13,5	PG 13,5	21,5	20,5	-
M16x1,5	M16x1,5	17,0	16,1	13,5
M20x1,5	M20x1,5	21,0	20,1	-

拧紧所用扭矩 / Tightening moment

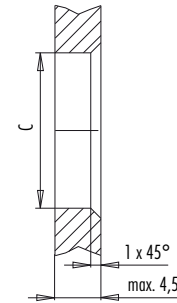
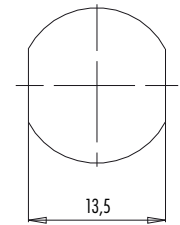
金属外壳 / Metal housing 6,25 Nm  
塑料外壳 / Plastic housing 3,75 Nm

其他选择 / alternativ

面板安装连接器，板前固定  
Panel mount connectors, front fastened

带平面抗旋转装置  
With flats as anti-rotation device

带钻孔  
With bore hole



	C
PG 9	15,3
M16x1,5	16,1

拧紧所用扭矩 / Tightening moment

金属外壳 / Metal housing 6,25 Nm  
塑料外壳 / Plastic housing 3,75 Nm

面板安装连接器，位置可调  
Panel mount connectors positioning possible



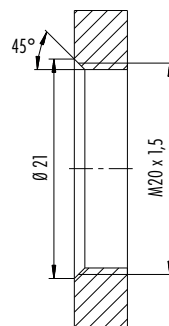
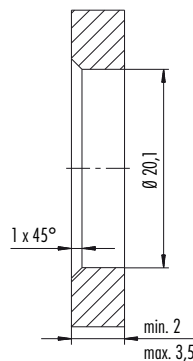
拧紧所用扭矩 / Tightening moment

金属外壳 / Metal housing 6,25 Nm  
塑料外壳 / Plastic housing 3,75 Nm

面板安装连接器，螺钉接线  
Panel mount connectors screw clamp connection

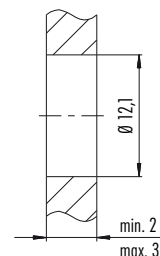
带钻孔  
With bore hole

带螺纹  
With thread to screw in



拧紧所用扭矩 / Tightening moment  
M20 x 1,5 5 Nm

面板安装连接器，带M12 x 1安装螺纹  
Panel mount connectors with M12 x 1 thread



拧紧所用扭矩 / Tightening moment  
M12 x 1 6,25 Nm