

# M16 圆形连接器 ROUND PLUG CONNECTOR

现场接线 Field-wireable



M16 圆形连接器 Round plug connector

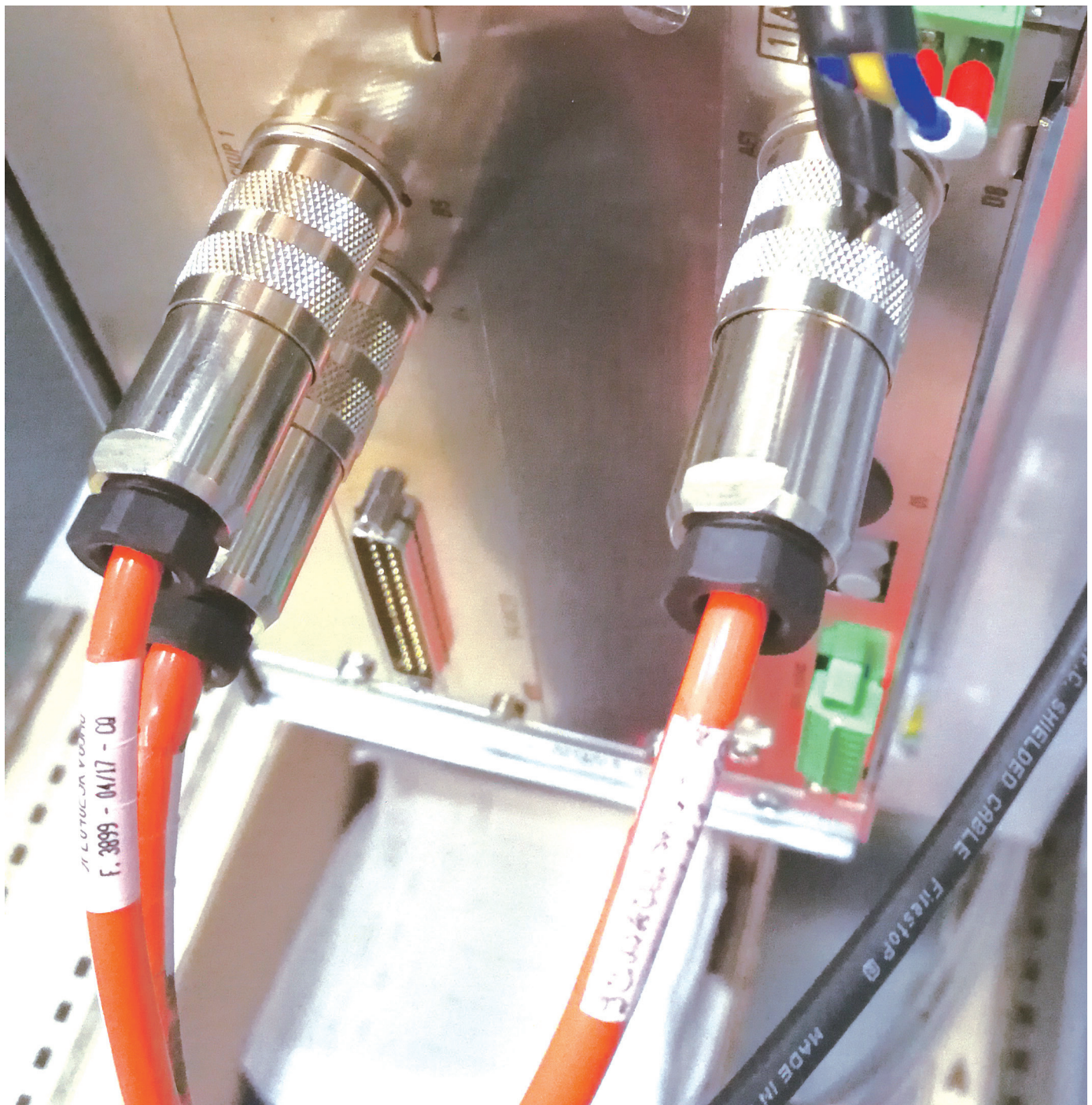
插针 Male

• 直出线 Straight

插孔 Female

• 90°

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## 特征 Characteristics

General Characteristics	标准 Standard	特征 Characteristics									
极数 Number of contacts		3	4	5	5 Stereo	6	7	7	8	12	14
View on termination side of male contact insert											
Contact arrangement	DIN EN 61076-2-106	03-a	04-a	05-a	05-b	06-a	07-a	07-b	08-a	12-a	14-a
Contact arrangement	IEC 60130-9 <sup>1)</sup>	✓	✓		✓	✓		✓	✓		✓
Electrical Characteristics											
Rated voltage <sup>2)</sup>	IEC 60664-1	300 V <sub>~</sub> (100 V <sub>~</sub> )		300 V <sub>~</sub> (63 V <sub>~</sub> )		100 V <sub>~</sub> (32 V <sub>~</sub> )		300 V <sub>~</sub> (63 V <sub>~</sub> )		100 V <sub>~</sub> (32 V <sub>~</sub> )	
Rated voltage	UL 1977	250 V									60 V
Rated impulse withstand voltage <sup>2)</sup>	IEC 60664-1	1500 V (840 V)			1200 V (500 V)		1500 V (840 V)			1200 V (500 V)	
Pollution degree <sup>2)</sup>	IEC 60664-1	1 (3 <sup>3)</sup> )									
Installation category	IEC 60664-1	I									
Insulation group	IEC 60664-1	II, 400 ≤ CTI < 600									
Current rating	IEC 60512-5-2 UL 1977	5 A / + 40 °C / + 104 °F please refer also to current derating curves page 59									3 A / + 40 °C / + 104 °F
Insulation resistance	IEC 60512-3-1	> 1010 Ω <sup>4)</sup>									
Contact resistance	IEC 60512-2-1	< 5 m Ω									
Climatic Characteristics											
Climatic category	IEC 60668-1	40 / 100 / 56									
Temperature range	IEC 60668-1	- 40 °C ... + 100 °C / - 40 °F ... + 212 °F									
Salt Spray Resistance	DIN IEC 60068-2-11, Test Ka	720h									
Mechanical Characteristics											
IP-degree	IEC 60529	IP 67 and IP 65 (in mated condition)									
Insertion and withdrawal forces	IEC 60512-13-2	25 N 90.oz	30 N 110.oz	35 N 125.oz	50 N 180.oz	50 N 180.oz	55 N 200.oz	60 N 220.oz	50 N 180.oz		
Mechanical operation	IEC 60512-9-1	Silver ≥ 500 mating cycles Gold ≥ 1000 mating cycles									
Materials											
Housing material		coupling ring brass, strain relief, die cast, nickel plated									
Dielectric material		Dielectric material thermoplastic									
Contact plating		Contact plating silver plated / gold plated 5)									
Further Characteristics											
Termination technique		solder, crimp									
Wire gauge		solder: ≤ 0,5 mm <sup>2</sup> / 20 AWG crimp: 2 - 6 pol (excluding 5S): 0,09 - 1,00 mm <sup>2</sup> / 28 - 18 AWG crimp: 5S, 7, 7S and 8-pol.: 0,09 - 0,75 mm <sup>2</sup> / 28 - 20 AWG									solder: ≤ 0,25 mm <sup>2</sup> / 24 AWG crimp: 0,09-0,25 mm <sup>2</sup> / 28 - 24 AWG
Flammability		UL 94 V0									
Locking system	IEC 60130-9 DIN EN 61076-2-106	metal screw coupling; tightening torque 0,7 Nm									
UL	UL 1977	Conditions of acceptability									

Caution: Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.

1) Edition 2000-05

2) values in brackets are according to DIN EN 61076-2-106

3) designed acc. pollution degree 2; can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled

4) under operating conditions >108 Ω

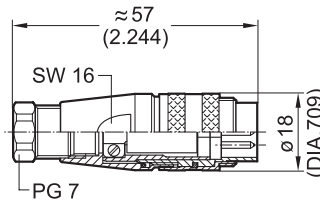
5) Remark for gold plated contacts: In order to avoid brittle inter-metallic connections, gold-plated terminals have to be tin-plated in the solder area.

IEC 60 664 ~ = DIN VDE 0110 ; IEC 60 512-x ~ = DIN EN 60 512-x; IEC 60 130-9 ~ = DIN EN 60 130-9; IEC 61076-2-106 ~ = DIN EN 61076-2-106

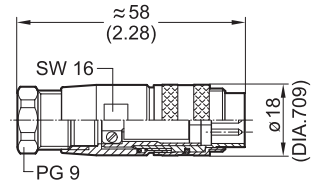
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3-14 Pole  
连接器 Connector

插针 Male



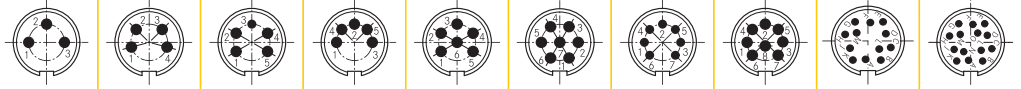
电缆直径 for cable diameter 4-6mm



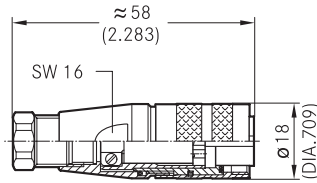
电缆直径 for cable diameter 6-8mm

1 型号 Form No.	916030	916040	916050	916051	916060	916070	916071	916080	916120	916141
极数 Suppression	3-pole	4-pole	5-pole	5 S-pole	6-pole	7-pole	7-pole	8-pole	12-pole	14-pole

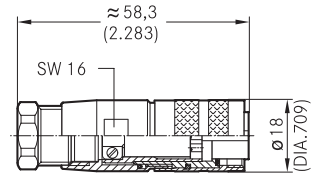
针脚排序  
Contact layout



插孔 Female



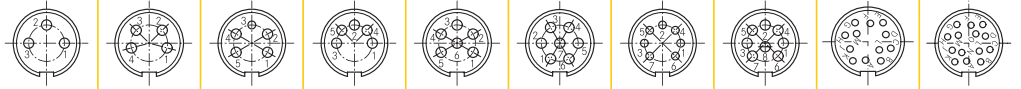
电缆直径 for cable diameter 4-6mm



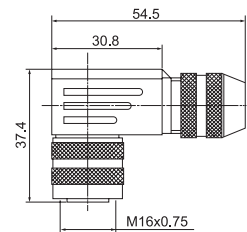
电缆直径 for cable diameter 6-8mm

型号 Form No.	916130	916140	916150	916151	916160	916170	916171	916180	916220	916240
极数 Suppression	3-pole	4-pole	5-pole	5 S-pole	6-pole	7-pole	7-pole	8-pole	12-pole	14-pole

针脚排序  
Contact layout

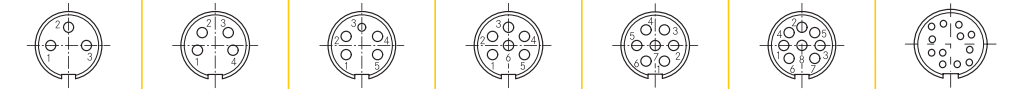


插孔 Female  
90°



型号 Form No.	916530	916540	916550	916560	916570	916580	916520
极数 Suppression	3-pole	4-pole	5-pole	6-pole	7-pole	8-pole	12-pole

针脚排序  
Contact layout

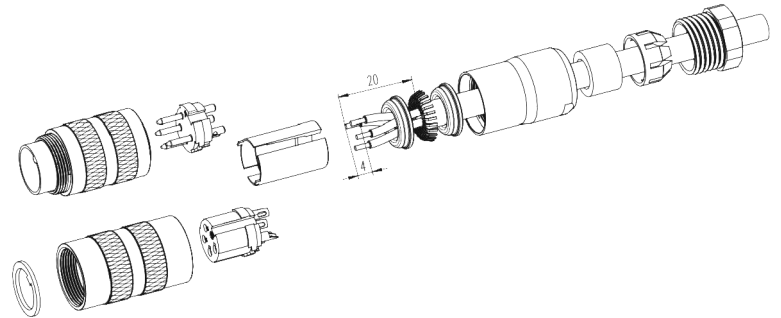


# M16 圆形连接器 ROUND PLUG CONNECTOR

## 直头系列 (带屏蔽环) Straight version (Version with shield clamping ring)

- 1、按照顺序将电缆穿入：压紧螺丝、夹紧圈、密封圈、外壳和第一个屏蔽夹紧环。
- 2、剥线，打开屏蔽层并套入第二个屏蔽夹紧环。
- 3、焊接导线，解开远端衬套，挤压两个屏蔽夹紧环并切断多余屏蔽。
- 4、根据图片安装其他部分。

1. Bead pressing screw, pinch ring, seal, distance shell and first shield clamping ring on cable.
2. Strip wires, widen shield and bead second shield clamping ring.
3. Solder wires, snap distance shell, push the two shield clamping rings together and cutt off projecting shielding braid.
4. Assemble remaining parts according to pictre.



## 弯角系列 Angled version

- 1、安装密封圈 (3个)
- 2、排列电缆部件
- 3、打电电缆和屏蔽圈
- 4、将导线穿过外壳
- 5、安装屏蔽圈和加紧圈
- 6、将压紧螺丝旋转少许
- 7、将导线焊接于插头上
- 8、在转角位置安装扭矩承载套筒
- 9、安装插头和外壳
- 10、安装保护盖
- 11、用 10-12Nm 的力量拧紧压紧螺丝

1. Assembly of seal (3x).
2. Bead cable parts.
3. Dismantle cable and shield broid.
4. Push single wires through the housing.
5. Mount shielding ring and pinch ring.
6. Slightly fix pressing screw.
7. Solder wires to insert.
8. Mount positioning sleeve in angled position.
9. Put in insert and distance sleeve.
10. Mount lid.
11. Fis pressing screw (approx. 10-20Nm).

