

1411906

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Connector, 8-position, shielded, Plug straight M12, coding: A, Screw connection, knurl material: Stainless steel 1.4404, cable gland M16, external cable diameter 3 mm ... 5.5 mm

### Your advantages

- · Safe use in the field, thanks to a high degree of protection
- Screw connection: proven connection technology for a large selection of different conductors
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

Item number	1411906
Packing unit	1 pc
Minimum order quantity	25 pc
Sales key	AF2CBA
Product key	AF2CBA
GTIN	4046356945394
Weight per piece (including packing)	59.71 g
Weight per piece (excluding packing)	59.71 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Notes

Assembly note	NOTE: Observe the permissible bending radii when routing
	cables, since the degree of protection may be at risk if the
	bending forces are too high. Reduce mechanical loads upstream
	of the connector, e.g., by using cable ties.

### Product properties

Product type	Circular connector (cable-side)
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight
Pg screw connection	M16

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	Ca. 62
Length	62 mm
External dimensions	
Outside diameter	3 mm 5.5 mm
Housing	
Diameter housing	20 mm

### Material specifications

Seal material	FKM
Material of grip body	Stainless steel 1.4404
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Stainless steel 1.4404

#### Connection data

Conductor connection



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Connection method	Screw connection
Connection cross section	0.25 mm² 0.5 mm² (without ferrule)
	0.14 mm <sup>2</sup> 0.34 mm <sup>2</sup> (with ferrule)
	0.25 mm² 0.5 mm² (solid)
Connection cross section AWG	24 20 (without ferrule)
	26 22 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	0.3 Nm 0.4 Nm (Pressure nut with sleeve housing with 3 mm 4 mm external cable diameter )
	0.8 Nm 1 Nm (Pressure nut with sleeve housing with 4 mm 8 mm external cable diameter )

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage $U_N$	30 V DC
	30 V AC
Nominal current I <sub>N</sub>	2 A

## Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100

#### Connector

#### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	A

### Cable/line

Stripping length of the individual wire	5 mm
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#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP69K
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)

### Standards and regulations



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Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

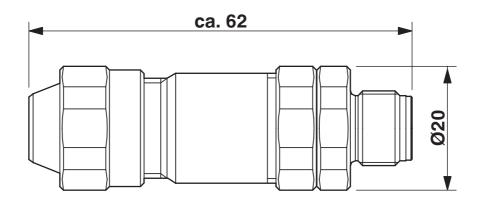


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## Drawings

### Dimensional drawing



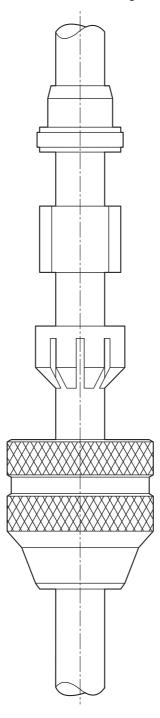
Plug, M12 x 1, straight, shielded



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## Assembly steps for M12 male/female plug and conductor

a = Slide on parts

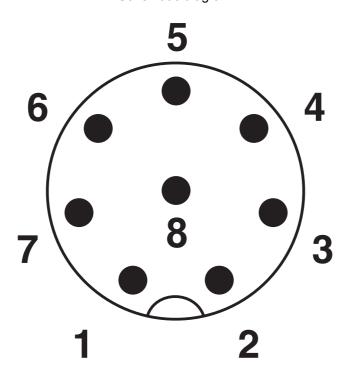
b= Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh. Slide cores through the housing. Mount shielding ring, gasket and clamping cage. Tighten pressure screw to fix the cable. Screw down cores. Mount male/female part. Tighten pressure screw.



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### Schematic diagram



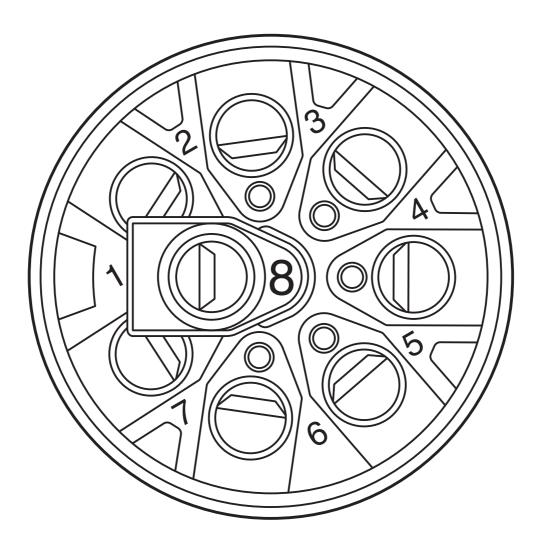
Pin assignment M12 plug, 8-pos., A-coded, view plug side



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### Schematic diagram



Cable connection side M12 (screw connection)



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## Classifications

	ECLASS-13.0	27440116	
ETIM			
	ETIM 9.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	0a5eb5d2-dd73-4003-a2ce-a3719ab1564e

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