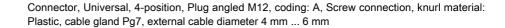


1681091

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### 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

#### Commercial data

Item number	1681091
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	0212*
Product key	AF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4017918157494
Weight per piece (including packing)	18.95 g
Weight per piece (excluding packing)	18.3 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.

### Mounting

Assembly note	The connector pin assignment can be rotated 90° to the cable
	outlet

### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	angled
Pg screw connection	Pg7
Insulation characteristics	
Overvoltage category	II

3

# Dimensions

Degree of pollution

Dimensional drawing	119 m 12 m 12 m 13 m 14 m 14 m 15 m 15 m 15 m 15 m 15 m 15
Length	41 mm
External dimensions	
Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm
Naterial specifications	
Flammability rating according to LIL 94	HB

#### N

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	PA
Contact material	CuZn



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Contact surface material	CuSnZn
Contact carrier material	PA
Material for screw connection	Plastic

#### Connection data

#### Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule)
	0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> (with ferrule)
	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (solid)
Connection cross section AWG	24 18 (without ferrule)
	26 20 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	0.8 Nm 1 Nm (Pressure screw with sleeve housing)

### Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	250 V AC
	250 V DC
Nominal current I <sub>N</sub>	4 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 50

#### Connector

#### Connection 1

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

### Cable/line

Signal type/category	Universal
Stripping length of the individual wire	5 mm

### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67



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Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)	
Standards and regulations		
Standard designation	M12 connector	
Standards/specifications	IEC 61076-2-101	

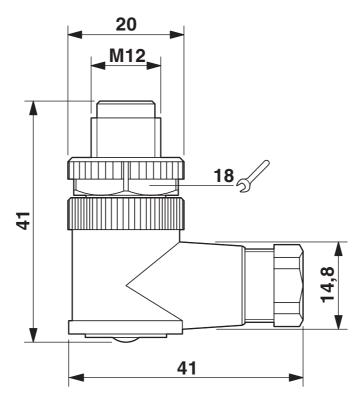


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### Drawings

### Dimensional drawing

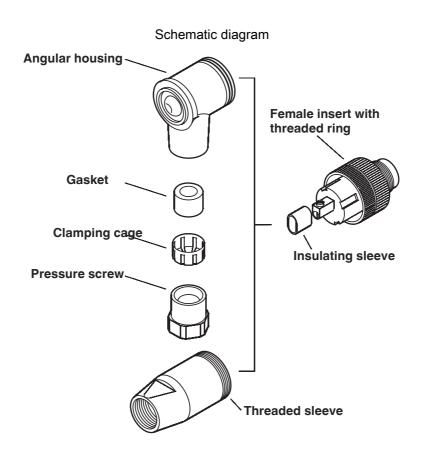


M12 x 1 male plug, angled

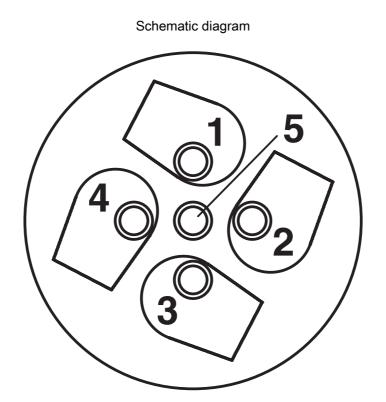


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Male/Female M12



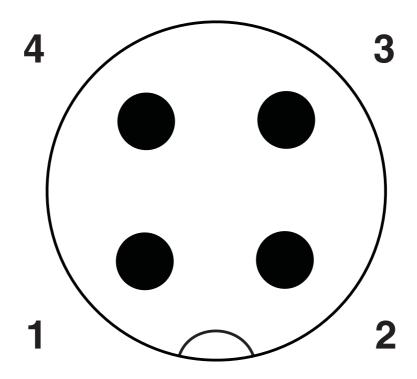
Cable connection side M12 (screw connection)



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### Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/1681091

cUL Recognized Approval ID: FILE E 221474					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

UL Recognized Approval ID: FILE E 221474					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-



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## Classifications

UNSPSC 21.0

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	ECLASS-13.0	27440116		
Εī	ETIM			
	ETIM 9.0	EC002635		
U	NSPSC			

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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	6e7f6c5e-bec3-4eef-a406-6b278343c29d

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