

1002791

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Connector, Universal, 8-position, shielded, Socket straight M12, coding: A, Screw connection, knurl material: Brass, nickel-plated, external cable diameter 4 mm ... 6 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	1002791
Packing unit	100 pc
Minimum order quantity	100 pc
Sales key	BF30
Product key	AF2CBA
GTIN	4055626465388
Weight per piece (including packing)	61.2 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	CN



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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)
Sensor type	Universal
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	18 All 17 All 18 All
Width	20 mm
Height	20 mm
Length	57 mm
Wrench size, union nut	18 mm
Wrench size, counter nut	17 mm
External dimensions	
Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm

## Material specifications

Flammability rating according to UL 94	НВ
Seal material	Silicon
Material of grip body	Brass, nickel-plated
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA



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Material for screw connection	Brass, nickel-plated
Standards/regulations	PA (Cable gland)

#### Connection data

#### Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm <sup>2</sup> 0.5 mm <sup>2</sup> (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)
	1 Nm (Pressure nut with coupling sleeve)

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	2 A

### Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100

#### Connector

#### Connection 1

Head design	Socket
Head cable outlet	straight
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
Ambient temperature (operation) (male connector/female	-40 °C 85 °C (Plug / socket)



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	connector)	
Sta	andards and regulations	
	M12	
	Standard designation	M12 connector
	Standards/specifications	IEC 61076-2-101

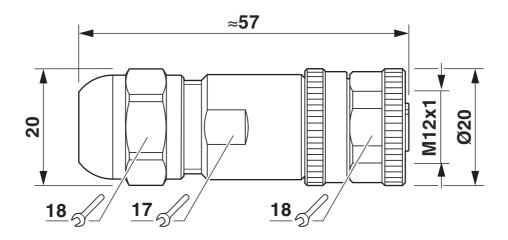


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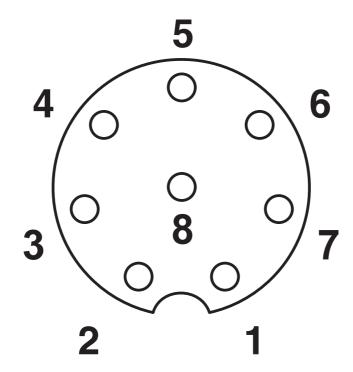
## **Drawings**

### Dimensional drawing



M12 x 1 socket, straight, shielded

## Schematic diagram

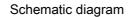


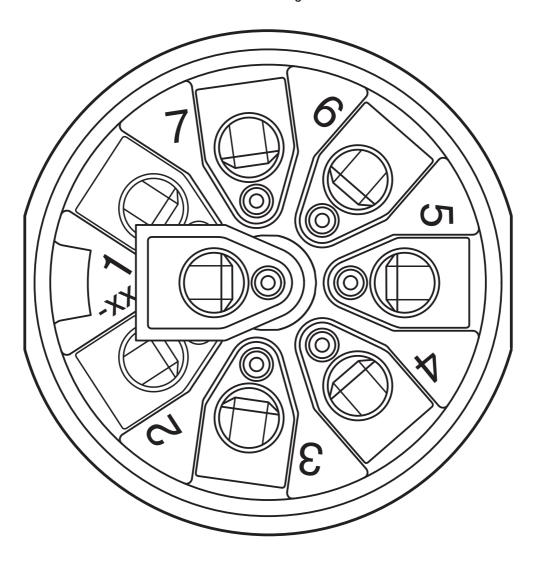
Pin assignment M12 socket, 8-pos., A-coded, view female side



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Cable connection side M12 (screw connection)



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1002791

. <b>7.1</b>	<b>cUL Recognized</b> Approval ID: FILE E 221474				
	Nominal	voltage U <sub>N</sub> Nomina	I current I <sub>N</sub> Cross	section AWG Cro	ss section mm <sup>2</sup>
keine					
	30 V	2 A	-	-	

<b>7.1</b>	UL Recognized Approval ID: FILE E 22147	74			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		30 V	2 A	-	-



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27440116			
	ECLASS-15.0	27440116			
ET	ETIM				
	ETIM 9.0	EC002635			
UN	ISPSC				

### U

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)

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