

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	1 pc
Minimum order quantity	100 pc
Sales key	BF30
Product key	BF2CBA
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.
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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	Ш
Degree of pollution	3

Data management status

Article revision	02

Dimensions

Dimensional drawing	18 J 17 J 18 J
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
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Material specifications

Flammability rating according to UL 94	НВ
Seal material	Silicon
Material of grip body	Brass, nickel-plated



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Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Brass, nickel-plated

Connection data

Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm ² 0.5 mm ² (without ferrule)
	0.14 mm ² 0.34 mm ² (with ferrule)
	0.25 mm ² 0.5 mm ² (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 _N	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



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

Standards and regulations

M12

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

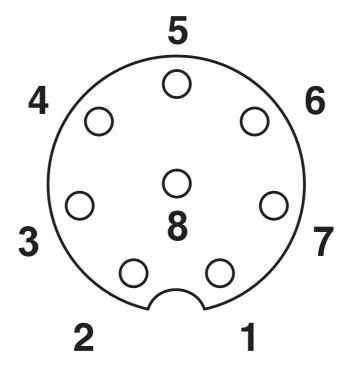


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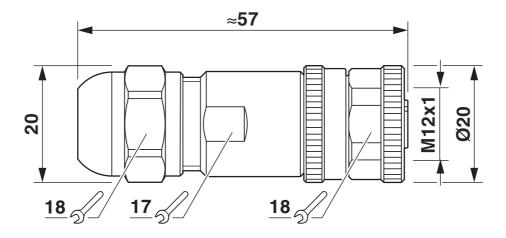
Drawings

Schematic diagram



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

Dimensional drawing



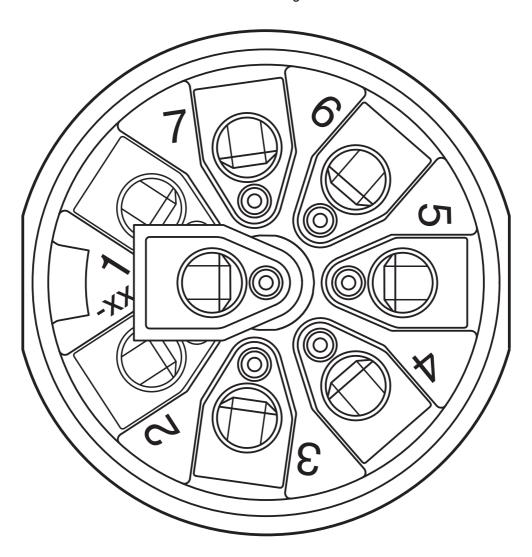
M12 x 1 socket, straight, shielded



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Schematic diagram



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

cUL Recognized Approval ID: FILE E 221474					
	Nom	ninal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	30 V	/	2 A	-	-

<i>7</i> 1	UL Recognized Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	2 A	-	-

cULus Recognized



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Classifications

ECLASS

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ET	ETIM			
	ETIM 9.0	EC002635		
UN	NSPSC			
	UNSPSC 21.0	39121400		



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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements Exemption	Yes 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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