

1401097

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Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm ... 10 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	1401097
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF2CBA
Product key	BF2CBA
GTIN	4046356523356
Weight per piece (including packing)	57.64 g
Weight per piece (excluding packing)	57.64 g
Country of origin	DE



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### Technical data

#### Notes

General	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate 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	PROFIBUS
Number of positions	5
Application	Data
No. of cable outlets	1
Shielded	yes
Coding	В
Cable outlet	straight
Pg screw connection	Pg11

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	10.00
Width	20.2 mm
Height	20.2 mm
Length	57 mm
Wrench size, union nut	16 mm
External dimensions	
Outside diameter	8 mm 10 mm
Housing	
Diameter housing	20.2 mm

#### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuZn



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Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

#### 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)
	1 Nm 1.4 Nm (Pressure nut with 8 mm 12 mm external cable diameter)

### Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A

#### Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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#### Connector

#### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	В

### Cable/line

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

#### Environmental and real-life conditions



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#### Ambient conditions

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

### Standards and regulations

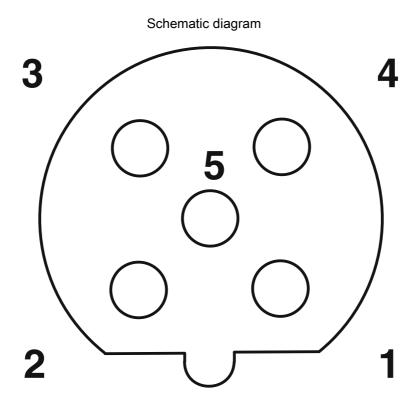
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



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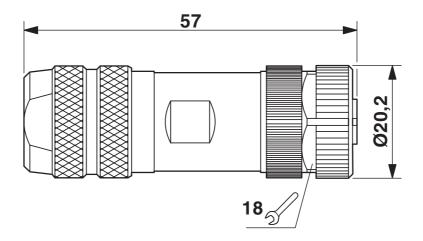
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## Drawings



Pin assignment M12 socket, 5-pos., B-coded, female side

Dimensional drawing

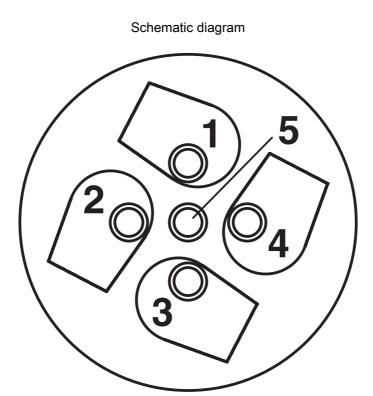


M12 x 1 socket, straight, shielded



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Cable connection side M12 (screw connection)

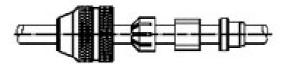


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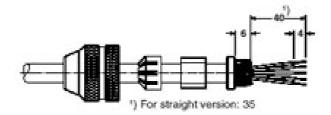
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### Functional drawing

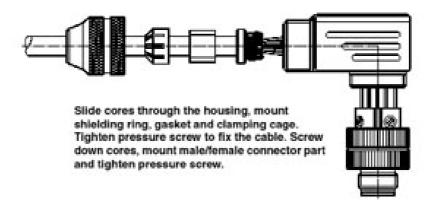
## Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor



Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh.





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/nz/products/1401097

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

<b>71</b>	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>
		60 V	4 A	-	-

cULus Recognized



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## Classifications

UNSPSC 21.0

#### **ECLASS**

	ECLASS-11.0	27440102
	ECLASS-12.0	27440116
	ECLASS-13.0	27440116
ETIM		
	ETIM 9.0	EC002635
UN	SPSC	

39121400



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## Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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