

1681499

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Connector, Universal, 5-position, Socket angled M12, coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 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

Commercial data

Item number	1681499
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4017918157418
Weight per piece (including packing)	27.95 g
Weight per piece (excluding packing)	27.76 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.
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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	5
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	angled
Pg screw connection	Pg9
Insulation characteristics	
Overvoltage category	II II

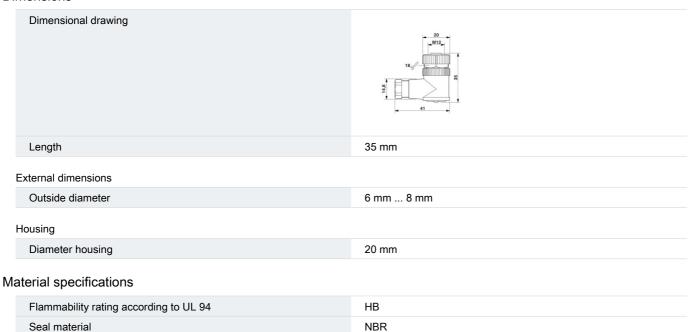
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Dimensions

Degree of pollution

Material of grip body

Contact material



PΑ

CuZn



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Contact surface material	CuSnZn
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 ² 0.75 mm ² (without ferrule)
	0.14 mm ² 0.75 mm ² (with ferrule)
	0.25 mm ² 0.75 mm ² (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	1.5 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 50

Connector

Connection 1

Head design	Socket
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

Schematic diagram

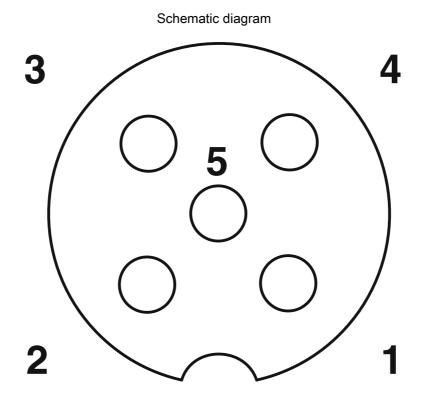
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Cable connection side M12 (screw connection)

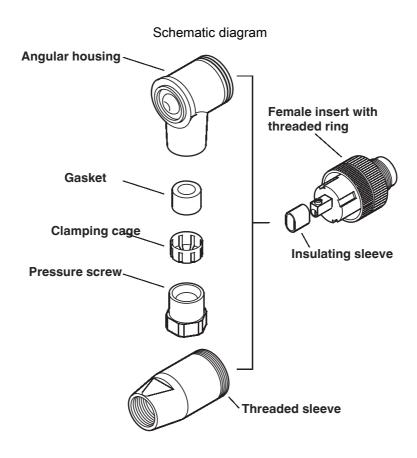


Pin assignment M12 socket, 5-pos., A-coded, socket side view



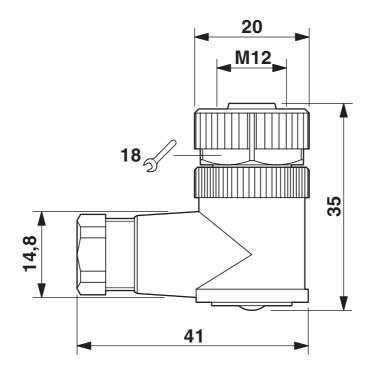
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Male/Female M12

Dimensional drawing





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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1681499

. 91	cUL Recognized Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	-	-

71	UL Recognized Approval ID: FILE E 221	474			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		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	
UNSPSC		

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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	9d28a4a2-33a3-4cd0-adc1-d163d9fc17d0

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com