

1663116

https://www.phoenixcontact.com/us/products/1663116

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Connector, Universal, 5-position, Plug straight M12, coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg7, 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

Commercial data

Item number	1663116
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4017918116583
Weight per piece (including packing)	24.16 g
Weight per piece (excluding packing)	23.13 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 wires can be connected both with ferrules and without
	ferrules

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	straight
Pg screw connection	Pg7
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3

Di

Material of grip body

Dimensions	
Dimensional drawing	10 g
Width	20 mm
Height	20 mm
Length	60 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	NBR

РΑ



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Contact material	CuZn
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)

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	Plug
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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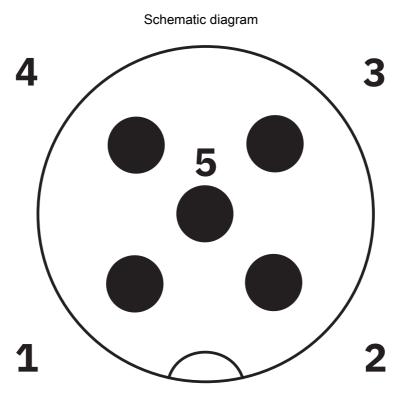
Degree of protection	IP67	
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)	
Standards and regulations		
Standards and regulations Standard designation	M12 connector	



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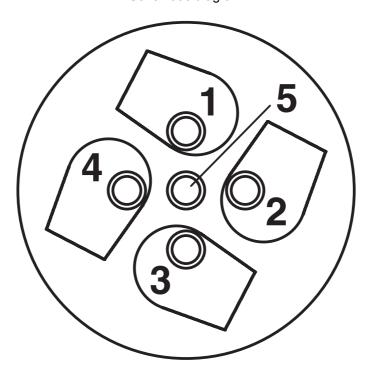


Drawings



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram

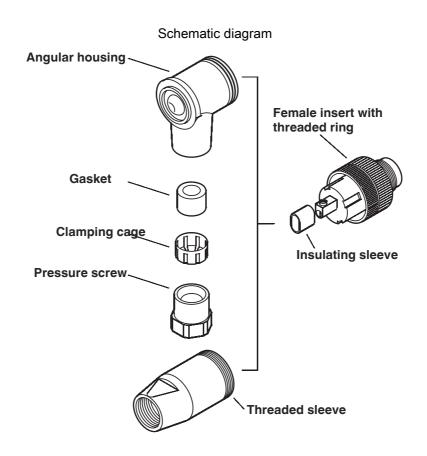


Cable connection side M12 (screw connection)



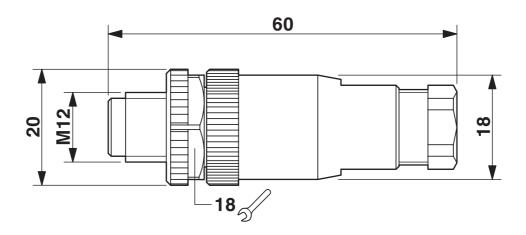
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Male/Female M12

Dimensional drawing



Plug, M12 x 1, straight



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1663116

. 7.1	cUL Recognized Approval ID: FILE E 2214	174			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	-	-

<i>9</i> 1	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	d93bebd2-5471-4cb7-a9e9-24611f594177	

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