

1404416

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Power connector, 4-position, Socket straight M12, coding: A, 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

#### Commercial data

Item number	1404416
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	AF2CAA
GTIN	4046356694483
Weight per piece (including packing)	27 g
Weight per piece (excluding packing)	27 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Notes

General	Strip 22 mm off the cable sheath, strip 7 mm off the conductor insulation, crimp the ferrule, then shorten this to 5 mm. Length of conductor with shortened ferrule: 20 mm. Connect conductors and tighten the mounting screws with 0.2 Nm.
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)
Application	Energy supply
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight
Pg screw connection	Pg11

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	19.
Width	20 mm
Height	20 mm
Length	60.4 mm
External dimensions	

# Outside diameter

Housing		

8 mm ... 10 mm

20 mm

### Material specifications

Diameter housing

Flammability rating according to UL 94	V0
Seal material	Viton
	NBR
Material of grip body	PA



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Contact material	CuZn
Contact surface material	Ni/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	0.75 mm <sup>2</sup> 1.5 mm <sup>2</sup> (without ferrule)
	0.75 mm <sup>2</sup> 1.5 mm <sup>2</sup> (with ferrule)
	0.75 mm² 1.5 mm² (solid)
Connection cross section AWG	18 16 (without ferrule)
	16 18 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	1.5 Nm 2 Nm (Pressure screw with sleeve housing)
	0.4 Nm (Screw plug insert with sleeve housing as far it will go)
	0.2 Nm (Screw terminal blocks)

### Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	> 10 GΩ
Nominal voltage U <sub>N</sub>	250 V AC
	250 V DC
Nominal current I <sub>N</sub>	8 A (when using 1.5 mm² conductors)

#### 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	A

### Cable/line

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) (male connector/female connector)	-40 °C 85 °C (Plug / socket)	
Standards and regulations		
Standards and regulations		
Standards and regulations Standard designation	M12 connector	

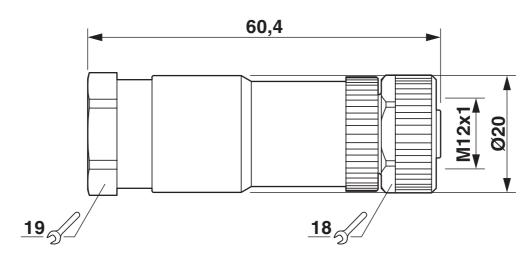


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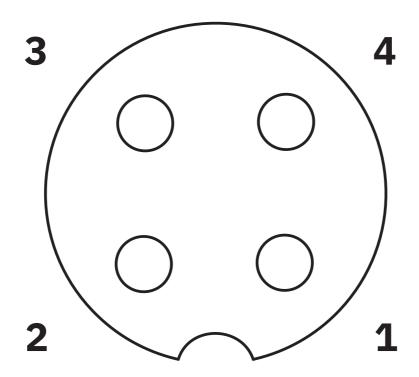
## Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1404416

. <b>7.1</b>	cUL Recognized Approval ID: FILE E 221474			
	Nominal volta	ge U <sub>N</sub> Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine				
	250 V	4 A	-	-

<b>7.1</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>
keine					
		250 V	4 A	-	-



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27440116
	ECLASS-15.0	27440116
ETIM		
	ETIM 9.0	EC002635
LINICROS		
UNSPSC		
	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)
SCIP	0e31e072-6a3a-4ed3-9c9d-71fa11416b18

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