

1408990

https://www.phoenixcontact.com/us/products/1408990

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Power connector, 4-position, Plug angled 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	1408990
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4046356885102
Weight per piece (including packing)	26.05 g
Weight per piece (excluding packing)	26.05 g
Customs tariff number	85366990
Country of origin	DE



1408990

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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 instruction:	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.

### Mounting

Assembly instructions	The connector pin assignment can be rotated 90° to the cable
	outlet

### Product properties

Product type	Circular connector (cable-side)
Application	Power supply
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	angled
Pg screw connection	Pg11

#### Insulation characteristics

Flammability rating according to UL 94

Overvoltage category	II
Degree of pollution	3

### **Dimensions**

Dimensional drawing	020.2 M1271 18 / 19 / 19 / 19 / 19 / 19 / 19 / 19 /
Length	44 mm
External dimensions	
Outside diameter	8 mm 10 mm
Housing	
Diameter housing	20.2 mm
Material specifications	

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1408990

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Seal material	NBR
Material of grip body	PA
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
macrition/withdrawar cycles	7 100

#### Connector

#### Connection 1

Head design	Plug
Head cable outlet	angled
Head thread type	M12
Coding	A

### Cable/line

Stripping length of the individual wire 5 mm
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1408990

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### Environmental and real-life conditions

#### 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

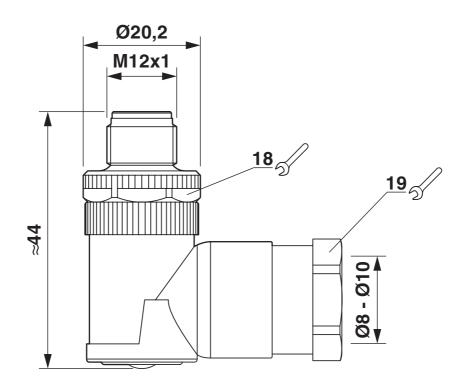


1408990

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### Drawings

### Dimensional drawing



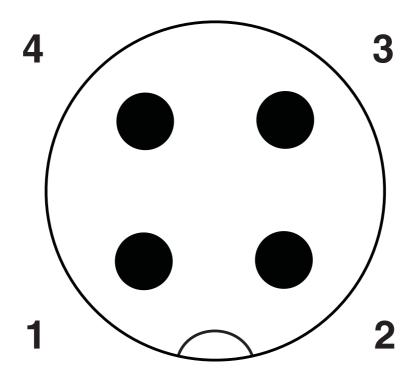
M12 x 1 male plug, angled



1408990

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### Schematic diagram



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



1408990

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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1408990

.71	<b>cUL Recognized</b> Approval ID: FILE E 2214	174			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

<b>71</b>	<b>UL Recognized</b> Approval ID: FILE E 2214	174			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

EAC	EAC
LIIL	Approval ID: RU C-DE.BL08.B.00511

cULus Recognized



1408990

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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	

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	23de4b9a-96e0-4d82-bf9e-8b4a7ae8c3a0



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### Accessories

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

https://www.phoenixcontact.com/us/products/1430873

 $\,$  M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



### A 1,5 - 7 - Ferrule

3200263

https://www.phoenixcontact.com/us/products/3200263



Ferrule, color: silver



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### TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

### TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm



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### TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

### SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/us/products/1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive





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### WIREFOX 6SC - Stripping tool

1212158

https://www.phoenixcontact.com/us/products/1212158



Stripping tool, for cables and conductors (especially for cables protected against short circuits and ground leakages) 1.5 - 6  $\rm mm^2$ , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10  $\rm mm^2$  stranded/1.5  $\rm mm^2$  solid, replaceable stripping blade

### CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/us/products/1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14  $\text{mm}^2$  ... 6  $\text{mm}^2$ , unlockable pressure lock, lateral entry



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SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

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