

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
Product key	AF2CAA
GTIN	4046356694483
Weight per piece (including packing)	27.26 g
Weight per piece (excluding packing)	27.26 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 18 18
Width	20 mm
Height	20 mm
Length	60.4 mm
External dimensions	

External dimensions

Outside diameter	8 mm 10 mm

Housing

Diameter housing	20 mm
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Material specifications

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 ² 1.5 mm ² (without ferrule)
	0.75 mm ² 1.5 mm ² (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 _N	250 V AC
	250 V DC
Nominal current I _N	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
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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)
Sta	andards and regulations	
	Standard designation	M12 connector

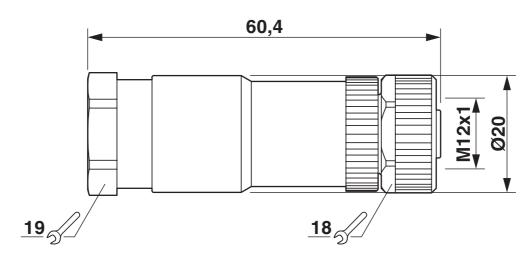


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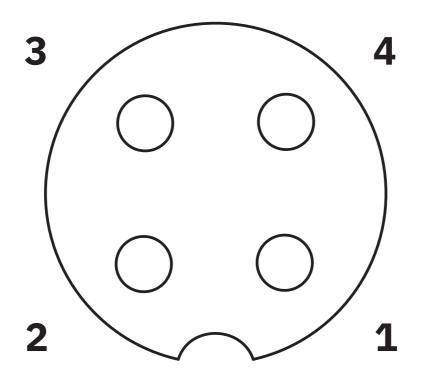
Drawings

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/pc/products/1404416

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

7.	UL Recognized Approval ID: FILE E 221	JL Recognized Approval ID: FILE E 221474				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²	
		250 V	4 A	-	-	



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Classifications

ECLASS				
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		
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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Accessories

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

https://www.phoenixcontact.com/pc/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



A 1,5 - 7 - Ferrule

3200263

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



Ferrule, Length contact range: 7 mm, sleeve length: 7 mm, color: silver-colored



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TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/pc/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/pc/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/pc/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/pc/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/pc/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/pc/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 mm² ... 6 mm², unlockable pressure lock, lateral entry



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SZF 1-0,6X3,5 - Screwdriver

1204517

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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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