

1404642

https://www.phoenixcontact.com/us/products/1404642

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Power connector, Power, 4-position, Socket straight M12, coding: S, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm \dots 10 mm, for AC current up to 12 A/630 V

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
- High-performance: AC connectors for up to 12 A and 630 V AC
- Protection against incorrect connection using special S-coding

Commercial data

Item number	1404642
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	AF2CAB
GTIN	4046356707732
Weight per piece (including packing)	28.65 g
Weight per piece (excluding packing)	28.61 g
Customs tariff number	85366990
Country of origin	DE



1404642

https://www.phoenixcontact.com/us/products/1404642

Technical data

Notes

General	Strip 21 mm off the cable sheath, strip 6 mm off the conductor insulation, crimp the ferrule, then shorten this to 5 mm. Conductor length 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
Sensor type	Power
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	S
Cable outlet	straight
Pg screw connection	Pg11
Insulation characteristics	
Overvoltage category	III

3

Dimensions

Degree of pollution

Flammability rating according to UL 94

Seal material

Dimensione	
Dimensional drawing	19 19
Width	20 mm
Height	20 mm
Length	60.4 mm
Wrench size, union nut	19 mm
External dimensions	
Outside diameter	8 mm 10 mm
Housing	
Diameter housing	20 mm
Material specifications	

V0 Viton



1404642

https://www.phoenixcontact.com/us/products/1404642

	NBR
Material of grip body	PA
Contact material	CuZn
Contact surface material	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 (with ferrule)
	0.75 mm² 2.5 mm² (solid)
Connection cross section AWG	18 16 (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	6 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	> 10 GΩ
Nominal voltage U _N	630 V AC
Nominal current I _N	12 A (when using 1.5 mm² conductors)
	12 A (at 40 °C)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	S

Cable/line

Signal type/category	Power
Stripping length of the individual wire	5 mm

Environmental and real-life conditions



1404642

https://www.phoenixcontact.com/us/products/1404642

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation) (male connector/female connector)	-40 °C 85 °C (Plug / socket)

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

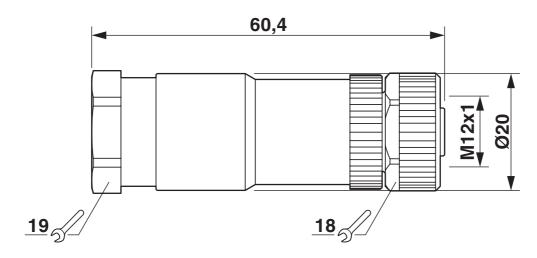


1404642

https://www.phoenixcontact.com/us/products/1404642

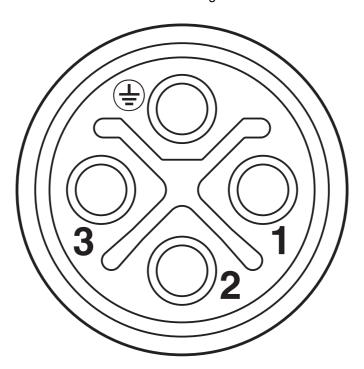
Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



Pin assignment of M12 socket, 4-pos., S-coded, socket side view



1404642

https://www.phoenixcontact.com/us/products/1404642

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1404642

.71	cUL Recognized Approval ID: FILE E 221474					
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²	
		600 V	12 A	- 16	-	

7.1	UL Recognized Approval ID: FILE E 221474					
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²	
		600 V	12 A	- 16	-	



1404642

https://www.phoenixcontact.com/us/products/1404642

Classifications

ECLASS

	ECLASS-13.0	27440116	
	ECLASS-15.0	27440116	
ETIM			
	ETIM 9.0	EC002635	
UN	NSPSC		
	UNSPSC 21.0	39121400	



1404642

https://www.phoenixcontact.com/us/products/1404642

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	b07d1c34-0b1a-4f70-bdcc-e31958c847b9
EF3.0 Climate Change	
CO2e kg	1.163 kg CO2e

Phoenix Contact 2025 © - all rights reserved https://www.phoenixcontact.com

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