

https://www.phoenixcontact.com/au/products/1419640

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Power connector, 3-position, unshielded, Socket straight M12, coding: S, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm \dots 8 mm, for alternating current up to 16 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 16 A and 630 V AC
- Protection against incorrect connection using special S-coding

Commercial data

Item number	1419640
Packing unit	1 pc
Minimum order quantity	1 рс
Sales key	AF2CAB
Product key	AF2CAB
Catalog page	Page 279 (C-2-2019)
GTIN	4055626181783
Weight per piece (including packing)	26.27 g
Weight per piece (excluding packing)	26.27 g
Customs tariff number	85366990
Country of origin	DE

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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	Power supply
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	S
Cable outlet	straight
Pg screw connection	Pg9

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Dimensions

	Dimensional drawing	
	Length	54 mm
	Wrench size, union nut	16 mm
E	External dimensions	
	Outside diameter	6 mm 8 mm
H	Housing	
	Diameter housing	20 mm
Ма	terial 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	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)
	0.8 Nm 1 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	≤ 5 mΩ
Insulation resistance	> 10 GΩ
Nominal voltage U _N	630 V AC
Nominal current I _N	16 A (when using 2.5 mm ² conductors)
	16 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

Stripping length of the individual wire	5 mm

Environmental and real-life conditions

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



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	connector)	
Sta	Standards and regulations	
	Standard designation	M12 connector
	Standards/specifications	IEC 61076-2-111

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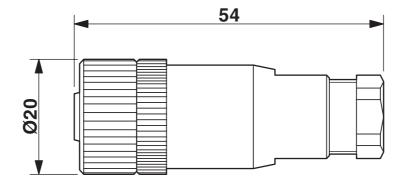


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Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



Pin assignment of M12 socket, 3-pos., S-coded, socket side view



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Approvals

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L Recognized proval ID: FILE E 221474			
Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
600 V	16 A	- 14	-

71	UL Recognized Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	16 A	- 14	-



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Classifications

ECLASS

	ECLASS-13.0	27440116
E	ГІМ	
	ETIM 9.0	EC002635
U	NSPSC	
	UNSPSC 21.0	39121400



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Environmental product compliance

EU RoHS

Yes
6(c)
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.
Lead(CAS: 7439-92-1)
238a0990-8d03-4c60-b54b-76cb0ba96b13

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