

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 ... 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 pc
Sales key	BF30
Product key	BF2CAB
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



1419640

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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

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Data management status

Insulation characteristics

Flammability rating according to UL 94

Seal material

Overvoltage category	III
Degree of pollution	3

Dimensions

Dimensional drawing	54
Length	54 mm
Wrench size, union nut	16 mm
External dimensions	
Outside diameter	6 mm 8 mm
Housing	
Diameter housing	20 mm
Material specifications	

V0

Viton



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	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 mm ² 2.5 mm ² (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 mm² conductors)
	16 A (at 40 °C)

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	S

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

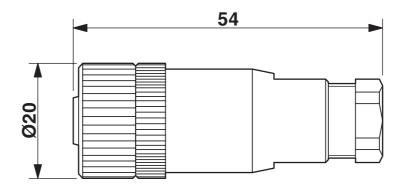


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Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



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



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1419640

. 91	CUL Recognized Approval ID: FILE E 221474				
	No	ominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	60	00 V	16 A	- 14	-

<i>9</i> 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	16 A	- 14	-

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

cULus Recognized



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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	

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Nov 2, 2024, 1:22 AM Page 7 (8)



1419640

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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	238a0990-8d03-4c60-b54b-76cb0ba96b13

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