

#### 1419641

https://www.phoenixcontact.com/us/products/1419641

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Power connector, 3-position, Plug angled 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, Contact 4 leading

#### 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	1419641
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAB
Catalog page	Page 279 (C-2-2019)
GTIN	4055626181790
Weight per piece (including packing)	23.83 g
Weight per piece (excluding packing)	23.83 g
Customs tariff number	85366990
Country of origin	DE

1419641

https://www.phoenixcontact.com/us/products/1419641

### 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.
General	<b>NOTE:</b> 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)
Number of positions	3
Application	Power supply
No. of cable outlets	1
Shielded	no
Coding	S
Cable outlet	angled
Pg screw connection	Pg9
Insulation characteristics	

Overvoltage category	III
Degree of pollution	3

#### Dimensions

Dimensional drawing	44 <del>R</del> <del>R</del> <del>R</del> <del>R</del> <del>R</del> <del>R</del> <del>R</del> <del>R</del>
Length	41 mm
Wrench size, union nut	16 mm
External dimensions	
Outside diameter	6 mm 8 mm
Housing	
Diameter housing	20 mm

Material specifications

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#### 1419641

https://www.phoenixcontact.com/us/products/1419641

Flammability rating according to UL 94	V0
Seal material	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 <sup>2</sup> 1.5 mm <sup>2</sup> (with ferrule)
	0.75 mm <sup>2</sup> 2.5 mm <sup>2</sup> (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 <sub>N</sub>	630 V AC
Nominal current I <sub>N</sub>	16 A (when using 2.5 mm <sup>2</sup> conductors)
	16 A (at 40 °C)

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	> 100

#### Connector

Connection 1	
Head design	Plug
Head cable outlet	angled
Head thread type	M12
Coding	S

#### Cable/line

Stripping length of the individual wire	5 mm
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Environmental and real-life conditions



#### 1419641

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Ambient conditions				
Degree of protection		IP67		
Ambient temperature (ope	eration)	-40 °C 85 °C (Plug / socket)		
Standards and regulations				
Standards and regulation	IS			
Standards and regulation	IS	M12 connector		



1419641

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## Classifications

#### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

#### ETIM

	ETIM 9.0	EC002635
UN	NSPSC	
	UNSPSC 21.0	39121400

1419641

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### Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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