

1404641

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Power connector, Power, 4-position, Plug straight M12, coding: S, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm ... 10 mm, for AC current up to 12 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 12 A and 630 V AC
- · Protection against incorrect connection using special S-coding

Commercial data

Item number	1404641
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAB
Catalog page	Page 279 (C-2-2019)
GTIN	4046356707725
Weight per piece (including packing)	25.82 g
Weight per piece (excluding packing)	25 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		
Sensor type	Power		
Number of positions	4		
No. of cable outlets	1		
Shielded	no		
Coding	S		
Cable outlet	straight		
Pg screw connection	Pg11		
Data management status			
Article revision	00		
Insulation characteristics			

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Dimensions

Overvoltage category

Degree of pollution

Dimensional drawing	19 d		
Width	20 mm		
Height	20 mm		
Length	65.5 mm		
Wrench size, union nut	19 mm		
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	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)
	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

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Insertion/withdrawal cycles	≥ 100
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Connector

Connection 1

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

Cable/line

Signal type/category	Power	



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	Stripping length of the individual wire	5 mm			
Environmental and real-life conditions					
	Ambient conditions				
	Degree of protection	IP67			
	Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)			
Standards and regulations					
	Standard designation	M12 connector			
	Standards/specifications	IEC 61076-2-111			

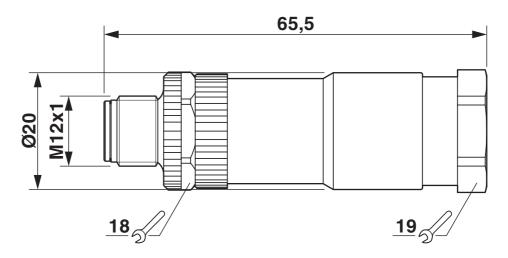


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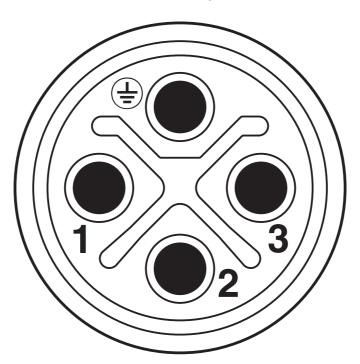
Drawings

Dimensional drawing



Plug, M12 x 1, straight

Schematic diagram



Connector pin assignment of M12 plug, 4-pos., S-coded, view of pin side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1404641

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	-

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	-

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

cULus Recognized



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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	



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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	012005f3-071c-4300-90a4-8c608806b629	

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