

1411605

https://www.phoenixcontact.com/us/products/1411605

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.



Device connector front mounting, Power, 4-position, Socket, straight, M12-Standard, coding: S, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 1.31 mm², UL/cUL stranded hook-up wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1238901

Your advantages

- · For compact devices: transmit high power in a confined space
- · Easy-to-install, optimized XL housing contour with wrench size 19
- · Mechanical tightening limitation for long-term-stable gasket
- · Preassembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- · Sealed on the litz wire side for optimum leak-tightness
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1411605
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCFG
Catalog page	Page 283 (C-2-2019)
GTIN	4046356936194
Weight per piece (including packing)	57.1 g
Weight per piece (excluding packing)	46 g
Customs tariff number	85444290
Country of origin	DE



1411605

https://www.phoenixcontact.com/us/products/1411605

Technical data

Notes

General The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration. Safety note Safety note WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property. • WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible. · WARNING: Only electrically gualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product. • The products are suitable for applications in plant, controller, and electrical device engineering. • When operating the connectors in outdoor applications, they must be separately protected against environmental influences. · Assembled products may not be manipulated or improperly opened. · Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products). · When using the product in direct connection with third-party manufacturers, the user is responsible. • For operating voltages > 50 V AC, conductive connector housings must be grounded · Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards. · Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product · Only use tools recommended by Phoenix Contact • Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products



1411605

https://www.phoenixcontact.com/us/products/1411605

Ensure that the protective or functional ground has been	
properly connected.	

• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector

• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Mounting

Mounting type	Front mounting M16 x 1.5 Tightening limitation
Assembly instructions	Tightening limitation

Product properties

Product type	Circular connectors (device side)
Sensor type	Power
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	S
Thread type	M12

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Bare Cu litz wires

Electrical properties

Rated voltage in acc. with IEC 61076-2-101	630 V
Rated surge voltage	6 kV
	6 kV AC
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	630 V
Nominal current I _N	12 A
Test voltage	6 kV



1411605

https://www.phoenixcontact.com/us/products/1411605

Connection data

onnection method	Individual wires
Contact connection type	Socket
Conductor cross section	1.31 mm ²
Tightening torque	0.8 Nm 1.3 Nm (Installation-side)
chanical properties	
lechanical data	
Insertion/withdrawal cycles	> 100
nnector	
Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	S
onnection 2	
Head design	free cable end
ole/line	
Cable length	0.5 m
Cable type	UL/cUL stranded hook-up wire
Signal type/category	Power
Wire diameter incl. insulation	2.2 mm ±0.07 mm
Single wire, color	black 1, black 2, black 3, green/yellow
Cable cross section	1.31 mm ²
Conductor material	Bare Cu litz wires
AWG signal line	16
Material wire insulation	mPPE
Halogen-free	yes
Flame resistance	in acc. to UL 1581 VW1
Ambient temperature (operation)	-40 °C 85 °C (without mechanical actuation)
	40.% 05 % (without mochanical estimation)

Environmental and real-life conditions

Ambient conditions		

Degree of protection

-40 °C ... 85 °C (without mechanical actuation) -25 °C ... 105 °C (Cable, flexible installation)



1411605

https://www.phoenixcontact.com/us/products/1411605

	IP65/IP67		
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)		
	-40 °C 85 °C (without mechanical actuation)		
	-25 °C 105 °C (Cable, flexible installation)		
	-40 °C 105 °C (cable, fixed installation)		
Standards and regulations			
Flame resistance	in acc. to UL 1581 VW1		
M12			
Standard designation	M12 connector		
Standards/specifications	IEC 61076-2-111		
Note	In line with		



1411605

https://www.phoenixcontact.com/us/products/1411605

Classifications

ECLASS

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		
UNSPSC				
	UNSPSC 21.0	39121400		



1411605

https://www.phoenixcontact.com/us/products/1411605

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"

Phoenix Contact 2024 © - 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