

1420396

https://www.phoenixcontact.com/us/products/1420396

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, rear mounting, Power, 4-position, Socket, straight, M12, coding: S , on free cable end, Rear mounting, M16 x 1.5, Individual wires, UL/cUL stranded hook-up wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239301

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	1420396
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AB27
Product key	ABQCHG
GTIN	4055626214559
Weight per piece (including packing)	149.3 g
Weight per piece (excluding packing)	136.7 g
Customs tariff number	85444290
Country of origin	DE



1420396

https://www.phoenixcontact.com/us/products/1420396

Technical data

Notes

les	
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.
General	Lock nut is included in the scope of delivery
afety 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 qualified 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 principle approach and the principle in the processor is a protective cap to protect connectors that are not in use.

The suitable accessories are available online in the accessory



1420396

https://www.phoenixcontact.com/us/products/1420396

	section of the product at phoenixcontact.com/products
	 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	Rear mounting
Assembly instructions	Tightening limitation
Connection method	Individual wires
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 AC
	6 kV AC
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V



1420396

https://www.phoenixcontact.com/us/products/1420396

Nominal current I _N	12 A
Test voltage	6 kV

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	1.31
Tightening torque	0.8 Nm
	1.3 Nm

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

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

Connection 2

Cable/line

Cable length	2	
Cable type	UL/cUL stranded hook-up wire	
Signal type/category	Power	
Wire diameter incl. insulation	2.2 mm	
Single wire, color	black 1, black 2, black 3, green/yellow	
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 105 °C (cable, fixed installation)	
	-20 °C 105 °C (Cable, flexible installation)	

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
----------------------	------



1420396

https://www.phoenixcontact.com/us/products/1420396

	IP65/IP67
Ambient temperature (operation)	-2585 (Plug / socket)
	-20 °C 105 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)
tandards and regulations	
Flame resistance	in acc. to UL 1581 VW1
N40	
M12	
Standard designation	M12 connector
Standards/specifications	based on IEC 61076-2-111
Note	In line with

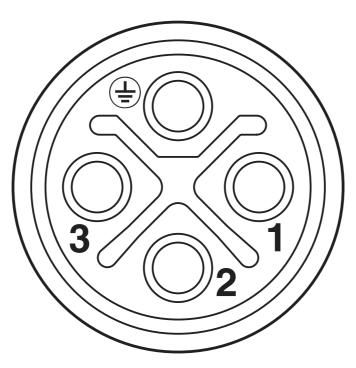


1420396

https://www.phoenixcontact.com/us/products/1420396

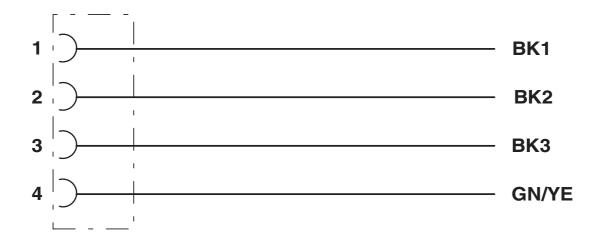
Drawings





Pin assignment of M12 socket, 4-pos., S-coded, socket side view

Circuit diagram





1420396

https://www.phoenixcontact.com/us/products/1420396

24,1 17,5 2,8 2,8 2,8 2,8

Dimensional drawing



1420396

https://www.phoenixcontact.com/us/products/1420396

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1420396



CUL Recognized Approval ID: E468743-20190917					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	12 A	- 16	-

71	UL Recognized Approval ID: E468743-20190917					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²	
		600 V	12 A	- 16	-	

cULus Recognized



1420396

https://www.phoenixcontact.com/us/products/1420396

Classifications

UNSPSC 21.0

ECLASS

202.00					
	ECLASS-11.0	27440102			
	ECLASS-12.0	27440116			
	ECLASS-13.0	27440116			
ETIM					
	ETIM 8.0	EC002635			
UNSPSC					

39121400



1420396

https://www.phoenixcontact.com/us/products/1420396

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 2023 © - 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