

1424721

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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.: 1239480

Your advantages

- · For compact devices: transmit high power in a confined space
- · Protection against mismatching thanks to S-coding
- · 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	1424721		
Packing unit	1 pc		
Minimum order quantity	50 pc		
Note	Made to order (non-returnable)		
Sales key	AB27		
Product key	ABQCHG		
GTIN	4055626378589		
Weight per piece (including packing)	147.3 g		
Weight per piece (excluding packing)	139.8 g		
Customs tariff number	85444290		
Country of origin	DE		



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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.
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 an operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate 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 technica 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



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section of the product at phoenixcontact.com/products

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

 \bullet 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 M16 x 1.5 With flat nut
Assembly instructions	With flat nut
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	630 V



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Nominal current I _N	12 A			
Test voltage				
connection data				
Conductor connection				
Connection method Individual wires				
Contact connection type	Socket			
Conductor cross section	1.31			
Tightening torque	3 Nm			
	4 Nm			
lechanical 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				
Head design	free cable end			
able/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)			

Environmental and real-life conditions

Ambient	conditions
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Degree of protection	IP67
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	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-20 °C 105 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)
andards and regulations	
Flame resistance	in acc. to UL 1581 VW1
M12	
Standard designation	M12 connector
Standards/specifications	based on IEC 61076-2-111
Note	In line with

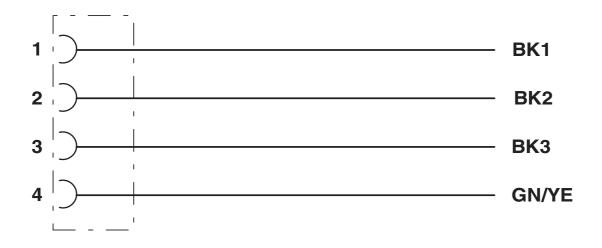


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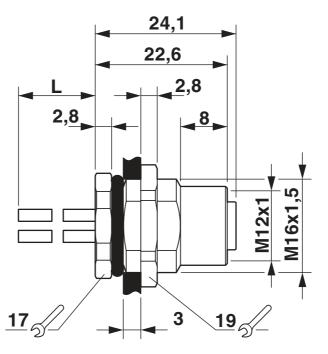
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Drawings





Dimensional drawing



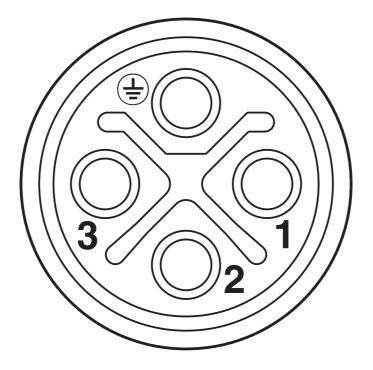
Dimensional drawing



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Schematic diagram



Pin assignment of M12 socket, 4-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/1424721

EAC	EAC Approval ID: B.01687				
.F \\	cUL Recognized Approval ID: E468743-2	0190917			
		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: E468743-20	0190917			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	12 A	- 16	-

cULus Recognized



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Classifications

ECLASS

	ECLASS-11.0	27440102	
	ECLASS-12.0	27440116	
	ECLASS-13.0	27440116	
ETIM			
	ETIM 8.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	



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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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