

1424721

https://www.phoenixcontact.com/us/products/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, cable length: 2 m,  $1.31 \text{ mm}^2$ , 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	1 pc
Note	Made to order (non-returnable)
Sales key	AB24
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

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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
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.
	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	<ul> <li>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.</li> </ul>
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <li>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).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	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
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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).</li> </ul>
Mounting	
Mounting type	Rear mounting M16 x 1.5 With flat nut
Assembly instructions	With flat nut
Product properties	
• •	0. 1. (1
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 <sub>N</sub>	630 V
Nominal current I <sub>N</sub>	12 A
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Test voltage	6 kV		
onnection data			
Conductor connection			
Connection method	Individual wires		
Contact connection type	Socket		
Conductor cross section	1.31 mm²		
Tightening torque	3 Nm 4 Nm (M12 connector)		
lechanical properties			
Mechanical data			
Insertion/withdrawal cycles	> 100		
onnector			
Connection 1			
Head design	Socket		
Head cable outlet	straight		
Head thread type	M12		
Coding	S		
Connection 2			
Head design	free cable end		
Troub doorg.			
able/line			
Cable length	2 m		
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		
Cable cross section	1.31 mm²		
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)		
nvironmental and real-life conditions			
Ambient conditions			
Degree of protection	IP67		
Degree of protection			



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Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-20 °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	based on IEC 61076-2-111
Note	In line with

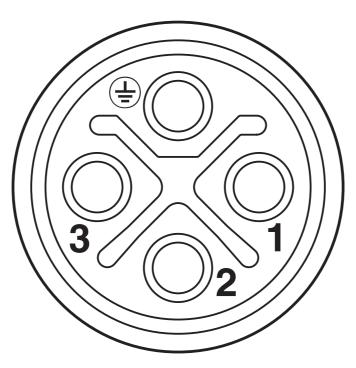


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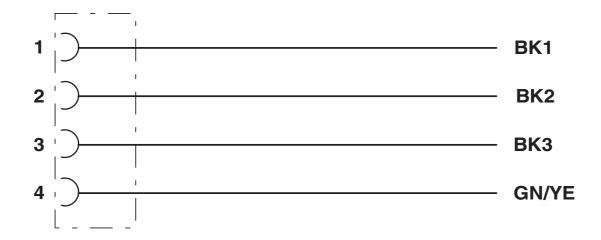
### Drawings





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

Circuit diagram





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### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1424721

. <b>7.1</b>	<b>cUL Recognized</b> Approval ID: E468743-20190917			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	600 V	12 A	16 - 16	-

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		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		600 V	12 A	16 - 16	-

cULus Recognized



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### Classifications

### **ECLASS**

UNSPSC 21.0

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

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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	0cee179e-f2eb-4f56-b78d-c37dd177bf60

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