

1424133

https://www.phoenixcontact.com/us/products/1424133

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Device connector rear mounting, Power, 4-position, Socket, straight, M12-Standard, S-coding, on free cable end, Individual wires, cable length: 0.5 m, 1.31 mm², UL/cUL stranded hook-up wire, potted, this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

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	1424133
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCHG
GTIN	4046356693356
Weight per piece (including packing)	59.2 g
Weight per piece (excluding packing)	47.323 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

Notes on operation	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.
Order information:	Lock nut is included in the scope of delivery
General	Contact connection method: Crimp connection

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.



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The suitable accessories are available online in the accessory 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). 	
Rear mounting (M16 x 1.5, with flat nut)	
3 Nm 4 Nm (M12 connector)	
Circular connectors (device side)	
Power	
Power	
4	
3+PE	
1	
3	
no	
S	
M12	
III	
3	
PUR (potted)	
V0	
FKM	
CuZn	
Au	
PA	
Zinc die-cast, nickel-plated	
Bare Cu litz wires	
630 V	
6 kV	
6 kV AC	



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Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	630 V
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 mm²	
Tightening torque	3 Nm 4 Nm (M12 connector)	

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100	

Connector

Connection 1

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

Connection 2

Head design free cable end

Cable/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	
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 85 °C (without mechanical actuation)	
	-40 °C 85 °C (without mechanical actuation)	



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Standards/specifications

	-25 °C 105 °C (Cable, flexible installation)
Environmental and real-life conditions	
Ambient conditions	
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 85 °C (without mechanical actuation)
Ambient temperature (operation) (Cable, flexible installation)	-25 °C 105 °C (Cable, flexible installation)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 105 °C (cable, fixed installation)
UL Type Rating	Type 4 (indoor use only)
Standards and regulations	
Flame resistance	in acc. to UL 1581 VW1
Standard designation	M12 circular connector

according to IEC 61076-2-111

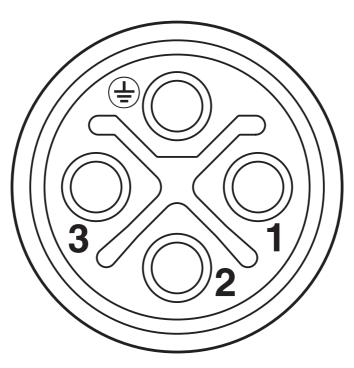


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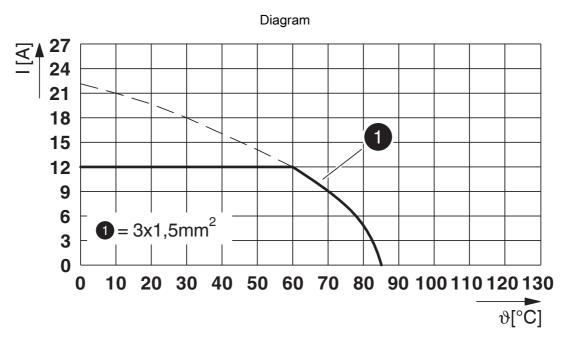
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Drawings





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



I = current strength, T = ambient temperature



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Circuit diagram



Contact assignment of the M12 socket



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1424133

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

71	UL Recognized Approval ID: E468743-20190917	 3-20190917		
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	600 V	12 A	16	-



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Classifications

UNSPSC 21.0

ECLASS

	ECLASS-13.0	27440103			
	ECLASS-15.0	27440103			
ETIM					
	ETIM 9.0	EC003570			
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	46012c7d-9159-4b48-825c-43b38fce6b1f

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com