

1559819

https://www.phoenixcontact.com/us/products/1559819

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Device connector rear mounting, CC link, 4-position, PVC, red, similar to RAL 3000, Socket, straight, M12-SPEEDCON, A-coding, on free cable end, Cable connection, cable length: 0.5 m, CC-Link, 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

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1559819
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGG
GTIN	4046356322126
Weight per piece (including packing)	60.7 g
Weight per piece (excluding packing)	56.321 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

otes	
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
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 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 principal 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. 	
	 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). 	
ounting		
Mounting type	Rear mounting (M16 x 1.5, with flat nut)	
Tightening torque	2 Nm 3 Nm (Installation-side)	
	· · · · · · · · · · · · · · · · · · ·	
roduct properties	Circular consectors (device cide)	
Product type	Circular connectors (device side)	
Application	Data CC link	
Sensor type		
Number of positions No. of cable outlets	1	
Shielded		
Coding	yes A	
	M12	
Thread type	WIIZ	
Insulation characteristics		
Overvoltage category	II	
Degree of pollution	3	
aterial specifications		
Flammability rating according to UL 94	V0	
Seal material	FKM	
Contact material	CuZn	
Contact surface material	Ni/Au	
Contact carrier material	PA 6.6	
Material for screw connection	Brass, nickel-plated	
Material for screw connection Outer sheath, material	Brass, nickel-plated PVC	
Outer sheath, material		
Outer sheath, material ectrical properties	PVC	
Outer sheath, material ectrical properties Rated surge voltage	PVC 2.5 kV	
Outer sheath, material ectrical properties Rated surge voltage Contact resistance Insulation resistance	PVC 2.5 kV ≤ 3 mΩ	
Outer sheath, material ectrical properties Rated surge voltage Contact resistance	PVC 2.5 kV \leq 3 mΩ \geq 10 MΩ	



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Connection data

Conductor connection

Connection method	Cable connection
Contact connection type	Socket
Tightening torque	2 Nm 3 Nm (Installation-side)

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	SPEEDCON
Coding	A

Connection 2

Head design	free cable end
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Cable/line

Cable length	0.5 m

CC-Link [990]	
Cable weight	78.8 kg/km
Number of positions	3
Shielded	yes
Cable type CC-Link [990]	
Conductor structure	3xAWG20/7 + 1xAWG22/19 (filler litz wire)
Conductor structure signal line	7x 0.28 mm
AWG signal line	20
Conductor cross section 0.5 mm²	
External cable diameter	7.70 mm
Outer sheath, material	PVC
External sheath, color	red
Conductor material	Bare Cu litz wires
Material wire insulation	foamed PE, with high density
Single wire, color	white, yellow, blue
Thickness, insulation	0.89 mm (Outer cable sheath)
Optical shield covering	78 %



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Max. conductor resistance	31.2 Ω/km	
Wave impedance	110 Ω	
Working capacitance	61 pF	
Nominal voltage, cable	300 V	
Smallest bending radius, fixed installation	77 mm	
Ambient temperature (operation)	-30 °C 60 °C (cable, fixed installation)	
	-5 °C 60 °C (Cable, flexible installation)	

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67 (When plugged in)	
	IP65 (When plugged in)	
	IP65/IP67	
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)	
	-40 °C 85 °C (without mechanical actuation)	

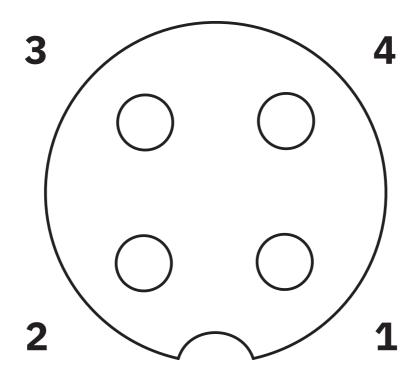


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Drawings

Schematic diagram

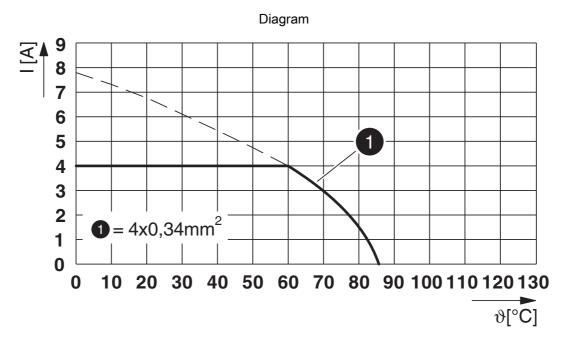


Pin assignment M12 socket, 4-pos., A-coded, view female side



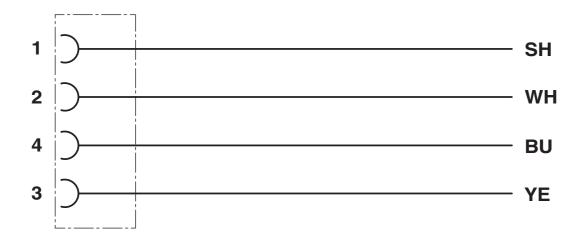
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I = current strength, T = ambient temperature

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/1559819

cUL Recognized Approval ID: E221474-20220907					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		250 V	1.5 A	-	-

7/	UL Recognized Approval ID: E118976-20100522	Recognized val ID: E118976-20100522		
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	250 V	4 A	-	-

<i>5</i> 11	UL Recognized Approval ID: E221474-2	0220907	907		
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		250 V	4 A	-	-



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Classifications

UNSPSC 21.0

ECLASS

	ECLASS-13.0	27440103	
	ECLASS-15.0	27440103	
ETIM			
	ETIM 9.0	EC003570	
UNSPSC			

39121400



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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: n/a)
SCIP	2df63d35-f1c7-4ebb-9af3-e3b9878d60d9

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