

1554681

https://www.phoenixcontact.com/us/products/1554681

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Device connector rear mounting, Universal, 5-position, Pin, straight, M12-Standard, coding: A, on free cable end, Rear mounting, Pg9, Individual wires, cable length: 0.5 m, 0.34 mm², TPE litz wire

Your advantages

- · 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
- · Standard pin assignments and codings for signal transmission with a uniform design-in design
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1554681		
Packing unit	1 pc		
Minimum order quantity	1 pc		
Sales key	AB24		
Product key	ABQCWE		
Catalog page	Page 270 (C-2-2013)		
GTIN	4046356170383		
Weight per piece (including packing)	36.23 g		
Weight per piece (excluding packing)	26.7 g		
Customs tariff number	85444290		
Country of origin	DE		



1554681

https://www.phoenixcontact.com/us/products/1554681

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	
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.

connector rear mounting



1554681

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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

• 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 Pg9 With locking nut
Assembly note	With locking nut

Product properties

Universal
5
1
no
A
M12

I	nsulation characteristics	
	Overvoltage category	II
	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 6.6
Material for screw connection	Stainless steel
Conductor material	Tin-plated Cu litz wires

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V (AC)
	60 V (DC)
Nominal current I _N	4 A
Max. conductor resistance	57.6 mΩ/m



1554681

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Connection data

Conductor material

AWG signal line

Material wire insulation Thickness, insulation

Nominal voltage, cable Test voltage, cable

Cable insulation resistance

Ambient temperature (operation)

Cable resistance

Conductor structure signal line

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 mm ²
Tightening torque	2 Nm 3 Nm (Installation-side)
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
Connection 1	
Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	A
Connection 2	
Head design	free cable end
able/line	
Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	black, brown,blue, white, gray
5	

Tin-plated Cu litz wires

7x 0.25 mm

0.21 mm 300 V

2000 V AC

≤ 57.6 mΩ/m

≥ 20 MΩ*km

-40 °C ... 85 °C (cable, fixed installation)

-25 °C ... 85 °C (Cable, flexible installation)

22 TPE



1554681

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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65/IP67/IP69/IP69K	
	IP69K	
	IP65/IP67/IP69K	
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)	
	-40 °C 85 °C (without mechanical actuation)	
	-25 °C 85 °C (Cable, flexible installation)	
	-40 °C 85 °C (cable, fixed installation)	

Standards and regulations

M12

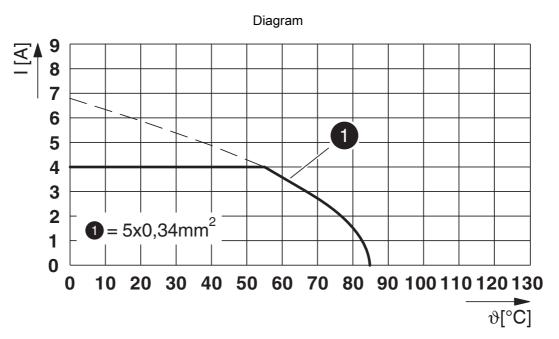
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



1554681

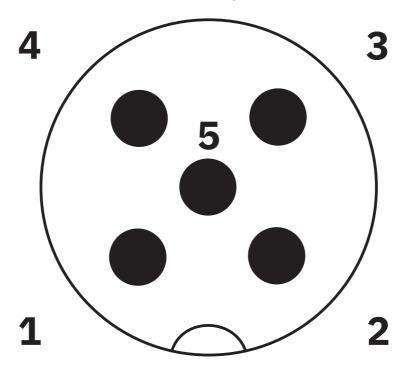
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Drawings



I = current strength, T = ambient temperature

Schematic diagram

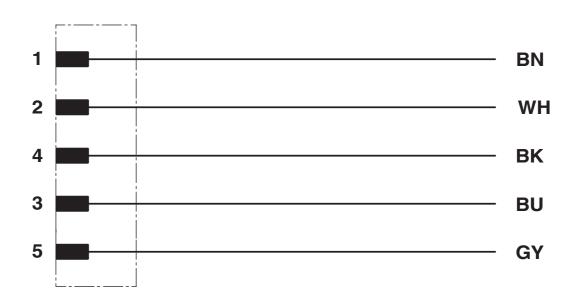


Pin assignment M12 male connector, 5-pos., A-coded, male side



1554681

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Circuit diagram



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Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1554681

.91	cUL Recognized Approval ID: E118976-20)100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-
	UL Recognized Approval ID: E118976-20	100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-
c '911 us	cULus Recogniz Approval ID: E221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 20	-

cULus Recognized

SACC-DSI-M12MS-5CON-PG9/0,5 VA - Device

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Classifications

ECLASS

	ECLASS-11.0	27440102	
	ECLASS-12.0	27440116	
	ECLASS-13.0	27440116	
ETIM			
	ETIM 9.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	



1554681

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
China RoHS			
Environment friendly use period (EFUP)	EFUP-E		
	No hazardous substances above the limits		
EU REACH SVHC			
REACH candidate substance (CAS No.)	No substance above 0.1 wt%		



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Accessories

PROT-M12 FS - Sealing cap

1560251 https://www.phoenixcontact.com/us/products/1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

PROT-M12 FS-M - Sealing cap

1430488 https://www.phoenixcontact.com/us/products/1430488



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field



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SACC-PG9-SEAL CLM - Flat gasket

1556320 https://www.phoenixcontact.com/us/products/1556320

Pg9 flat gasket, for M12 flush-type connectors with Pg9 fastening thread



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