

1027666

https://www.phoenixcontact.com/us/products/1027666

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Device connector, rear mounting, Universal, 5-position, Flush-type female connector, straight, M12-Push-Pull, coding: A , on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.34 mm 2 , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1238099

Your advantages

- · Established M12 standard for secure transmission of signals, data, and power
- · Easy and quick cabling of devices and systems in hard-to-reach areas
- Manufacturer-independent M12 push-pull locking system for maximum availability
- · Reliable shield connection even under extreme mechanical strain
- · Compatible with connectors with screw or push-in connection

Commercial data

Item number	1027666
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCCB
Catalog page	Page 48 (C-2-2019)
GTIN	4055626533384
Weight per piece (including packing)	39.7 g
Weight per piece (excluding packing)	29.7 g
Customs tariff number	85444290
Country of origin	DE



1027666

https://www.phoenixcontact.com/us/products/1027666

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	Push-pull external locking
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.

- 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.



1027666

https://www.phoenixcontact.com/us/products/1027666

	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).
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	Universal
Number of positions	5
Application	Signal
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
Material specifications	
Material	Dropp pickel plated
	Brass, nickel-plated V0
Flammability rating according to UL 94 Seal material	NBR/FKM
Material of grip body	Brass, nickel-plated
Contact material	CuZn
Contact material Contact surface material	Au
Contact carrier material	PA 6.6
Material for screw connection	Brass, nickel-plated
Conductor material	Tin-plated Cu litz wires
Electrical properties	
Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
modiation registarioe	- 100 MIZ



1027666

https://www.phoenixcontact.com/us/products/1027666

Nominal voltage U _N	60 V (AC)
	60 V (DC)
Nominal current I _N	4 A
Transmission medium	Copper
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.34 mm²
Tightening torque	3 Nm
	4 Nm

Mechanical properties

Mechanical data

Insertion/withdrawal cycles > 100	
-----------------------------------	--

Connector

Connection 1

Head design	Flush-type female connector
Head cable outlet	straight
Head thread type	M12
Head locking type	Push-Pull
Coding	A

Connection 2

Head design	free cable end
· ·	

Cable/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	brown, white, blue, black, gray
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC



1027666

https://www.phoenixcontact.com/us/products/1027666

Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)
	-25 °C 85 °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)	-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

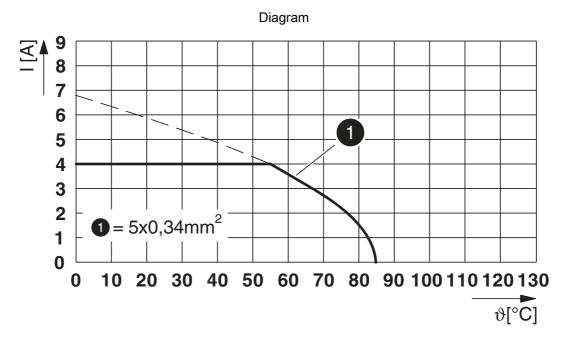
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-010
Note	Push-pull (type 2)



1027666

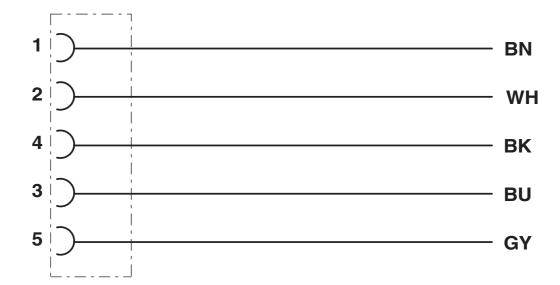
https://www.phoenixcontact.com/us/products/1027666

Drawings



I = current strength, T = ambient temperature

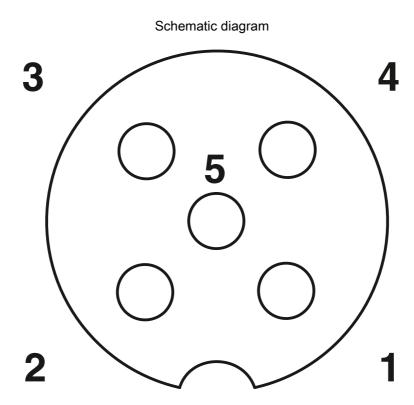
Circuit diagram





1027666

https://www.phoenixcontact.com/us/products/1027666



Pin assignment M12 socket, 5-pos., A-coded, socket side view



1027666

https://www.phoenixcontact.com/us/products/1027666

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1027666



2 42 0	cULus Recognized Approval ID: E221474-20140616				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 20	-



1027666

https://www.phoenixcontact.com/us/products/1027666

Classifications

UNSPSC 21.0

ECLASS

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

39121400



1027666

https://www.phoenixcontact.com/us/products/1027666

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"	



1027666

https://www.phoenixcontact.com/us/products/1027666

Accessories

SACC-E-MU-M16 - Flat nut

1504097

https://www.phoenixcontact.com/us/products/1504097

Flat nut, Screw mounting, M16 x 1.5, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239863



SACC-M16-SEAL CLM - Flat gasket

1430394

https://www.phoenixcontact.com/us/products/1430394

M16 flat gasket for M12 flush-type connectors with M16 fastening thread





1027666

https://www.phoenixcontact.com/us/products/1027666

PROT-M12 - Screw plug

1680539

https://www.phoenixcontact.com/us/products/1680539



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

PROT-M12 SH - Screw plug

1503302

https://www.phoenixcontact.com/us/products/1503302



An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors



1027666

https://www.phoenixcontact.com/us/products/1027666

PROT-M12 FB - Screw plug

1555538

https://www.phoenixcontact.com/us/products/1555538



M12 high-grade steel screw plug, for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors for the food industry

Phoenix Contact 2023 © - all rights reserved https://www.phoenixcontact.com

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