

1458871

https://www.phoenixcontact.com/nz/products/1458871

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 front mounting, Universal, 5-position, Socket, straight, M12-Standard, coding: A, on free cable end M12, Front mounting, M16 x 1.5, 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
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1458871
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	ABQCVB
Product key	ABQCVB
Catalog page	Page 268 (C-2-2013)
GTIN	4046356655491
Weight per piece (including packing)	35.3 g
Weight per piece (excluding packing)	22.1 g
Country of origin	DE



1458871

https://www.phoenixcontact.com/nz/products/1458871

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.
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: On the product On the packing label In the supplied documentation 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 suitable online in the accessory.

The suitable accessories are available online in the accessory



1458871

https://www.phoenixcontact.com/nz/products/1458871

	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	Front mounting M16 x 1.5
roduct properties	
Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Data management status	
Article revision	11
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	Au
Contact carrier material	PA 66 GF
Material for screw connection	Stainless steel
Conductor material	Tin-plated Cu litz wires
ectrical properties	
Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V (AC)
	60 V (AC)



1458871

https://www.phoenixcontact.com/nz/products/1458871

Nominal current I _N	4 A
Max. conductor resistance	57.6 Ω/km

Connection data

Conductor connection

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

Connection 2

Head design	free cable end
Head thread type	M12

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	black, brown,blue, white, gray
Cable cross section	0.34 mm²
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 (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 Ω/km
Cable insulation resistance	≥ 20 MΩ*km



1458871

https://www.phoenixcontact.com/nz/products/1458871

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	IP65/IP67/IP69/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

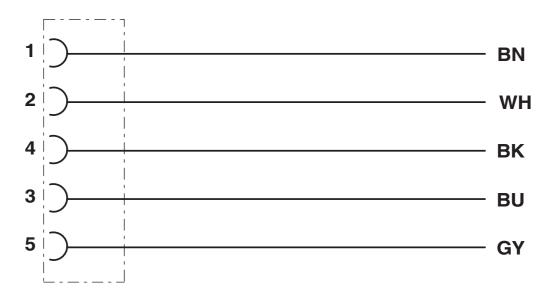


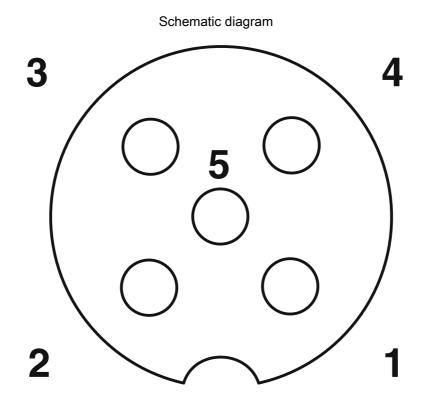
1458871

https://www.phoenixcontact.com/nz/products/1458871

Drawings

Circuit diagram



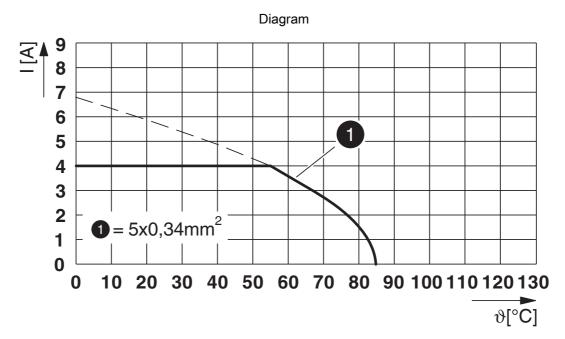


Pin assignment M12 socket, 5-pos., A-coded, socket side view



1458871

https://www.phoenixcontact.com/nz/products/1458871



I = current strength, T = ambient temperature



1458871

https://www.phoenixcontact.com/nz/products/1458871

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/nz/products/1458871

1 R:	cUL Recognized Approval ID: E118976-20100522				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-

<i>7</i> /	UL Recognized Approval ID: E118976-20	Recognized proval ID: E118976-20100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-

c 711 us	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	-

cULus Recognized



1458871

https://www.phoenixcontact.com/nz/products/1458871

Classifications

UNSPSC 21.0

ECLASS

27440102			
27440116			
27440116			
ETIM			
EC002635			
UNSPSC			

39121400



1458871

https://www.phoenixcontact.com/nz/products/1458871

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%	

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT Ltd Unit 15C, 906-930 Great South Road, Penrose Auckland 1061 0508 474 636 sales@phoenixcontact.co.nz