

1415302

https://www.phoenixcontact.com/pc/products/1415302

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, Power, 6-position, Pin, straight, M12-Standard, coding: M, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.2 m,  $1.31 \text{ mm}^2$ , UL/cUL stranded hook-up wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239088

### Your advantages

- · For compact devices: transmit high power in a confined space
- Easy-to-install, optimized XL housing contour with wrench size 19
- Mechanical tightening limitation for long-term-stable gasket
- · 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	1415302
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABQCGG
Catalog page	Page 287 (C-2-2019)
GTIN	4055626056302
Weight per piece (including packing)	49 g
Weight per piece (excluding packing)	38.2 g
Customs tariff number	85444290
Country of origin	DE



1415302

https://www.phoenixcontact.com/pc/products/1415302

### 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.
	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	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.
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <li>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).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	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



1415302

https://www.phoenixcontact.com/pc/products/1415302

	section of the product at phoenixcontact.com/products
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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).</li> </ul>
Mounting	
Mounting type	Rear mounting M16 x 1.5 XL version, with flat nut, tightening limitation
Assembly note	XL version, with flat nut, tightening limitation
Product properties	
Product type	Circular connectors (device side)
Sensor type	Power
Number of positions	6
No. of cable outlets	1
Shielded	no
Coding	M
Thread type	M12
Data management status	
Article revision	11
Insulation characteristics	
Overvoltage category	III
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
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Bare Cu litz wires
Electrical properties	
Rated voltage in acc. with IEC 61076-2-101	630 V
Rated surge voltage	6 kV
	6 kV AC



1415302

https://www.phoenixcontact.com/pc/products/1415302

Nominal current I <sub>N</sub>	8 A
Test voltage	6 kV

#### Connection data

#### Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	1.31 mm²
Tightening torque	0.8 Nm 1.3 Nm (Installation-side)

### Mechanical properties

#### Mechanical data

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

#### Connector

### Connection 1

Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	M

### Connection 2

Head design free cable end	
----------------------------	--

### Cable/line

Cable length	0.2 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, black 4, black 5, 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 105 °C (cable, fixed installation)
	-25 °C 105 °C (Cable, flexible installation)

### Environmental and real-life conditions

#### Ambient conditions



1415302

Note

https://www.phoenixcontact.com/pc/products/1415302

Degree of protection	IP67
	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 105 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)
andards and regulations	
Flame resistance	in acc. to UL 1581 VW1
M12	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

In line with

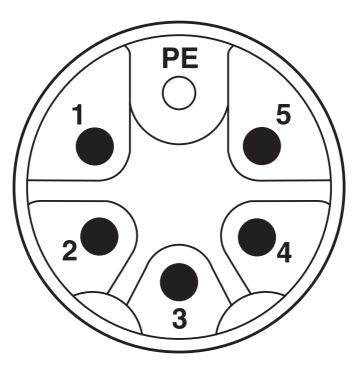


1415302

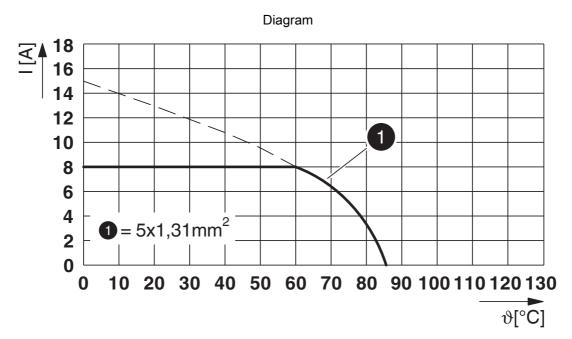
https://www.phoenixcontact.com/pc/products/1415302

## Drawings





Pin assignment of M12 connector, 6-pos., M-coded, pin side view



I = current strength, T = ambient temperature



1415302

https://www.phoenixcontact.com/pc/products/1415302

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1415302

c <b>911</b> us	cULus Recogniz Approval ID: E46874	<b>zed</b> 3-20180113			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	10 A	16 - 16	-



1415302

https://www.phoenixcontact.com/pc/products/1415302

### Classifications

UNSPSC 21.0

### **ECLASS**

27440102		
27440116		
27440116		
ETIM		
EC002635		

39121400



1415302

https://www.phoenixcontact.com/pc/products/1415302

## 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	1ede712d-8f8d-4eff-824b-7eed34136156

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

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstraße 8 D-32825 Blomberg +49 (0) 5235-3 00 info@phoenixcontact.com