

1415296

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Device connector front mounting, Power, 5-position, Socket, straight, M12-Standard, L-coding, on free cable end, Individual wires, cable length: 0.2 m, 2.50 mm<sup>2</sup>, PEX litz wire, potted, this item is expected to be lead-free from Q1 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

## 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	1415296
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCFG
GTIN	4055626056258
Weight per piece (including packing)	48.7 g
Weight per piece (excluding packing)	45.973 g
Customs tariff number	85444290
Country of origin	DE



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## 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.
Notes on operation	FE not connected to metal parts that can be touched, no protective function
General	Contact connection method: Crimp connection

## Mounting

Mounting type	Front mounting (M16 x 1.5, XL variant, tightening limitation)
Modriting type	r form mounting (wro x 1.5, XL variant, tightering innitation)

## Product properties

Product type	Circular connectors (device side)
Application	Power
Sensor type	Power
Number of positions	5
Connection profile	4+FE
No. of cable outlets	1
No. of power contacts	4
Shielded	no
Coding	L
Thread type	M12

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

# Material specifications

Material Molding compound	PUR (potted)
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	Tin-plated Cu litz wires

### Electrical properties

ated voltage in acc. with IEC 61076-2-101
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Rated surge voltage	1.5 kV
Rated surge voltage	1.5 kV AC/DC
Nominal voltage U <sub>N</sub>	63 V DC
Nominal current I <sub>N</sub>	16 A
Test voltage	1.5 kV
Test voltage Core/Core	6 kV

#### Connection data

#### Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross-section	2.5 mm²

## 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	L

#### Connection 2

Head design	free cable end

### Cable/line

Cable length	0.2 m
Cable type	PEX litz wire
Signal type/category	Power
Single wire, color	brown 1, white 2, blue 3, black 4, pink FE
Cable cross section	2.5 mm²
Conductor material	Tin-plated Cu litz wires
AWG signal line	14
Material wire insulation	PE-X
Test voltage Core/Core	6 kV
Halogen-free	according to IEC 60754-1
Flame resistance	in acc. with UL FT-2
Other resistance	Hydrolysis-resistant
Ambient temperature (operation)	-40 °C 105 °C (cable, fixed installation)



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Standards/specifications

	-25 °C 105 °C (Cable, flexible installation)
ironmental and real-life conditions	
mbient conditions	
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female	-25 °C 85 °C (Plug / socket)
connector)	-40 °C 85 °C (without mechanical actuation)
Ambient temperature (operation) (Cable, flexible installation)	-25 °C 105 °C (Cable, flexible installation)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 105 °C (cable, fixed installation)
UL Type Rating	Type 4 (indoor use only)
ndards and regulations	
Flame resistance	in acc. with UL FT-2
Other resistance	Hydrolysis-resistant
Standard designation	M12 circular connector

according to IEC 61076-2-111

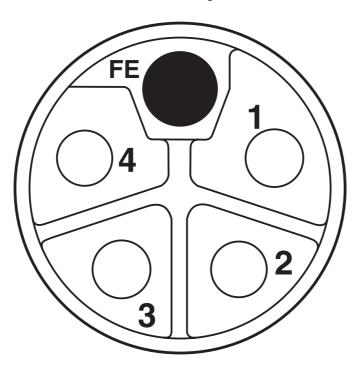


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# Drawings





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



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# Approvals

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e <b>911</b> us	cULus Recogniz Approval ID: E46874	PULus Recognized  pproval ID: E468743-20180113			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		63 V	16 A	14	-



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## Classifications

### **ECLASS**

	ECLASS-13.0	27440103	
	ECLASS-15.0	27440103	
ETIM			
	ETIM 9.0	EC003570	
U	UNSPSC		
	UNSPSC 21.0	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: 7439-92-1)
SCIP	6dbb4d30-fc55-4249-be26-fd99dada2dde

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