

1425582

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Device connector front mounting, Power, 5-position, Pin, straight, M12-Standard, coding: L, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.2 m,  $2.50 \text{ mm}^2$ , PEX litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239513

#### 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                          | 1425582             |
|--------------------------------------|---------------------|
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | AB24                |
| Product key                          | ABQCEG              |
| Catalog page                         | Page 286 (C-2-2019) |
| GTIN                                 | 4055626424316       |
| Weight per piece (including packing) | 47.5 g              |
| Weight per piece (excluding packing) | 46.1 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 version, tightening limitation |
|---------------|--|
| Thread type   | ()   |
| Assembly note | XL version, tightening limitation                          |

#### Product properties

| Product type           | Circular connectors (device side) |
|------------------------|-----------------------------------|
| Sensor type            | Power                             |
| Number of positions    | 5                                 |
| No. of cable outlets   | 1                                 |
| Shielded               | no                                |
| Coding                 | L                                 |
| Thread type            | M12                               |
| Data management status |                                   |

| Article revision           | 10 |
|----------------------------|----|
| Insulation characteristics |    |

| Overvoltage category | III |
|----------------------|-----|
| Degree of pollution  | 3   |

#### Material specifications

| Color                                  | gray                      |
|--|---------------------------|
| Flammability rating according to UL 94 | V0                        |
| Seal material                          | FKM                       |
| Contact material                       | CuZn                      |
| Contact surface material               | Ni/Au                     |
| Contact carrier material               | PA                        |
| Material for screw connection          | CuZn alloy, nickel-plated |
| Conductor material                     | Tin-plated Cu litz wires  |

#### Electrical properties



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| Rated voltage in acc. with IEC 61076-2-101 | 63 V         |
|--|--------------|
| Rated surge voltage                        | 1.5 kV       |
|  | 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       |

#### Connection data

#### Conductor connection

| Connection method       | Individual wires                  |
|-------------------------|-----------------------------------|
| Contact connection type | Pin                               |
| Conductor cross section | 2.5 mm <sup>2</sup>               |
| 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            | 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                                       |
| 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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|                                      | -25 °C 105 °C (Cable, flexible installation) |
|--------------------------------------|--|
| vironmental and real-life conditions |  |
| mbient conditions                    |  |
| 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. with UL FT-2                         |
| Other resistance                     | Hydrolysis-resistant                         |
| M12                                  |  |
| Standard designation                 | M12 connector                                |
| Standards/specifications             | IEC 61076-2-111                              |
| Note                                 | In line with                                 |

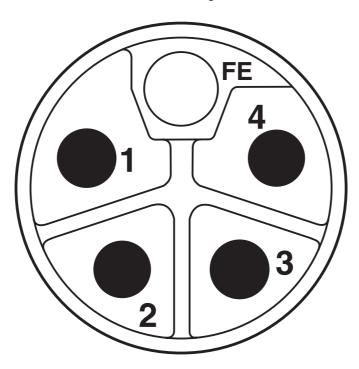


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### Drawings

#### Schematic diagram



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



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### Approvals

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| c <b>911</b> us | cULus Recogniz<br>Approval ID: E46874 | zed<br>3-20180113              |                                |                   |                               |
|-----------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|                 |                                       | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|                 |                                       | 63 V                           | 16 A                           | 14 - 14           | -                             |



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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 |  |



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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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