

1685518
<https://www.phoenixcontact.com/us/products/1685518>

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Cable connector, number of positions: 19, status display: no; master cable connection: M23 screw locking, shielding: yes, this item is expected to be lead-free from Q3 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance. This product is in the process of being discontinued. This product must no longer be considered for new projects. Please contact your sales representative for alternatives.

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1685518 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | AB31 |
| Product key | ABRAFC |
| GTIN | 4017918878917 |
| Weight per piece (including packing) | 212.6 g |
| Weight per piece (excluding packing) | 207.494 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

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Technical data

Notes

| | |
|--------------------|--|
| Notes on operation | The connector is designed for use on sensor/actuator boxes with an M23 plug-in connection. |
|--------------------|--|

Product properties

| | |
|---------------------|---------------------------------|
| Product type | Circular connector (cable-side) |
| Number of positions | 19 |

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 26 mm |
| Height | 60 mm |
| Length | 92 mm |

Material specifications

| | |
|------------------|-------|
| Material Housing | GD-Zn |
| Seal material | FPM |

Connection data

Connection assignment

| | |
|--|-----------------------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = 15 = WH |
| | 1 / 2 (B) = 7 = GYPK |
| | 2 / 4 (A) = 5 = GN |
| | 2 / 2 (B) = 4 = RDBU |
| | 3 / 4 (A) = 16 = YE |
| | 3 / 2 (B) = 8 = WHGN |
| | 4 / 4 (A) = 3 = GY |
| | 4 / 2 (B) = 14 = BNGN |
| | 5 / 4 (A) = 17 = PK |
| | 5 / 2 (B) = 9 = WHYE |
| | 6 / 4 (A) = 2 = RD |
| | 6 / 2 (B) = 13 = YEBN |
| | 7 / 4 (A) = 11 = BK |
| | 7 / 2 (B) = 10 = WHGY |
| | 8 / 4 (A) = 1 = VT |
| | 8 / 2 (B) = 18 = GYBN |
| | 1-8 / 1 (+ 120 V) = 19 = BN |
| | 1-8 / 3 (0 V) = 6 = BU |

RC/TWGM/KVD/LBL 16+3 - Cable connector



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| | |
|--|--------------------------|
| | 1-8 / 5 (PE) = 12 = GNYE |
|--|--------------------------|

Electrical properties

| | |
|-----------------------|---|
| Nominal voltage U_N | 150 V |
| Rated current, total | 10 A (with 1 mm ² conductor cross-section) |

Connector

Connection 2

| | |
|-------------------|--------|
| Head design | Socket |
| Head cable outlet | angled |
| Head thread type | M23 |

Insulating body

| | |
|--|--|
| Coding | N |
| Material (Insulating body) | PA 6.6 |
| Material (Contact) | CuZn |
| Material (Contact surface) | Ni/Au |
| Insertion/withdrawal cycles | 100 |
| Connection method | Solder cup |
| Contact switching type | Socket |
| Application | Signal |
| Number of positions | 19 |
| Direction of rotation | Standard |
| Connection profile | 16+3 |
| Number Contact (Contact group 1) | 3 |
| Diameter Contact (Contact group 1) | 1.5 mm |
| Litz wire cross-section min. Contact (Contact group 1) | 0.08 mm ² |
| Litz wire cross-section max. Contact (Contact group 1) | 1 mm ² |
| Rated current Contact (Contact group 1) | 10 A (for max. connection cross section) |
| Rated voltage Contact (Contact group 1) | 48 V AC 74 V DC |
| Rated surge voltage | 1.5 kV |
| Overvoltage category | III |
| Degree of pollution | 3 |
| Number Contact (Contact group 2) | 16 |
| Diameter Contact (Contact group 2) | 1 mm |
| Litz wire cross-section min. Contact (Contact group 2) | 0.08 mm ² |
| Litz wire cross-section max. Contact (Contact group 2) | 1 mm ² |
| Rated current Contact (Contact group 2) | 8 A |
| Number Contact (Contact group 3) | 1 |
| Diameter Contact (Contact group 3) | 1.5 mm |
| Rated current Contact (Contact group 3) | 8 A |

Cable/line

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| | |
|-------------------------|--------------------|
| External cable diameter | 9.5 mm ... 14.5 mm |
| Connection method | M23 screw locking |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|-------------------|
| Degree of protection | IP65 |
| | IP67 |
| Ambient temperature (operation) | -20 °C ... 125 °C |

RC/TWGM/KVD/LBL 16+3 - Cable connector

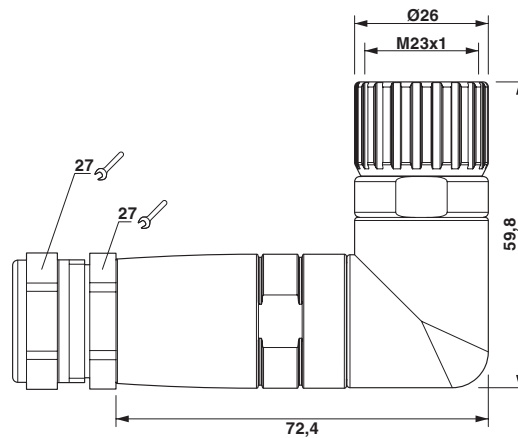
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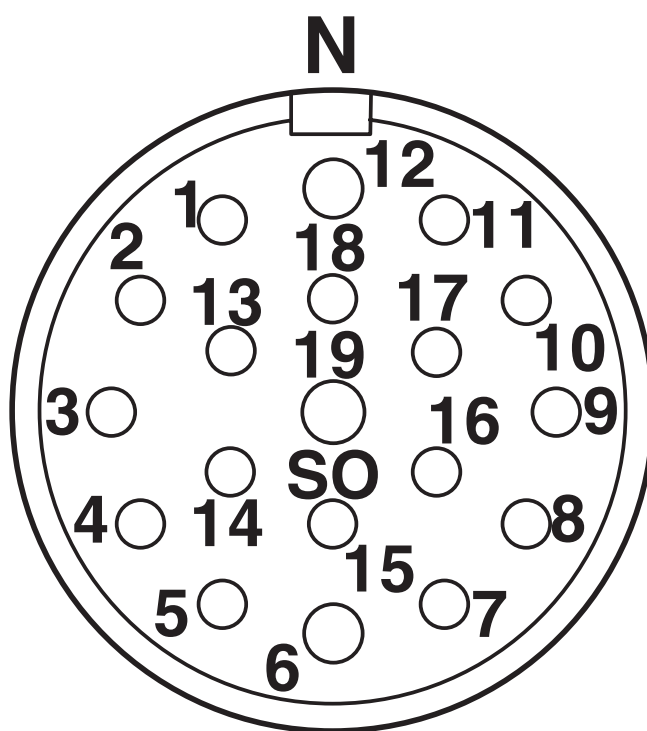
Drawings

Dimensional drawing



Dimensional drawing

Schematic diagram



Pin assignment M23 socket, 19-pos., female side view

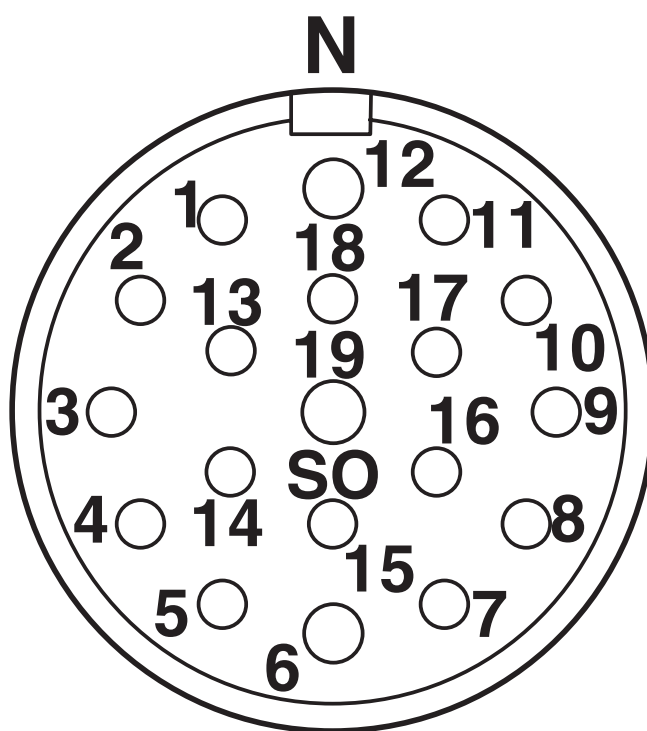
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Schematic diagram



Connector pin assignment

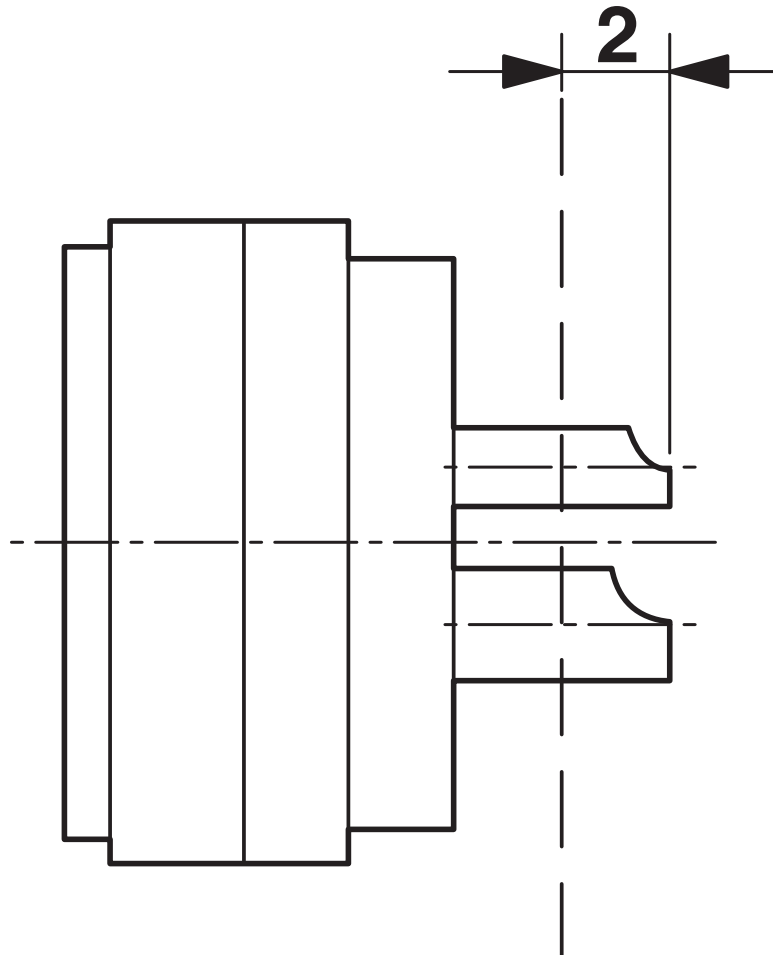
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Schematic diagram



Dimensional drawing

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440116 |
| ECLASS-15.0 | 27440116 |

ETIM

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| ETIM 9.0 | EC002635 |
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UNSPSC

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| UNSPSC 21.0 | 31261500 |
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Environmental product compliance

EU RoHS

| | |
|---|------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c) |

China RoHS

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|--|---|
| 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 | 9792afa3-1321-42b5-a891-d65899a66248 |

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