

## Female connector - RCK-TGUM/BL16+3/10,0PUR-U - 1684069

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Female connector, Number of positions: 19, Status indication: No; Master cable connection: M23 socket, Cable length: 10 m, Shielding: No

### Key commercial data

|                  |               |
|------------------|---------------|
| package_quantity | 1             |
| GTIN             | 4017918172053 |

### Technical data

#### General

|                     |       |
|---------------------|-------|
| Rated voltage       | 150 V |
| Number of positions | 19    |

#### Ambient conditions

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Degree of protection            | IP65                              |
| Degree of protection            | IP67                              |
| Ambient temperature (operation) | -40 °C ... 125 °C (Plug / socket) |

#### Master cable data/connection data

|                   |            |
|-------------------|------------|
| Connection method | M23 socket |
| Length of cable   | 10 m       |

#### Insulation material

|                                                          |             |
|----------------------------------------------------------|-------------|
| Housing material                                         | PUR         |
| Material of contact, master cable side                   | CU alloy    |
| Material of contact surface, master cable side           | Gold-plated |
| Material of the contact carrier on the master cable side | PA          |

#### Connection assignment

|                                       |                        |
|---------------------------------------|------------------------|
| Slot/position = pin = conductor color | 1 / 4 (A) = 15 = WH    |
| Slot/position = pin = conductor color | 1 / 2 (B) = 7 = GY/PK  |
| Slot/position = pin = conductor color | 2 / 4 (A) = 5 = GN     |
| Slot/position = pin = conductor color | 2 / 2 (B) = 4 = RD/BU  |
| Slot/position = pin = conductor color | 3 / 4 (A) = 16 = YE    |
| Slot/position = pin = conductor color | 3 / 2 (B) = 8 = WH/GN  |
| Slot/position = pin = conductor color | 4 / 4 (A) = 3 = GY     |
| Slot/position = pin = conductor color | 4 / 2 (B) = 14 = BN/GN |

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## Technical data

### Connection assignment

|                                       |                             |
|---------------------------------------|-----------------------------|
| Slot/position = pin = conductor color | 5 / 4 (A) = 17 = PK         |
| Slot/position = pin = conductor color | 5 / 2 (B) = 9 = WH/YE       |
| Slot/position = pin = conductor color | 6 / 4 (A) = 2 = RD          |
| Slot/position = pin = conductor color | 6 / 2 (B) = 13 = YE/BN      |
| Slot/position = pin = conductor color | 7 / 4 (A) = 11 = BK         |
| Slot/position = pin = conductor color | 7 / 2 (B) = 10 = WH/GY      |
| Slot/position = pin = conductor color | 8 / 4 (A) = 1 = VT          |
| Slot/position = pin = conductor color | 8 / 2 (B) = 18 = GY/BN      |
| Slot/position = pin = conductor color | 1-8 / 1 (+ 120 V) = 19 = BN |
| Slot/position = pin = conductor color | 1-8 / 3 (0 V) = 6 = BU      |
| Slot/position = pin = conductor color | 1-8 / 5 (PE) = 12 = GN/YE   |

### Cable

|                                                 |                                                                                                                                                                                    |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cable type                                      | PUR/PVC black                                                                                                                                                                      |
| Cable type (abbreviation)                       | PUR                                                                                                                                                                                |
| Cable abbreviation                              | LiYY11Y-HF                                                                                                                                                                         |
| UL AWM style                                    | 20549 (80°C/300 V)                                                                                                                                                                 |
| Conductor cross section                         | 16x 0.5 mm <sup>2</sup> (signal line)                                                                                                                                              |
| Conductor cross section                         | 3x 1 mm <sup>2</sup> (power line)                                                                                                                                                  |
| AWG signal line                                 | 20                                                                                                                                                                                 |
| AWG power supply                                | 17                                                                                                                                                                                 |
| Conductor structure signal line                 | 28x 0.15 mm                                                                                                                                                                        |
| Conductor structure, voltage supply             | 56x 0.15 mm                                                                                                                                                                        |
| Core diameter including insulation              | 1.5 mm ±0.1 mm (signal line)                                                                                                                                                       |
| Core diameter including insulation              | 2.1 mm ±0.1 mm (power line)                                                                                                                                                        |
| Wire colors                                     | Brown, blue, green-yellow, white, green, yellow, gray, pink, red, black, violet, gray-pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray, gray-brown |
| Overall twist                                   | Wires twisted in layers                                                                                                                                                            |
| External sheath, color                          | Black RAL 9005                                                                                                                                                                     |
| Inner sheath thickness                          | ≥ 0.15 mm                                                                                                                                                                          |
| Outer sheath thickness                          | ≥ 0.76 mm                                                                                                                                                                          |
| External cable diameter D                       | 10.5 mm ± 0.2 mm                                                                                                                                                                   |
| Minimum bending radius, fixed installation      | 7.5 x D                                                                                                                                                                            |
| Minimum bending radius, flexible installation   | 10 x D                                                                                                                                                                             |
| Number of bending cycles                        | 1500000                                                                                                                                                                            |
| Minimum bending radius, drag chain applications | 10 x D                                                                                                                                                                             |
| Traversing path                                 | 2 m                                                                                                                                                                                |
| Traversing rate                                 | 2 m/s                                                                                                                                                                              |
| Cable weight                                    | 183.7 kg/km                                                                                                                                                                        |
| Outer sheath, material                          | PUR                                                                                                                                                                                |
| Material, inner sheath                          | PVC                                                                                                                                                                                |

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## Technical data

### Cable

|                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| Material conductor insulation   | PVC                                                        |
| Conductor material              | Bare Cu litz wires                                         |
| Nominal voltage, cable          | 300 V                                                      |
| Test voltage, cable             | 2000 V                                                     |
| Special properties              | Silicone-free                                              |
| Flame resistance                | According to DIN EN 50265                                  |
| Resistance to oil               | As per VDE 0472 Part 803                                   |
| Other resistance                | Highly resistant to acids, alkaline solutions and solvents |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation)               |
| Ambient temperature (operation) | -5 °C ... 80 °C (cable, flexible installation)             |

## classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000104 |
| ETIM 3.0 | EC000104 |
| ETIM 4.0 | EC000104 |
| ETIM 5.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

## approvals

GOST /

### Approval details

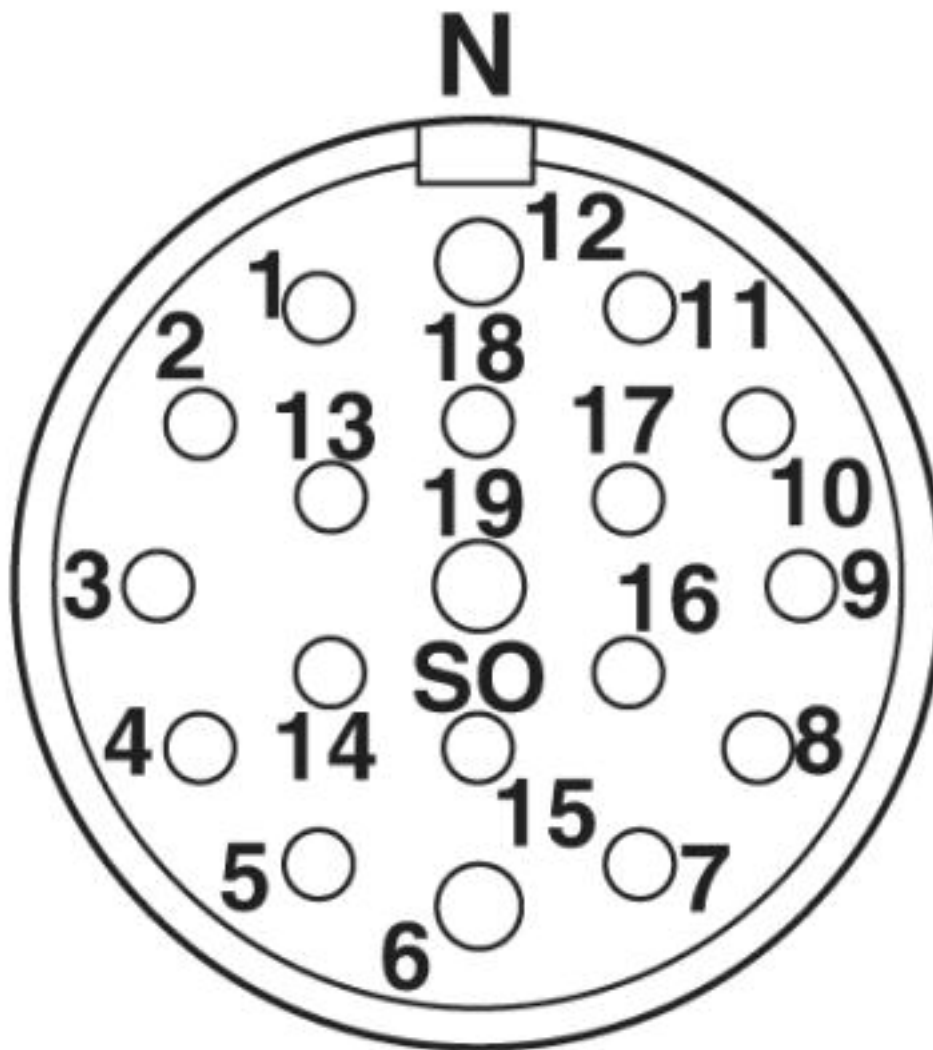
## Female connector - RCK-TGUM/BL16+3/10,0PUR-U - 1684069

approvals



Drawings

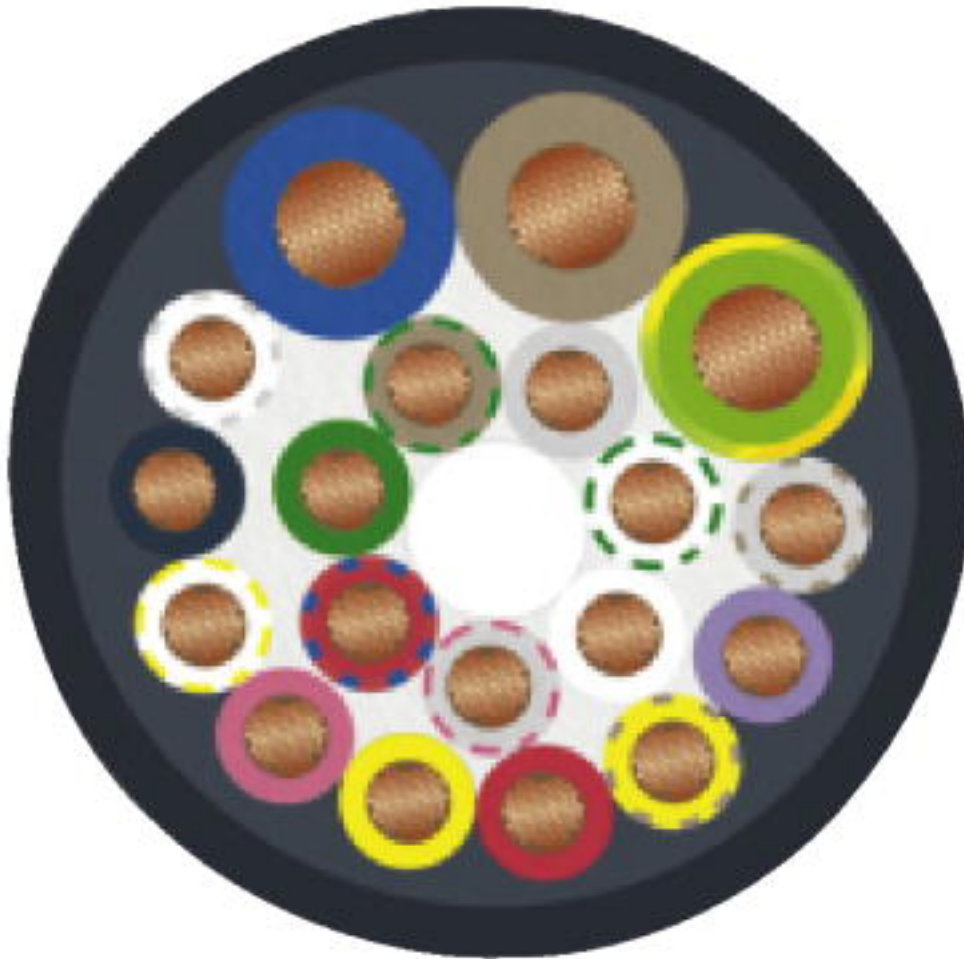
Schematic diagram



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

## Female connector - RCK-TGUM/BL16+3/10,0PUR-U - 1684069

Cable cross section



PUR/PVC black [PUR]

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