

# General Accessories

## Connector Cables

### Type CONB1...

CARLO GAVAZZI



- Straight or 90° connectors
- M12 version
- 3, 4 or 5 wire
- LEDs in transparent housing
- IP 67
- UL approved

## Product Description

M12 connection cables for 3 wires, 4 wires or 5 wires. Come in straight or angled versions. Some versions are also with LED.

UL approved high-quality connection cable either in PVC jacket or in the more durable PUR jacket. Standard lengths of 2m, 5m, 10m or 15m.

## Ordering Key

**CONB14NF-APT2P**

**CONB**  
**1 = M12 DC**  
**3 = 3 wire (BN, BU, BK)**  
**4 = 4 wire (BN, BU, BK, WH)**  
**5 = 5 wire (BN, BU, BK, WH, GY)**  
**N= Not shielded**  
**F= Female**  
**A = Angled**  
**S = Straight**  
**P= PNP**  
**N= NPN**  
**T= Transparent housing**  
**2 = 2 m**  
**5 = 5 m**  
**10 = 10 m**  
**15 = 15 m**  
**Blank = PVC cable**  
**P = PUR**

## Type Selection

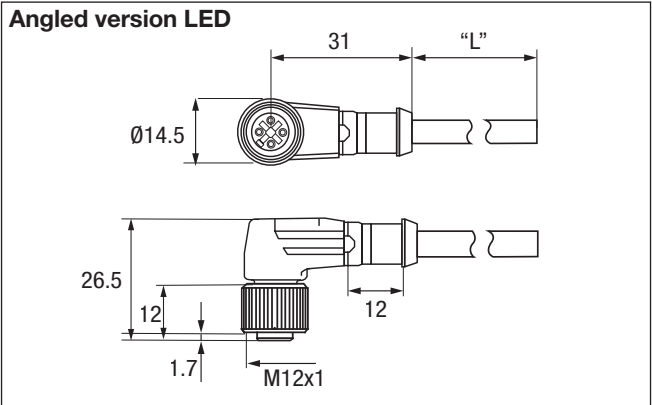
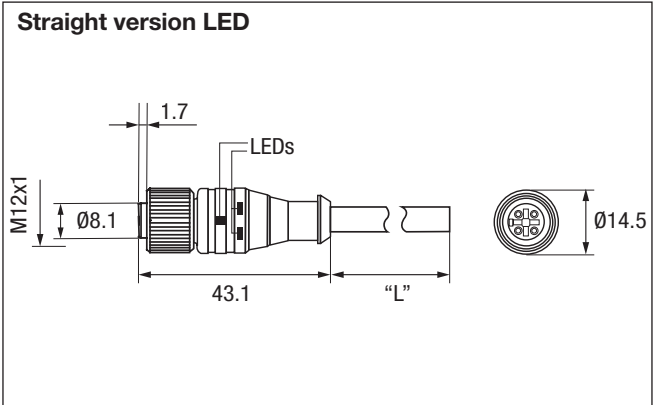
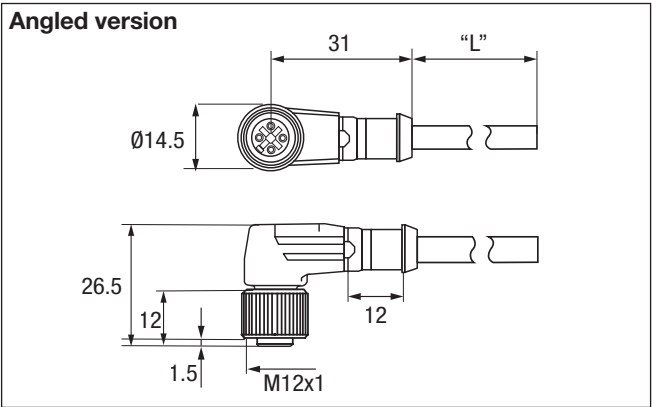
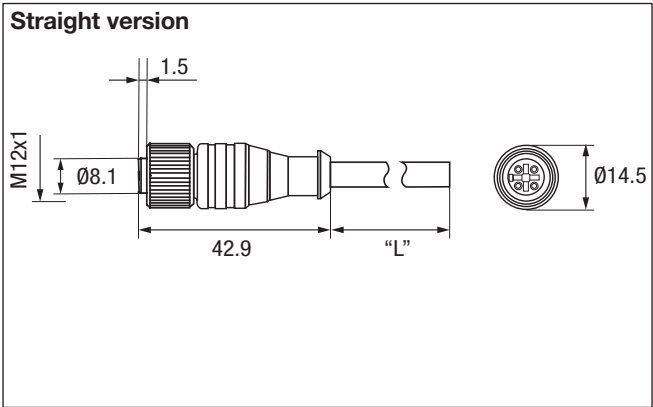
| Plug type       | Cable length | Ordering number PVC | Ordering number PVC LED NPN | Ordering number PVC LED PNP | Ordering number PUR |
|-----------------|--------------|---------------------|-----------------------------|-----------------------------|---------------------|
| 3-Wire Angled   | 2 m          | CONB13NF-A2         | CONB13NF-ANT2               | CONB13NF-APT2               | CONB13NF-A2P        |
|                 | 5 m          | CONB13NF-A5         | CONB13NF-ANT5               | CONB13NF-APT5               | CONB13NF-A5P        |
|                 | 10 m         | CONB13NF-A10        | -                           | -                           | CONB13NF-A10P       |
|                 | 15 m         | CONB13NF-A15        | -                           | -                           | CONB13NF-A15P       |
| 3-Wire Straight | 2 m          | CONB13NF-S2         | -                           | -                           | CONB13NF-S2P        |
|                 | 5 m          | CONB13NF-S5         | -                           | -                           | CONB13NF-S5P        |
|                 | 10 m         | CONB13NF-S10        | -                           | -                           | CONB13NF-S10P       |
|                 | 15 m         | CONB13NF-S15        | -                           | -                           | CONB13NF-S15P       |
| 4-Wire Angled   | 2 m          | CONB14NF-A2         | CONB14NF-ANT2               | CONB14NF-APT2               | CONB14NF-A2P        |
|                 | 5 m          | CONB14NF-A5         | CONB14NF-ANT5               | CONB14NF-APT5               | CONB14NF-A5P        |
|                 | 10 m         | CONB14NF-A10        | -                           | -                           | CONB14NF-A10P       |
|                 | 15 m         | CONB14NF-A15        | -                           | -                           | CONB14NF-A15P       |
| 4-Wire Straight | 2 m          | CONB14NF-S2         | CONB14NF-SNT2               | CONB14NF-SPT2               | CONB14NF-S2P        |
|                 | 5 m          | CONB14NF-S5         | CONB14NF-SNT5               | CONB14NF-SPT5               | CONB14NF-S5P        |
|                 | 10 m         | CONB14NF-S10        | -                           | -                           | CONB14NF-S10P       |
|                 | 15 m         | CONB14NF-S15        | -                           | -                           | CONB14NF-S15P       |
| 5-Wire Angled   | 2 m          | CONB15NF-A2         | -                           | -                           | CONB15NF-A2P        |
|                 | 5 m          | CONB15NF-A5         | -                           | -                           | CONB15NF-A5P        |
|                 | 10 m         | CONB15NF-A10        | -                           | -                           | CONB15NF-A10P       |
|                 | 15 m         | CONB15NF-A15        | -                           | -                           | CONB15NF-A15P       |
| 5-Wire Straight | 2 m          | CONB15NF-S2         | -                           | -                           | CONB15NF-S2P        |
|                 | 5 m          | CONB15NF-S5         | -                           | -                           | CONB15NF-S5P        |
|                 | 10 m         | CONB15NF-S10        | -                           | -                           | CONB15NF-S10P       |
|                 | 15 m         | CONB15NF-S15        | -                           | -                           | CONB15NF-S15P       |



Specifications

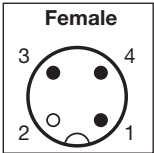
|                                                                                                             |                                                                   |                                                                              |                                                                                            |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Rated operating voltage (U<sub>B</sub>)</b><br>3 or 4 wire version<br>5 wire version<br>LED versions     | 240V AC/DC<br>60V AC/DC<br>30V AC/DC                              | PVC<br>3 wires<br>4 wires<br>5 wires                                         | 0,34mm <sup>2</sup><br>0,25mm <sup>2</sup><br>0,34mm <sup>2</sup>                          |
| <b>Rated current</b>                                                                                        | ≤ 4 A                                                             | <b>Contact material</b>                                                      | CuSn                                                                                       |
| <b>Contact resistance</b>                                                                                   | ≤ 5mΩ                                                             | <b>Contact plating</b>                                                       | Cu/Au                                                                                      |
| <b>Rated impulse voltage</b><br>3 or 4 wire<br>5 wire                                                       | 2.0KV<br>1.5KV                                                    | <b>Contact bearer material</b>                                               | TPU orange                                                                                 |
| <b>Insulation resistance</b>                                                                                | > 10 <sup>9</sup> Ω                                               | <b>Moulded body material</b>                                                 | TPU translucent                                                                            |
| <b>Cable outer diameter</b><br>PUR<br>3 wires<br>4 wires<br>5 wires<br>PVC<br>3 wires<br>4 wires<br>5 wires | 4.3 mm<br>4.7 mm<br>5.4 mm<br>5 mm<br>5 mm<br>5.7 mm              | <b>O-ring sealing</b>                                                        | FKM                                                                                        |
| <b>Wire cross section</b><br>PUR<br>3 wires<br>4 wires<br>5 wires                                           | 0,34mm <sup>2</sup><br>0,34mm <sup>2</sup><br>0,50mm <sup>2</sup> | <b>Knurled nut</b>                                                           | CuZn, nickel plated                                                                        |
|                                                                                                             |                                                                   | <b>Tightening torque</b>                                                     | 0.5 Nm                                                                                     |
|                                                                                                             |                                                                   | <b>Degree of protection</b>                                                  | IP 67                                                                                      |
|                                                                                                             |                                                                   | <b>Pollution degree</b>                                                      | 3                                                                                          |
|                                                                                                             |                                                                   | <b>Pin IEC standard</b>                                                      | IEC61076-2-101                                                                             |
|                                                                                                             |                                                                   | <b>Temperature</b>                                                           | -40° to 90°C                                                                               |
|                                                                                                             |                                                                   | <b>Weight*</b><br>2 m version<br>5 m version<br>10 m version<br>15 m version | approx 100 g<br>approx 200 g<br>approx 300 g<br>approx 500 g<br>*varies depending on model |
|                                                                                                             |                                                                   | <b>LED colour</b><br>Power<br>Output                                         | Green<br>Yellow                                                                            |

Dimensions

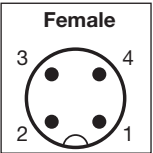


Contact layout

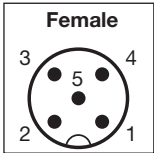
(3-wire)



(4-wire)



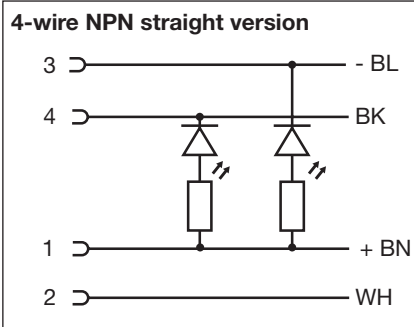
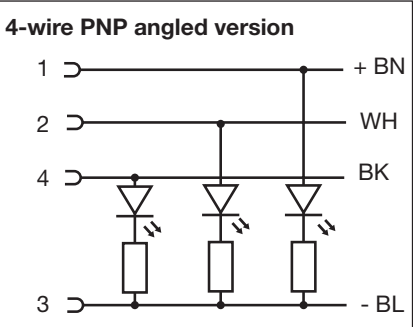
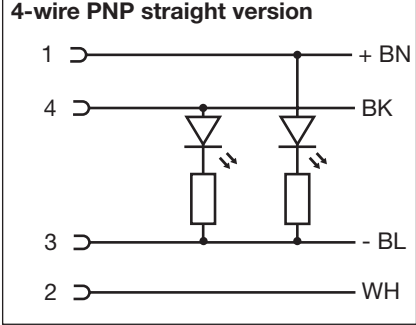
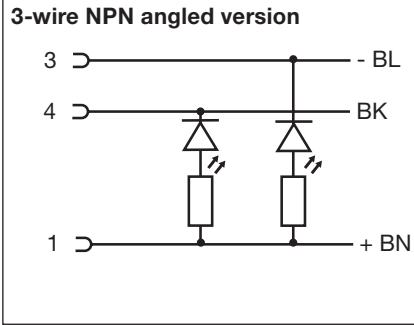
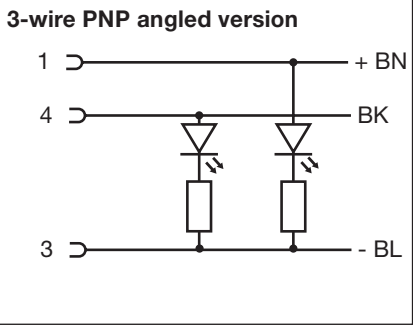
(5-wire)



Colour Code

- 1 Brown (BN)
- 2 White (WH)
- 3 Blue (BL)
- 4 Black (BK)
- 5 Grey

LED Connections



Derating curve (DIN EN 60512-5-2)

