

1404003

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Sensor/actuator cable, 4-position, PP-EPDM, gray RAL 7035, Plug straight M12, coding: A, on free cable end, cable length: 3 m, Hygienic design, with plastic knurl

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Contamination can be detected quickly thanks to the light color

#### Commercial data

| Item number                          | 1404003             |
|--------------------------------------|---------------------|
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF03                |
| Product key                          | BF1CCA              |
| Catalog page                         | Page 144 (C-4-2013) |
| GTIN                                 | 4046356677493       |
| Weight per piece (including packing) | 83.4 g              |
| Weight per piece (excluding packing) | 83.4 g              |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |



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## Technical data

#### Product properties

| Product type               | Sensor/actuator cable    |
|----------------------------|--------------------------|
| Application                | Food processing industry |
| Number of positions        | 4                        |
| No. of cable outlets       | 1                        |
| Shielded                   | no                       |
| Coding                     | A                        |
| Insulation characteristics |                          |
| Overvoltage category       | II                       |
| Degree of pollution        | 3                        |
|                            |                          |

#### Material specifications

| Material of grip body         | PP            |
|-------------------------------|---------------|
| Contact material              | CuSn          |
| Contact surface material      | Ni/Au         |
| Contact carrier material      | PP            |
| Material for screw connection | Polypropylene |

### Electrical properties

| Insulation resistance          | ≥ 100 MΩ |
|--------------------------------|----------|
| Nominal voltage U <sub>N</sub> | 250 V AC |
|                                | 250 V DC |
| Nominal current I <sub>N</sub> | 4 A      |

#### Mechanical properties

#### Mechanical data

| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|-------|
|-----------------------------|-------|

### Signaling

| Status display         | No |
|------------------------|----|
| Status display present | No |

#### Connection data

#### Conductor connection

| Tightening torque 0.4 Nm (M12 connector) |  |
|--|--|
|--|--|

#### Connector

#### Connection 1

| Туре                | Plug straight M12 |
|---------------------|-------------------|
| Number of positions | 4                 |



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| Coding type                                   | A  |
|---|--|
| Connection 2                                  |  |
| Туре  | free cable end                           |
| ista dia a                                    |  |
| able/line                                     |  |
| Cable length                                  | 3 m                                      |
| Dimensional drawing                           |  |
| Cable weight                                  | 30 kg/km                                 |
| Number of positions                           | 4  |
| Shielded                                      | no                                       |
| Conductor structure signal line               | 42x 0.10 mm                              |
| AWG signal line                               | 22                                       |
| Conductor cross section                       | 4x 0.34 mm² (Signal line)                |
| Wire diameter incl. insulation                | 1.27 mm ±0.02 mm (Signal line)           |
| External cable diameter                       | 4.70 mm ±0.15 mm                         |
| Outer sheath, material                        | PP-EPDM                                  |
| External sheath, color                        | gray RAL 7035                            |
| Conductor material                            | Bare Cu litz wires                       |
| Material wire insulation                      | PP                                       |
| Single wire, color                            | brown, white, blue, black                |
| Thickness, insulation                         | ≥ 0.21 mm                                |
| Thickness, outer sheath                       | approx. 0.80 mm                          |
| Overall twist                                 | 4 wires, twisted                         |
| Length of twist, overall twist                | 48 mm                                    |
| Max. conductor resistance                     | approx. 58 MΩ/km                         |
| Insulation resistance                         | ≥ 1 GΩ*km                                |
| Nominal voltage, cable                        | ≤ 300 V                                  |
| Test voltage                                  | ≥ 3000 V                                 |
| Minimum bending radius, fixed installation    | 5 x D                                    |
| Minimum bending radius, flexible installation | 10 x D                                   |
| Smallest bending radius, fixed installation   | 24 mm                                    |
| Smallest bending radius, movable installation | 47 mm                                    |
| Max. bending cycles                           | 4000000                                  |
| Torsional frequency                           | Torsion cycles/min                       |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815 |



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| Other resistance                | Resistant to cold bending and cold impacts (according to DIN EN 60811-1-4 (-40 $^{\circ}$ C)) |
|---------------------------------|---|
| Special properties              | partly suitable for use with drag chain   |
| Ambient temperature (operation) | -40 °C 105 °C (cable, fixed installation)   |
|                                 | -25 °C 105 °C (Cable, flexible installation)  |

#### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection            | IP65                          |
|---------------------------------|-------------------------------|
|                                 | IP67                          |
|                                 | IP68                          |
|                                 | IP69K                         |
| Ambient temperature (operation) | -40 °C 105 °C (Plug / socket) |

### Standards and regulations

| Standard designation     | M12 connector        |
|--------------------------|----------------------|
| Standards/specifications | IEC 61076-2-101      |
| Standard designation     | Material conformance |
| Standards/specifications | FDA 21 CFR 177.2600  |

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