

1698985

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Sensor/actuator cable, 8-position, PUR, black, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m, spiraled

### Commercial data

| Item number                          | 1698985       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF18          |
| Product key                          | AF1ICA        |
| GTIN                                 | 4067923265103 |
| Weight per piece (including packing) | 346 g         |
| Weight per piece (excluding packing) | 346 g         |
| Country of origin                    | US            |



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### Technical data

#### Notes

| Irade | restriction |
|-------|-------------|

| CE note | The products are offered exclusively for export outside the EU |
|---------|--|
|         | and the European Economic Area.                                |

### Product properties

| Product type         | Sensor/actuator cable   |
|----------------------|---|
| Application          | Standard, U.S. cables   |
| Number of positions  | 8   |
| No. of cable outlets | 1   |
| Special properties   | Coil cords are rated to 500,000 cycles when extended no greater than three times the retracted length and not subject to any adverse or abusive conditions. |
| Shielded             | no  |
| Coding               | A   |

### Material specifications

| Flammability rating according to UL 94 | НВ  |
|--|---|
| Seal material                          | NBR   |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuZn  |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material for screw connection          | Zinc die-cast, nickel-plated                |
| Outer sheath, material                 | PUR   |

### Electrical properties

| Insulation resistance          | ≥ 10 MΩ |
|--------------------------------|---------|
| Nominal voltage U <sub>N</sub> | 30 V AC |
|                                | 30 V DC |
| Nominal current I <sub>N</sub> | 0.8 A   |

#### Mechanical properties

#### Mechanical data

| Insertion/withdrawal cycles | ≥ 100        |
|-----------------------------|--------------|
| Insertion/withdrawar cycles | <b>= 100</b> |

### Signaling

| Status display         | no |
|------------------------|----|
| Status display present | no |

#### Connection data



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#### Conductor connection

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

#### Connector

#### Connection 1

| Туре                | Plug straight M12 |
|---------------------|-------------------|
| Number of positions | 8                 |
| Coding type         | A                 |

#### Connection 2

| Туре                | Socket straight M12 |
|---------------------|---------------------|
| Number of positions | 8                   |
| Coding type         | A                   |

#### Cable/line

| Cable length 1.5 m |
|--------------------|
|--------------------|

#### PUR black [570]

#### Dimensional drawing



| Cable weight                                  | 42.8 kg/km   |
|---|--|
| Number of positions                           | 8  |
| Shielded                                      | no   |
| Cable type                                    | PUR black [570]                                    |
| Conductor structure signal line               | 28x 0.10 mm  |
| AWG signal line                               | 24   |
| Wire diameter incl. insulation                | 0.61 mm  |
| External cable diameter                       | 5.50 mm ±0.2 mm                                    |
| Outer sheath, material                        | PUR  |
| External sheath, color                        | black  |
| Conductor material                            | Tin-plated Cu litz wires                           |
| Material, filler                              | Cotton   |
| Material wire insulation                      | PVC  |
| Single wire, color                            | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist                                 | 8 wires, twisted                                   |
| Max. conductor resistance                     | max. 100.4 Ω/km (20 °C)                            |
| Nominal voltage, cable                        | 300 V  |
| Minimum bending radius, flexible installation | 6 x D  |



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| Smallest bending radius, movable installation | 33 mm                                     |
|---|---|
| Ambient temperature (operation)               | -15 °C 105 °C (cable, fixed installation) |

### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection  | IP65                                      |
|---|---|
|   | IP67                                      |
| Ambient temperature (operation) (male connector/female connector) | -25 °C 90 °C (Plug / socket)              |
| Ambient temperature (operation) (Cable, fixed installation)       | -15 °C 105 °C (cable, fixed installation) |

### Standards and regulations

| Standard designation     | M12 connector   |
|--------------------------|-----------------|
| Standards/specifications | IEC 61076-2-101 |

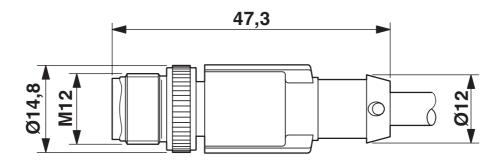


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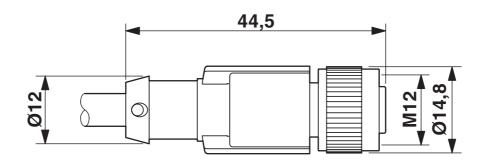
## **Drawings**

### Dimensional drawing

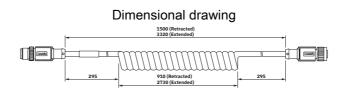


Plug, M12 x 1, straight, shielded

### Dimensional drawing



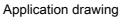
M12 x 1 socket, straight, shielded

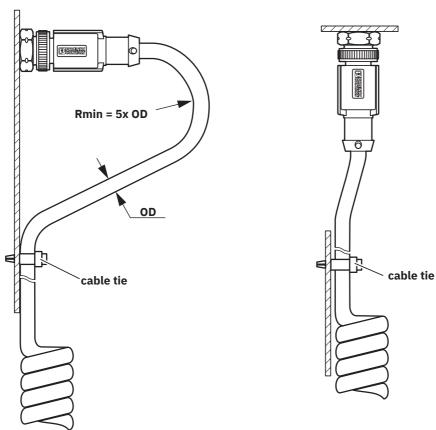




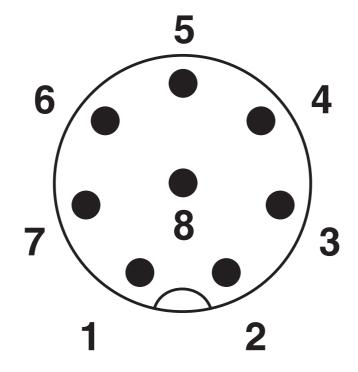
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Schematic diagram



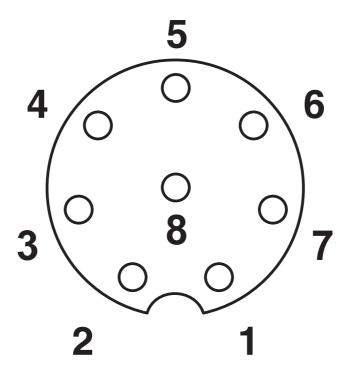
Pin assignment M12 plug, 8-pos., A-coded, view plug side



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Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Circuit diagram



Contact assignment of M8 plugs / M12 sockets



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## Classifications

#### **ECLASS**

| ECLASS-13.0 | 27060311 |
|-------------|----------|
| ECLASS-15.0 | 27060311 |



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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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