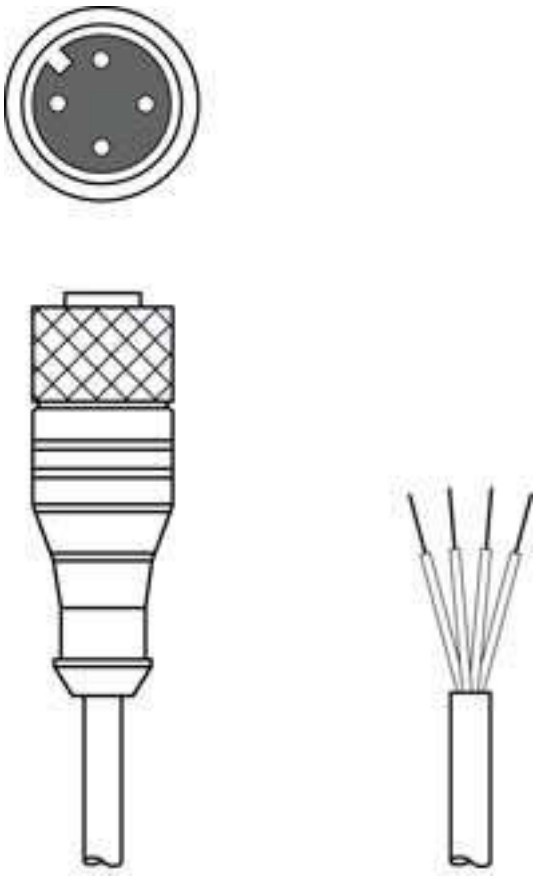
# Technical data sheet
# Connection cable
Part no.: 50146351
KD U-M12-4A-P1-200



For Illustration purposes only

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IP 67 IP 65 c UL us LISTED

# Technical data

## Basic data

| | |
|---|---|
| **Application** | Oil and lubricant resistant |

## Electrical data

### Performance data

| | |
|---|---|
| **Operating voltage** | Max. 250 V AC/DC |

## Connection

### Connection 1

| | |
|---|---|
| **Type of connection** | Connector |
| **Thread size** | M12 |
| **Type** | Female |
| **Handle body material** | PUR |
| **No. of pins** | 4 -pin |
| **Encoding** | A-coded |
| **Version** | Axial |
| **Connector, LED** | No |
| **Lock** | Screw fitting, nickel-plated diecast zinc, recommended torque 0.6 Nm, self-locking |

### Connection 2

| | |
|---|---|
| **Type of connection** | Open end |

### Cable properties

| | |
|---|---|
| **Number of conductors** | 4 Piece(s) |
| **Wire cross section** | 0.34 mm² |
| **AWG** | 22 |
| **Sheathing color** | Black |
| **Shielded** | No |
| **Silicone-free** | Yes |
| **Cable design** | Connection cable (open on one end) |
| **Cable diameter (external)** | 4.7 mm |
| **Cable length** | 20,000 mm |
| **Sheathing material** | PUR |
| **Wire insulation** | PP |
| **Suitability for drag chains** | Yes |
| **Traverse rate** | Max. 3.3 m/s with horiz. traverse path of 5m and and max. acceleration of 5m/s² |
| **Properties of the outer sheathing** | Free of CFC, cadmium, silicone, halogen and lead, matt, low-adhesion, abrasion-resistant, easily machine-processable |
| **Resistance of the outer sheathing** | Hydrolysis and microbe resistant, good oil, gasoline and chemical resistance in accordance with VDE 0472 part 803 test B, flame retardant in accordance with UL 1581 VW1 / CSA FT1 / IEC 60332-1, IEC 60332-2-2 |
| **Torsion suitability** | ±180° / m (max. 2 mio. cycles with 35 cycles / min) |

## Mechanical data

| | |
|---|---|
| **Width across flats** | 13 mm |
| **Net weight** | 403 g |
| **Bending cycles** | 5,000,000 Piece(s) |
| **Bending radius, flexible laying, min.** | Min. 10 x cable diameter |
| **Bending radius, stationary laying, min.** | Min. 5 x cable diameter |

## Operation and display

## Environmental data

| | |
|---|---|
| **Ambient temperature, operation, flexible use** | -25 ... 80 °C |
| **Ambient temperature, operation, stationary use** | -40 ... 80 °C |

## Certifications

| | |
|---|---|
| **Degree of protection** | IP 65 |
| | IP 67 |
| **Approvals** | c UL US |

## Classification

| | |
|---|---|
| **Customs tariff number** | 85444290 |
| **ECLASS 5.1.4** | 27279201 |
| **ECLASS 8.0** | 27279218 |
| **ECLASS 9.0** | 27060311 |
| **ECLASS 10.0** | 27060311 |
| **ECLASS 11.0** | 27060311 |
| **ECLASS 12.0** | 27060311 |
| **ECLASS 13.0** | 27060311 |
| **ECLASS 14.0** | 27060311 |
| **ECLASS 15.0** | 27060311 |
| **ETIM 5.0** | EC001855 |
| **ETIM 6.0** | EC001855 |
| **ETIM 7.0** | EC001855 |
| **ETIM 8.0** | EC001855 |
| **ETIM 9.0** | EC001855 |
| **ETIM 10.0** | EC001855 |

# Electrical connection

## Connection 1

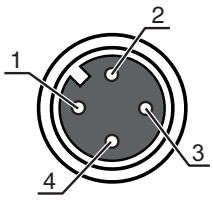
| | |
|---|---|
| **Type of connection** | Connector |
| **Thread size** | M12 |
| **Type** | Female |
| **Handle body material** | PUR |

# Electrical connection

## Connection 1

| | |
|---|---|
| **No. of pins** | 4 -pin |
| **Encoding** | A-coded |
| **Version** | Axial |
| **Connector, LED** | No |
| **Lock** | Screw fitting, nickel-plated diecast zinc, recommended torque 0.6 Nm, self-locking |

| Pin | Conductor color |
|---|---|
| **1** | Brown |
| **2** | White |
| **3** | Blue |
| **4** | Black |

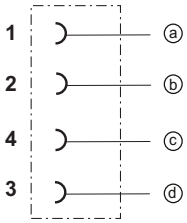



## Connection 2

| | |
|---|---|
| **Type of connection** | Open end |

# Circuit diagrams

## Wiring schematic




a Brown wire
b White wire
c Black wire
d Blue wire