

## Technical data sheet

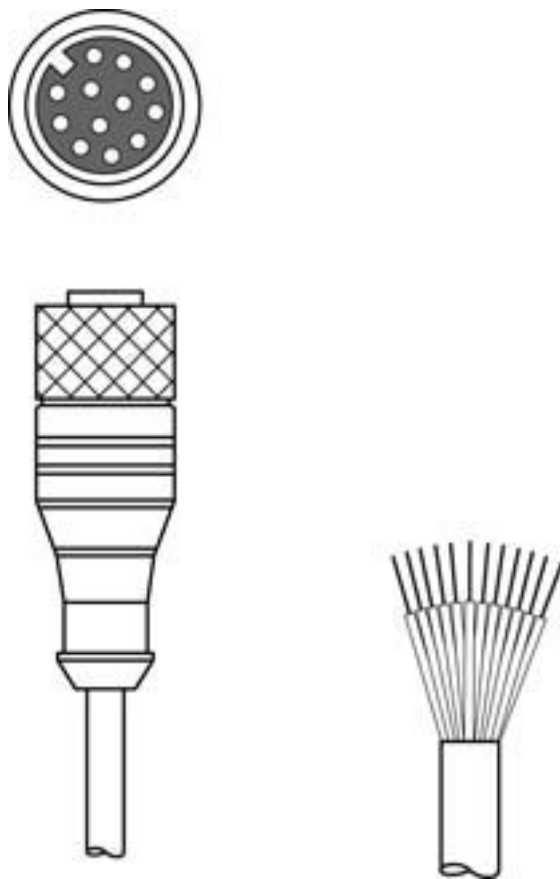
### Connection cable

Part no.: 50130281

KD S-M12-CA-P1-020

#### Contents

- Technical data
- Electrical connection
- Circuit diagrams



For illustration purposes only



## Technical data

### Basic data

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

### Electrical data

#### Performance data

|                   |                 |
|-------------------|-----------------|
| Operating voltage | Max. 30 V AC/DC |
|-------------------|-----------------|

### Connection

#### Connection 1

|                      |                                                                                    |
|----------------------|------------------------------------------------------------------------------------|
| Type of connection   | Connector                                                                          |
| Thread size          | M12                                                                                |
| Type                 | Female                                                                             |
| Handle body material | PUR                                                                                |
| No. of pins          | 12 -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              | 12 Piece(s)                                                                                                                                                                                                     |
| Wire cross section                | 0.14 mm <sup>2</sup>                                                                                                                                                                                            |
| AWG                               | 26                                                                                                                                                                                                              |
| Sheathing color                   | Black                                                                                                                                                                                                           |
| Shielded                          | Yes                                                                                                                                                                                                             |
| Silicone-free                     | Yes                                                                                                                                                                                                             |
| Cable design                      | Connection cable (open on one end)                                                                                                                                                                              |
| Cable diameter (external)         | 6.5 mm                                                                                                                                                                                                          |
| Cable length                      | 2,000 mm                                                                                                                                                                                                        |
| Sheathing material                | PUR                                                                                                                                                                                                             |
| Wire insulation                   | PP                                                                                                                                                                                                              |
| Traverse rate                     | Max. 3.3 m/s with horiz. traverse path of 5m and max. acceleration of 5m/s <sup>2</sup>                                                                                                                         |
| Suitability for drag chains       | Yes                                                                                                                                                                                                             |
| 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               | ±30° / m (max. 2 mio. cycles with 35 cycles / min)                                                                                                                                                              |

### Mechanical data

|                                         |                          |
|-----------------------------------------|--------------------------|
| Width across flats                      | 13 mm                    |
| 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 |

### 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

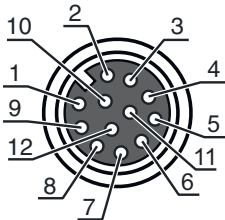
|                      |           |
|----------------------|-----------|
| Type of connection   | Connector |
| Thread size          | M12       |
| Type                 | Female    |
| Handle body material | PUR       |

Electrical connection

Connection 1

|                |                                                                                    |
|----------------|------------------------------------------------------------------------------------|
| No. of pins    | 12 -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   | Blue            |
| 3   | White           |
| 4   | Green           |
| 5   | Pink            |
| 6   | Yellow          |
| 7   | Black           |
| 8   | Gray            |
| 9   | Red             |
| 10  | Violet          |
| 11  | Gray / Pink     |
| 12  | Blue / Red      |



Connection 2

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

Circuit diagrams

Wiring schematic

