

## Overview

- distance measuring
- 0 ... 10 mm
- PNP / push-pull
- IO-Link
- connector M12
- 25 ... 75 °C
- IP 67



Picture similar



## Technical data

### General data

|                       |                                                        |
|-----------------------|--------------------------------------------------------|
| Mounting type         | Flush                                                  |
| Special type          | Linearized                                             |
| Type                  | Distance measuring                                     |
| Measuring distance Sd | 0 ... 10 mm                                            |
| Resolution            | < 0,005 mm (High Accuracy Mode)                        |
| Repeat accuracy       | < 0,015 mm                                             |
| Adjustment            | IO-Link                                                |
| Teach                 | Single point, Two point, Window                        |
| Linearity error       | ± 40 µm (S = 0 ... 8 mm)<br>± 160 µm (S = 0 ... 10 mm) |
| Temperature drift     | ± 3 % (Full Scale)                                     |
| Hysteresis            | < 99 % (adjustable)                                    |
| Power on indication   | LED green                                              |
| Output indicator      | LED yellow                                             |

### Electrical data

|                                        |                             |
|----------------------------------------|-----------------------------|
| Response time (factory characteristic) | < 1 ms                      |
| Switching frequency                    | < 800 Hz                    |
| Voltage supply range +Vs               | 8 ... 36 VDC                |
| Current consumption max. (no load)     | 15 mA                       |
| Output circuit                         | PNP<br>Push-pull<br>IO-Link |
| Output current                         | < 100 mA                    |

### Electrical data

|                             |     |
|-----------------------------|-----|
| Short circuit protection    | Yes |
| Reverse polarity protection | Yes |

### Communication interface

|                        |                                                                                                                                                                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface              | IO-Link V1.1                                                                                                                                                                                                                      |
| Baud rate              | 230,4 kBaud (COM 3)                                                                                                                                                                                                               |
| Cycle time             | ≥ 0,6 ms                                                                                                                                                                                                                          |
| Process data length    | 32 Bit                                                                                                                                                                                                                            |
| Process data structure | Bit 0 = SSC1 (distance)<br>Bit 1 = SSC2 (distance)<br>Bit 3 = alarm<br>Bit 4 = SSC3 (frequency)<br>Bit 5 = SSC4 (counter)<br>Bit 16-31 = 16 Bit measurement                                                                       |
| IO-Link port type      | Class A                                                                                                                                                                                                                           |
| Adjustable parameters  | Measuring range<br>Switching point<br>Switching hysteresis<br>Measured value filtering<br>Time filters<br>LED status indicators<br>Output logic<br>Output circuit<br>Counter<br>Deactivate the sensor element<br>Find Me function |

## Technical data

### Communication interface

|                 |                    |
|-----------------|--------------------|
| Additional data | Distance           |
|                 | Frequency          |
|                 | Operating cycles   |
|                 | Operating hours    |
|                 | Boot cycles        |
|                 | Operating voltage  |
|                 | Device temperature |
|                 | Histograms         |

### Mechanical data

|      |                      |
|------|----------------------|
| Type | Cylindrical threaded |
|------|----------------------|

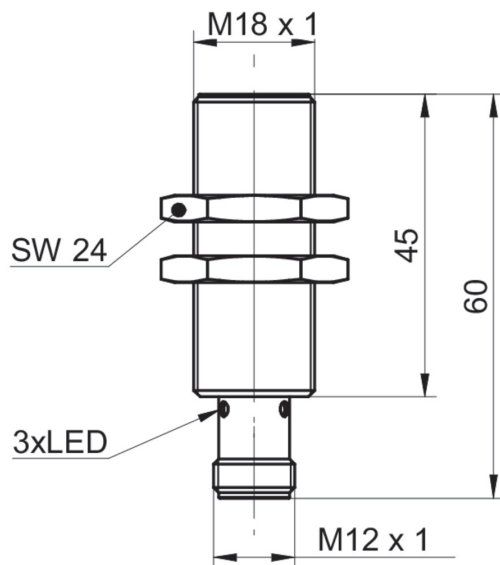
### Mechanical data

|                        |                     |
|------------------------|---------------------|
| Housing material       | Brass nickel plated |
| Dimension              | 18 mm               |
| Housing length         | 60 mm               |
| Connection types       | Connector M12       |
| Tightening torque max. | 40 Nm               |

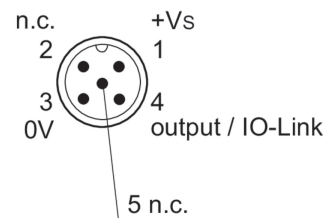
### Ambient conditions

|                       |                |
|-----------------------|----------------|
| Operating temperature | -25 ... +75 °C |
| Protection class      | IP 67          |

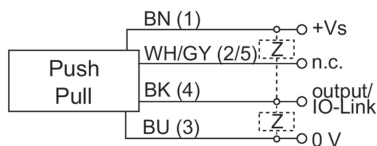
## Dimension drawing



## Pin assignment



## Connection diagram



## Resolution

