

**Overview**

- 20 ... 1500 mm
- voltage output
- qTeach, line-Teach, IO-Link
- connector M12 5 pin
- -25 ... 65 °C
- IP 69



Picture similar



**Technical data**

**General data**

|                                |   |
|--------------------------------|---|
| Scanning range Sd              | 20 ... 1500 mm                          |
| Scanning range close limit Sdc | 20 ... 1500 mm                          |
| Scanning range far limit Sde   | 20 ... 1500 mm                          |
| Version                        | IO-Link dual channel Multiplex version  |
| Hysteresis typ.                | 4 % Sde                                 |
| Repeat accuracy                | 0.5 mm                                  |
| Resolution                     | < 0.3 mm                                |
| Response time ton              | < 70 ms                                 |
| Release time toff              | < 70 ms                                 |
| Temperature drift              | > 50 mm < 2 % of distance to target Sde |
| Power-up drift                 | Compensated after 15 min.               |
| Sonic frequency                | 200 kHz                                 |
| Adjustment                     | qTeach, line-Teach, IO-Link             |
| Light indicator                | LED yellow                              |
| Power on indication            | LED green                               |
| Alignment measuring axis       | < 2°                                    |

**Electrical data**

|                          |                         |
|--------------------------|-------------------------|
| Voltage supply range +Vs | 12 ... 30 VDC           |
| Current consumption typ. | 35 mA                   |
| Output circuit           | Voltage output          |
| Output signal            | 0 ... 10 V / 10 ... 0 V |
| Output current           | 100 mA                  |

**Electrical data**

|                             |                |
|-----------------------------|----------------|
| Voltage drop Vd             | <3.5 VDC       |
| Residual ripple             | < 10 % Vs      |
| Short circuit protection    | Yes            |
| Reverse polarity protection | Yes, Vs to GND |

**Communication interface**

|                        |   |
|------------------------|---|
| Interface              | IO-Link V1.1  |
| Baud rate              | 38,4 kBaud (COM 2)  |
| Cycle time             | ≥ 12 ms   |
| Process data length    | 48 Bit  |
| Process data structure | Bit 0 = SSC1 (distance)<br>Bit 1 = SSC2 (distance)<br>Bit 2 = quality<br>Bit 3 = alarm<br>Bit 5 = SSC4 (counter)<br>Bit 8-15 = scale factor<br>Bit 16-47 = 32 Bit measurement |

|                   |         |
|-------------------|---------|
| IO-Link port type | Class A |
|-------------------|---------|

|                 |  |
|-----------------|--|
| Additional data | Distance<br>Excess gain<br>Operating cycles<br>Operating hours<br>Boot cycles<br>Operating voltage<br>Device temperature<br>Histograms |
|-----------------|--|

**Technical data**

**Communication interface**

|                       |                               |
|-----------------------|-------------------------------|
| Adjustable parameters | Switching point               |
|                       | Switching hysteresis          |
|                       | Measured value filtering      |
|                       | Time filters                  |
|                       | LED status indicators         |
|                       | Output logic                  |
|                       | Output circuit                |
|                       | Counter                       |
|                       | Beam forming                  |
|                       | Analog output characteristic  |
|                       | Function of pin 5             |
|                       | Deactivate the sensor element |
|                       | Find Me function              |

**Mechanical data**

|                     |                              |
|---------------------|------------------------------|
| Housing material    | Stainless steel (V2A) / TR90 |
| Coating active face | PEEK                         |
| Width / diameter    | 18 mm                        |
| Height / length     | 64 mm                        |
| Connection types    | Connector M12 5 pin          |

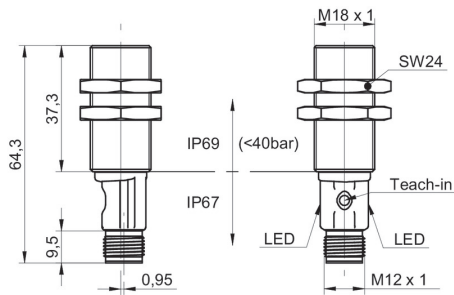
**Ambient conditions**

|                               |                |
|-------------------------------|----------------|
| Operating temperature         | -25 ... +65 °C |
| Storage temperature           | -40 ... +75 °C |
| Protection class              | IP 69          |
| Protection class (connection) | IP 67          |

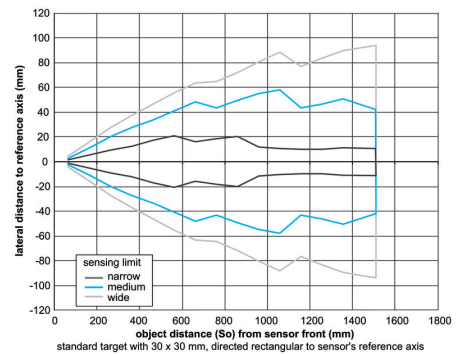
**Mechanical data**

|        |                      |
|--------|----------------------|
| Design | Cylindrical threaded |
|--------|----------------------|

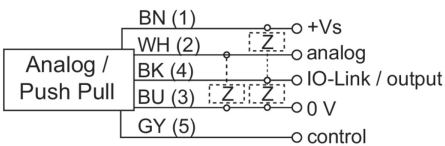
**Dimension drawing**



**Typical sonic cone profile**



**Connection diagram**



**Pin assignment**

