

**overview**

- distance measuring
- 0 ... 3 mm
- push-pull / IO-Link
- IO-Link
- connector M8
- -25 ... 75 °C
- IP 67



**technical data**

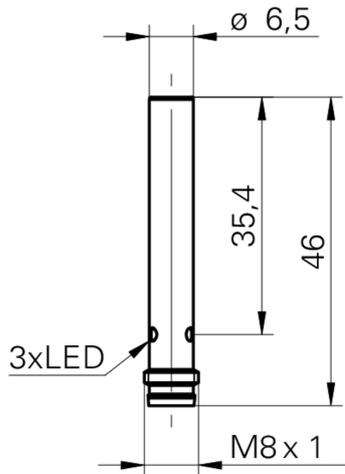
| general data                           |                                                                          | communications interface |                                                                                                                                                                                                                                   |
|----------------------------------------|--------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| mounting type                          | flush                                                                    | interface                | IO-Link V1.1                                                                                                                                                                                                                      |
| special type                           | linearized                                                               | baud rate                | 230,4 kBaud (COM 3)                                                                                                                                                                                                               |
| type                                   | distance measuring                                                       | cycle time               | ≥ 0,6 ms                                                                                                                                                                                                                          |
| measuring distance Sd                  | 0 ... 3 mm                                                               | process data length      | 32 Bit                                                                                                                                                                                                                            |
| resolution                             | < 0,005 mm (High Accuracy Mode)                                          | 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                                                                       |
| repeat accuracy                        | < 0,01 mm                                                                | IO-Link port type        | Class A                                                                                                                                                                                                                           |
| adjustment                             | IO-Link                                                                  | 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 |
| teach                                  | Single point, Two point, Window                                          | additional data          | distance<br>frequency<br>operating cycles<br>operating hours<br>boot cycles<br>operating voltage<br>device temperature<br>histograms                                                                                              |
| linearity error                        | ± 10 µm (S = 0 ... 2 mm)<br>± 90 µm (S = 0 ... 3 mm)                     |                          |                                                                                                                                                                                                                                   |
| temperature drift                      | ± 2 % (Full Scale; S = 0 ... 2 mm)<br>± 3 % (Full Scale; S = 0 ... 3 mm) |                          |                                                                                                                                                                                                                                   |
| hysteresis                             | < 99 % (adjustable)                                                      |                          |                                                                                                                                                                                                                                   |
| power on indication                    | LED green                                                                |                          |                                                                                                                                                                                                                                   |
| output indicator                       | LED orange                                                               |                          |                                                                                                                                                                                                                                   |
| electrical data                        |                                                                          |                          |                                                                                                                                                                                                                                   |
| response time (factory characteristic) | < 1 ms                                                                   |                          |                                                                                                                                                                                                                                   |
| switching frequency                    | < 1,25 kHz                                                               |                          |                                                                                                                                                                                                                                   |
| voltage supply range +Vs               | 8 ... 36 VDC                                                             |                          |                                                                                                                                                                                                                                   |
| current consumption max. (no load)     | 15 mA                                                                    |                          |                                                                                                                                                                                                                                   |
| output circuit                         | push-pull / IO-Link                                                      |                          |                                                                                                                                                                                                                                   |
| output current                         | < 100 mA                                                                 |                          |                                                                                                                                                                                                                                   |
| short circuit protection               | yes                                                                      |                          |                                                                                                                                                                                                                                   |
| reverse polarity protection            | yes                                                                      |                          |                                                                                                                                                                                                                                   |

**technical data**

**mechanical data**

|                  |                    |
|------------------|--------------------|
| type             | cylindrical smooth |
| housing material | stainless steel    |
| dimension        | 6,5 mm             |
| housing length   | 46 mm              |

**dimension drawing**



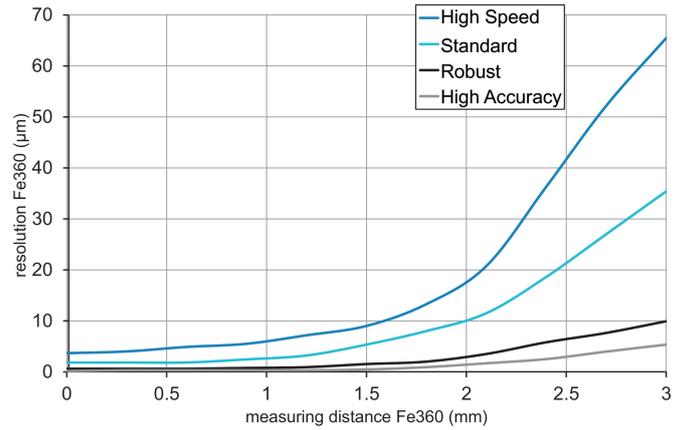
**mechanical data**

|                  |              |
|------------------|--------------|
| connection types | connector M8 |
|------------------|--------------|

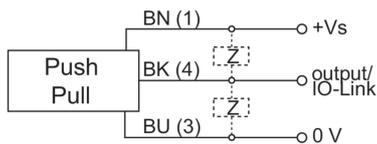
**ambient conditions**

|                       |                |
|-----------------------|----------------|
| operating temperature | -25 ... +75 °C |
| protection class      | IP 67          |

**resolution**



**connection diagram**



**pin assignment**

