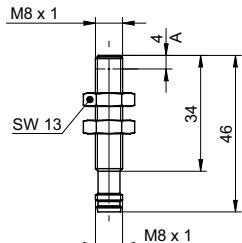


Inductive distance measuring sensors

IR08.D03L-11193947

dimension drawing



general data

| | |
|-----------------------|--|
| mounting type | flush |
| special type | linearized |
| type | distance measuring |
| measuring distance Sd | 0 ... 3 mm |
| resolution | < 0,005 mm (High Accuracy Mode) |
| repeat accuracy | < 0,01 mm |
| adjustment | IO-Link |
| teach | Single point, Two point, Window |
| linearity error | ± 10 µm (S = 0 ... 2 mm) ± 90 µm (S = 0 ... 3 mm) |
| temperature drift | ± 2 % (Full Scale; S = 0 ... 2 mm) ± 3 % (Full Scale; S = 0 ... 3 mm) |
| hysteresis | 0 ... 99 % (adjustable) |
| power on indication | LED green |
| output indicator | LED orange |

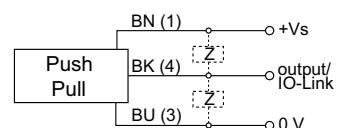
photo



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 |

connection diagram



IO-Link



mechanical data

| | |
|------------------------|----------------------|
| type | cylindrical threaded |
| housing material | stainless steel |
| dimension | 8 mm |
| housing length | 46 mm |
| connection types | connector M8 |
| tightening torque max. | 10 Nm (A: 7 Nm) |

ambient conditions

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

Inductive distance measuring sensors

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communications interface

| | |
|------------------------|---|
| interface | IO-Link V1.1 |
| baud rate | 230,4 kBaud (COM 3) |
| cycle time | $\geq 0,6$ ms |
| process data length | 32 Bit |
| process data structure | Bit 0 = SSC1 (distance) Bit 1 = SSC2 (distance) Bit 3 = alarm Bit 4 = SSC3 (frequency) Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement |
| IO-Link port type | Class A |
| adjustable parameters | measuring range switching point switching hysteresis measured value filtering time filters LED status indicators output logic output circuit counter deactivate the sensor element Find Me function |
| additional data | distance frequency operating cycles operating hours boot cycles operating voltage device temperature histograms |

resolution

