

Overview

- Most reliable object detection through barrier principle
- Flexible parameterization and additional diagnostic data thanks to IO-Link
- High performance in compact housing



Technical data

General data

Scanning range Sd	0 ... 500 mm
Reflector position Sde	40 ... 500 mm
Adjusting range reflector (operating range)	± 2,5 % Sde
Adjusting range reflector (limit range)	± 5 % Sde
Version	IO-Link
Repeat accuracy	< 0.5 mm
Response time ton/toff min	< 16 ms
Response time ton/toff standard	< 40 ms
Temperature drift	> 50 mm < 2 % of distance to target Sde < 50 mm ± 1 mm
Power-up drift	Compensated after 15 min.
Sonic frequency	290 kHz
Adjustment	line-Teach, IO-Link
Alignment aid	Light indicator flashing
Light indicator	LED yellow
Power on indication	LED green
Alignment measuring axis	< 2°
Resolution	< 0.3 mm

Electrical data

Voltage supply range +Vs	12 ... 30 VDC
Current consumption typ.	35 mA
Output circuit	Push-pull
Output current	100 mA
Voltage drop Vd	<3 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	≥ 8 ms
Process data length	48 Bit
Process data structure	Bit 0 = SSC1 (distance) Bit 1 = SSC2 (distance) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 8-15 = scale factor Bit 16-47 = 32 Bit measurement
IO-Link port type	Class A
Additional data	Distance Excess gain Operating cycles Operating hours Boot cycles Operating voltage Device temperature Histograms
Adjustable parameters	Time filters LED status indicators Output logic Output circuit Counter Beam forming Deactivate the sensor element Find Me function

Mechanical data

Design	Cylindrical threaded
Housing material	Brass nickel plated
Width / diameter	12 mm
Height / length	50 mm
Connection types	Connector M12 5 pin

Technical data

Mechanical data

Tightening torque max. 15 Nm (Front: 10 Nm)

Ambient conditions

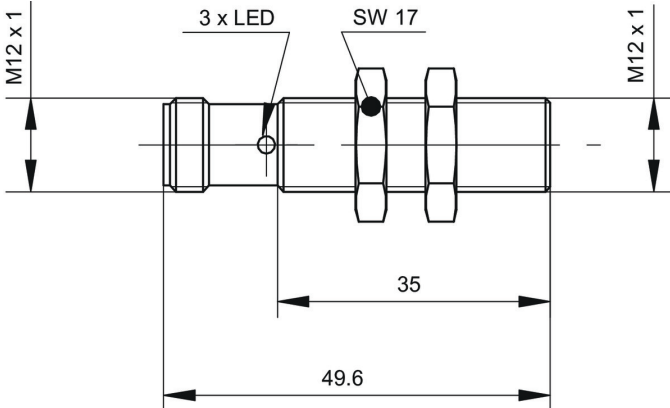
Operating temperature -25 ... +65 °C

Ambient conditions

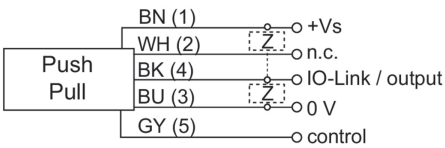
Storage temperature -40 ... +75 °C

Protection class IP 67

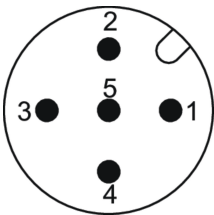
Dimension drawing



Connection diagram



Pin assignment



Typical sonic cone profile

