

Overview

- Ultra-flat design for installation in confined spaces
- Large measuring range 0 ... 12 mm
- Robust plastic housing with metal sleeves
- Additional mounting material for easy installation on tubes
- IO-Link: Application-specific setting and extended diagnostic Data



Picture similar



Technical data

General data

Mounting type	Non-flush
Special type	Linearized
Type	Distance measuring
Measuring distance Sd	0 ... 12 mm
Resolution	< 0.12 mm (High Accuracy Mode)
Repeat accuracy	0.12 mm (High Accuracy Mode)
Adjustment	IO-Link
Teach	Single point, Two point, Window
Linearity error	± 150 µm (S = 0 ... 9 mm) ± 400 µm (S = 0 ... 12 mm)
Temperature drift	± 4 % (Full Scale)
Hysteresis	< 99 % (adjustable)
Power on indication	LED green
Output indicator	LED yellow
Correction factor typ.	Mild steel 100 %, stainless steel 70 %, aluminum 50 %

Electrical data

Response time (factory characteristic)	< 1.8 ms (High Speed Mode) < 3 ms (Standard Mode) < 25 ms (Robust Mode) < 50 ms (High Accuracy Mode)
Switching frequency	280 Hz (High Speed Mode) 80 Hz (Standard Mode) 20 Hz (Robust Mode) 10 Hz (High Accuracy Mode)
Voltage supply range +Vs	6 ... 36 VDC
Current consumption max. (no load)	18 mA

Electrical data

Output circuit	PNP Push-pull IO-Link
Output current	100 mA
Voltage drop Vd	<2 VDC
Short circuit protection	Yes
Reverse polarity protection	Yes
Baud rate	230.4 kBaud (COM 3)

Mechanical data

Design	Rectangular
Material (sensing face)	PA
Housing material	PA 12
Dimension	25 mm
Housing length	52.4 mm
Connection types	Cable, L=2 m
Weight	36 g
Cable characteristics	PUR 3 x 0.14 mm ²

Ambient conditions

Operating temperature	-25 ... +75 °C
Storage temperature range	-40 ... +75 °C
Protection class	IP 67
Vibration resistance	IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis
Shock resistance	IEC 60068-2-27:2009 100 g / 6 ms, 10 jolts per axis and direction

Communication interface

Interface	IO-Link V1.1
Baud rate	230.4 kBaud (COM 3)
Cycle time	≥ 0.6 ms

Technical data

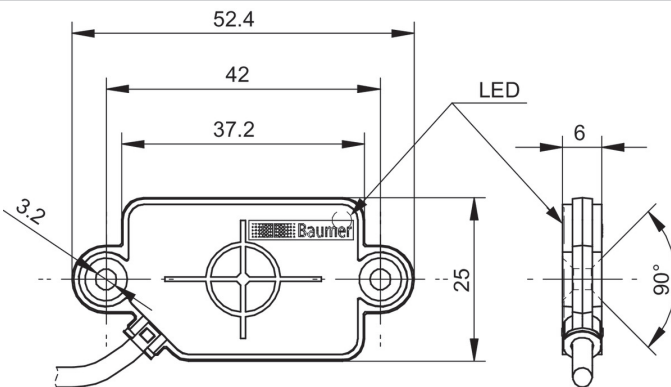
Communication interface

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

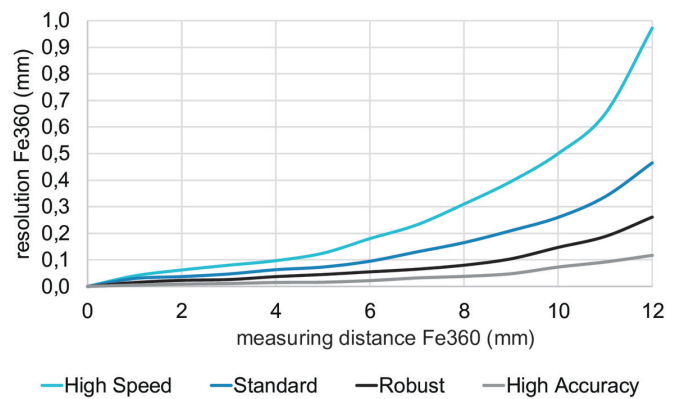
Communication interface

Additional data	Distance Frequency Operating cycles Operating hours Boot cycles Operating voltage Device temperature Histograms
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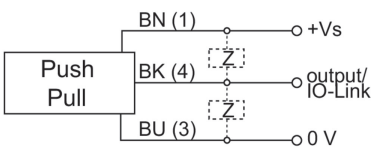
Dimension drawing



Resolution



Connection diagram

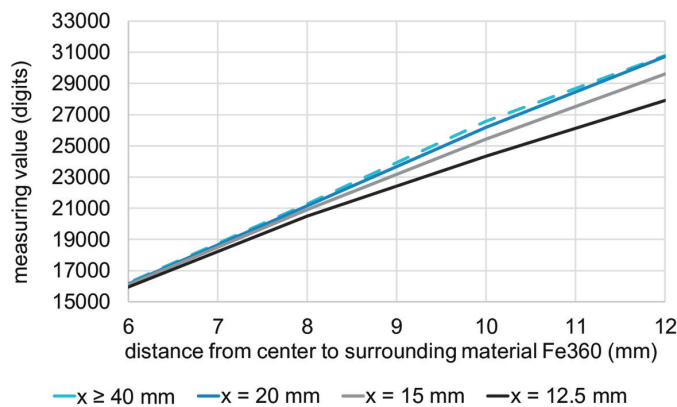
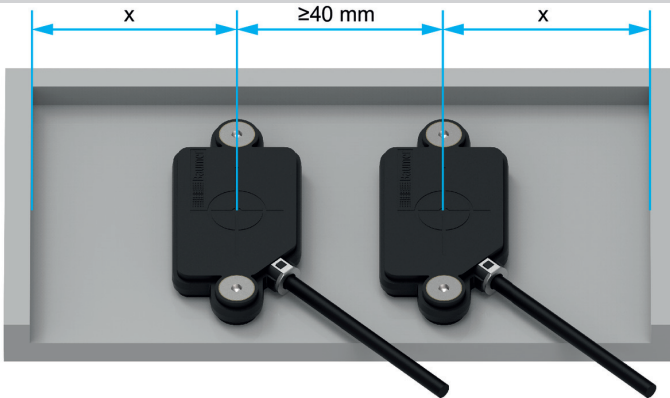


Correction factors for different mounting situation (approx.)



Mounting material:	Correction factor
Non-metal:	100 %
Construction steel:	110 %
Stainless steel:	95 %
Aluminium:	90 %

Mounting instructions



Accessories

Mounting accessories

11053652	HC25-1
11078172	BX 20-360-1
11078173	BX 20-1200-1
11089348	BX 20-2000-1
11089349	BX 20-4000-1