![Baumer - Passion for Sensors]

Inductive distance sensors

IF200.D10L-Q41.DPMO.71N/A014

Article number: 11241894

Overview

- Large measuring range from 0...10 mm
- IO-Link switching output and additional analog output
- Simple commissioning due to linearized output signal
- Application-specific setting by qTeach or Teach via IO-Link
- Extended IO-Link diagnostic data and histograms
- Robust plastic housing usable up to +75°C

Picture similar

CE c(UL)us IO-Link

Technical data

General data

Mounting type	Non-flush
Special type	Linearized
Particular characteristics	IO-Link dual channel
Type	Distance measuring
Measuring distance Sd	0 … 10 mm
Resolution	< 0.020 mm (High Accuracy Mode)
Repeat accuracy	0.020 mm
Adjustment	qTeach IO-Link
Teach	Single point, Two point, Window
Linearity error	± 40 µm (S = 0 ... 8 mm) ± 60 µm (S = 0 ... 10 mm)
Temperature drift	± 2 % (Full Scale)
Hysteresis	< 99 % (adjustable)
Power on indication	LED green
Output indicator	LED yellow

Electrical data

Response time (factory characteristic)	< 0.6 ms (High Speed Mode) < 0.9 ms (Standard Mode) < 2.3 ms (Robust Mode) < 10.5 ms (High Accuracy Mode)
Switching frequency	800 Hz (High Speed Mode) 500 Hz (Standard Mode) 150 Hz (Robust Mode) 30 Hz (High Accuracy Mode)
Voltage supply range +Vs	12 … 30 VDC
Current consumption max. (no load)	25 mA
Output circuit	PNP Push-pull Analog 0 ... 10 VDC IO-Link

Electrical data

Load resistance	> 10 kOhm
Output current	100 mA
Voltage drop Vd	<2.5 VDC
Short circuit protection	Yes
Reverse polarity protection	Yes

Mechanical data

Design	Rectangular
Material (sensing face)	SAN
Housing material	SAN
Dimension	20 mm
Housing length	41 mm
Connection types	Connector M8 4 pin

Ambient conditions

Operating temperature	-25 … +75 °C
Protection class	IP 67

Communication interface

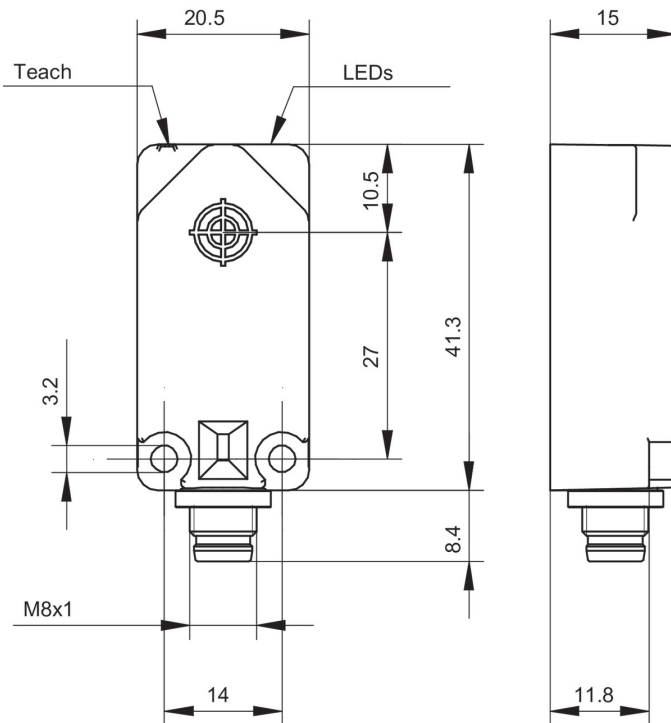|	
Interface	IO-Link V1.1
Baud rate	230,4 kBaud (COM 3)
Cycle time	≥ 0.6 ms
Process data length	32 Bit
Process data structure	Bit 0 = SSC1 (distance) Bit 1 = SSC2 (distance) Bit 3 = alarm Bit 4 = SSC3 (frequency) Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
IO-Link port type	Class A

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Communication interface

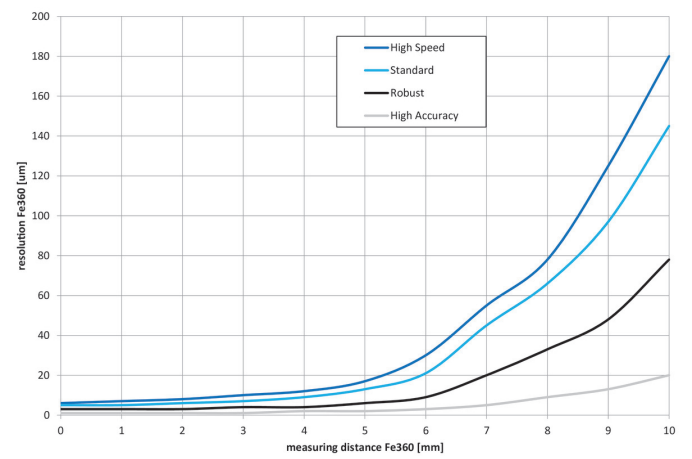| Adjustable parameters	Measuring range
	Switching point
	Switching hysteresis
	Measured value filtering
	Time filters
	LED status indicators
	Output logic
	Output circuit
	Counter
	Deactivate the sensor element
	Find Me function

Communication interface

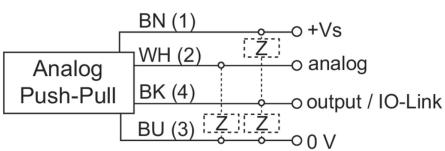| Additional data	Distance
	Frequency
	Operating cycles
	Operating hours
	Boot cycles
	Operating voltage
	Device temperature
	Histograms

Dimension drawing

Resolution

Connection diagram

BN (1) — +Vs
WH (2) — analog
BK (4) — output / IO-Link
BU (3) — 0 V

Analog Push-Pull

Pin assignment

analog
2
1
+Vs

output / IO-Link
4
3
0 V