

Preliminary

## Overview

- Inductive distance sensor with IO-Link
- Robust full metal housing made of stainless steel V4A
- Extended measuring range from 0...7 mm
- Additional diagnostic data such as temperature and switching cycles



Picture similar



## Technical data

### General data

Mounting type	Non-flush
Special type	Linearized
Measuring distance Sd	0 ... 7 mm
Resolution	10 µm 0...6 mm (100 Hz) 4 µm 0...6 mm (10 Hz) 15 µm 6...7 mm (100 Hz) 2 ... 3 µm 4 ... 5 mm (20 - 30 °C and 10 Hz)
Linearity error	± 20 µm (S = 0 ... 5 mm) ± 40 µm (S = 0 ... 6 mm) ± 60 µm (S = 0 ... 7 mm)
Temperature drift	± 2 % (S = 0 ... 6 mm) ± 3 % (S = 0 ... 7 mm) < 0.5 % (S = 0 ... 7 mm; 20 ... 30 °C)

### Electrical data

Response time (factory characteristic)	< 50 ms
Switching frequency	10 ... 100 Hz
Voltage supply range +Vs	18 ... 28 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

### Mechanical data

Type	Cylindrical threaded
Material (sensing face)	Stainless steel 1.4404 (V4A)
Housing material	Stainless steel 1.4404 (V4A)
Dimension	18 mm
Housing length	60 mm
Connection types	Connector M12 5 pin
Tightening torque max.	55 Nm

### Ambient conditions

Operating temperature	-25 ... +75 °C -25 ... +90 °C (reduced features)
Storage temperature range	-40 ... +100 °C
Protection class	IP 68

### 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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### Technical data

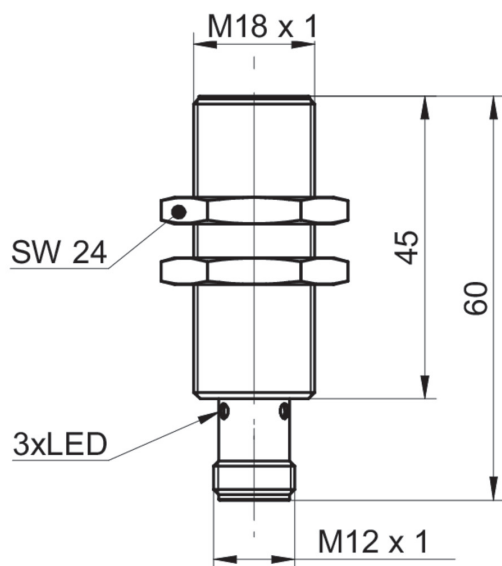
#### Communication interface

Adjustable parameters	Measuring range
	Switching point
	Switching hysteresis
	Measured value filtering
	Time filters
	Output logic
	Output circuit
	Counter
	Deactivate the sensor element

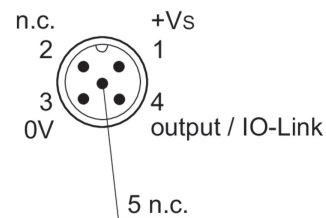
#### Communication interface

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

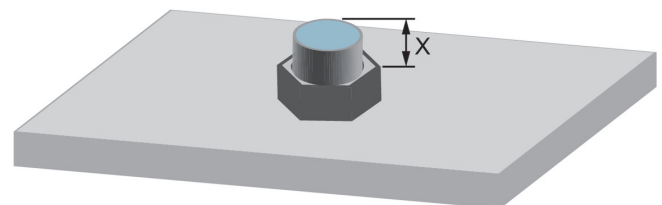
### Dimension drawing



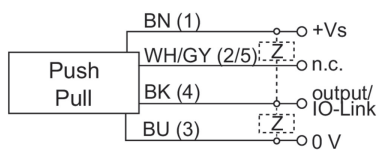
### Pin assignment



### Resolution

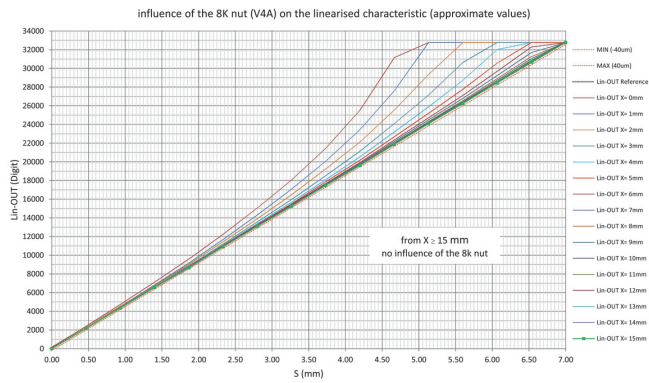


### Connection diagram



## Preliminary

## Resolution



## Mounting instructions

