Inductive distance measuring sensors

IR06.D03L-11193946

dimension drawing

ø 6,5
35,4
46
M8 x 1
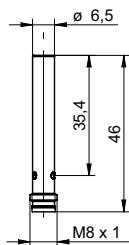
general data

|	
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

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
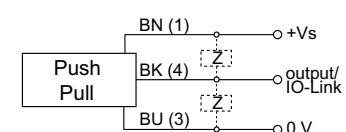
mechanical data

type	cylindrical smooth
housing material	stainless steel
dimension	6,5 mm
housing length	46 mm
connection types	connector M8

ambient conditions

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

photo

connection diagram

BN (1) +Vs
Push Pull
BK (4) output/ IO-Link
BU (3) 0 V

IO-Link

CE

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Baumer

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communications 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
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