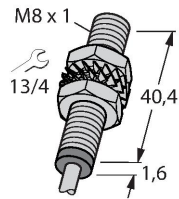


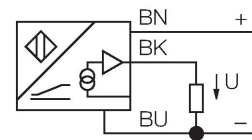
BI1.5-EG08-LU Inductive Sensor – With Analog Output



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- 3-wire, 15...30 VDC
- Analog output
- 0...10 V
- Cable connection

Wiring diagram



Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.

Technical data

Type	BI1.5-EG08-LU
ID	1533003
General data	
Measuring range	0.25...1.25 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 1 \%$ of measuring range A - B
	0.5 %, after warm-up 0.5 h
Reproducibility	$\leq 10 \mu\text{m}$
	$\leq 5 \mu\text{m}$, after a warm-up time of 0.5 h
Linearity deviation	$\leq 3 \%$
Temperature drift	$\leq \pm 0.06 \%/K$
Electrical data	
Operating voltage U_B	15...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
No-load current	$\leq 8 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Output function	3-wire, Analog output
Voltage output	0...10 V
Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$

Technical data

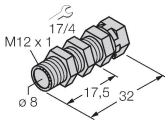
Measuring sequence frequency	200 Hz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, PA12-GF30
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C

Mounting instructions

Mounting instructions/Description	
	Distance D16 mm
	Distance W4.5 mm
	Distance T3 x B
	Distance S12 mm
	Distance G9 mm
	Diameter active area BØ 8 mm

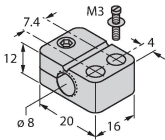
Accessories

QM-08	6945100
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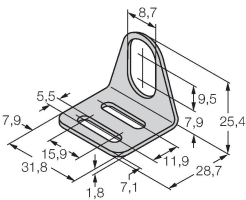
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

BST-08B	6947210
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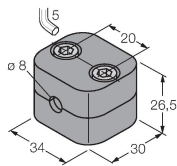
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW08	6945008
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08	6901322
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80

69479

Mounting clamp for smooth barrel sensors; mounting block material:
Anodized aluminum

