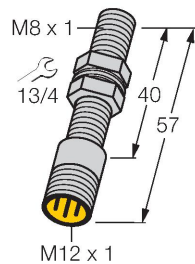


BI1.5-EG08-LU-H1341

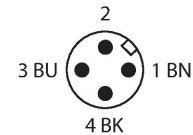
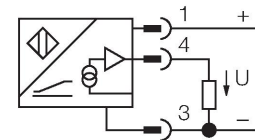
Inductive Sensor – With Analog Output



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- 3-wire, 15...30 VDC
- Analog output
- 0...10 V
- M12 x 1 male connector

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.

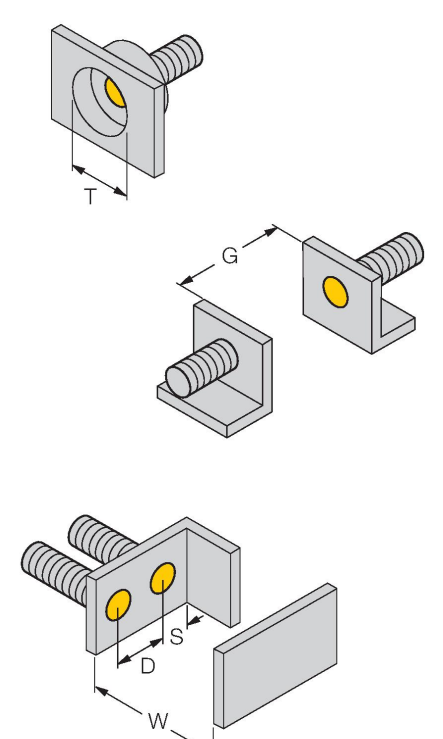
Technical data

Type	BI1.5-EG08-LU-H1341
ID	1533004
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

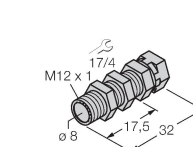
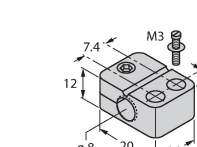
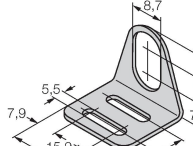
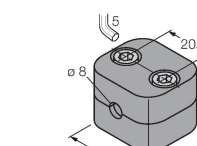
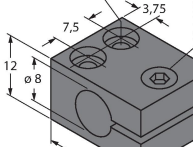
Measuring sequence frequency	200 Hz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	57 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 x 1
Environmental conditions	
Ambient temperature	-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

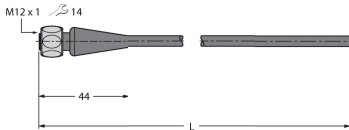
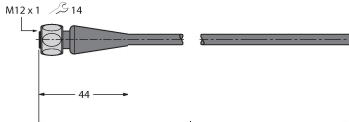
Mounting instructions/Description	
	Distance D
	16 mm
	Distance W
	4.5 mm
	Distance T
	3 x B
	Distance S
	12 mm
	Distance G
	9 mm
	Diameter active area B
	Ø 8 mm

BI1.5-EG08-LU-H1341| 02/21/2025 13-10 | technical changes reserved

Accessories

QM-08  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.	6945100 BST-08B  Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6
MW08  Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	6945008 BSS-08  Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene
MBS80  Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	6901322

Wiring accessories

Dimension drawing	Type	ID	
	RKH4-2/TFE	6935482	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray; temperature range: -25...+80 °C
	RKH4-2/TFG	6934384	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40...+105 °C

Dimension drawing

Type

ID

RKC4.301T-0.15-RSC4.334T/TXL 6631382

Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology

