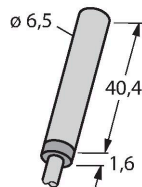


BI1.5-EH6.5-LU

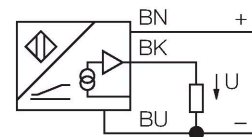
Inductive Sensor – With Analog Output



Features

- Smooth barrel, Ø 6.5 mm
- 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

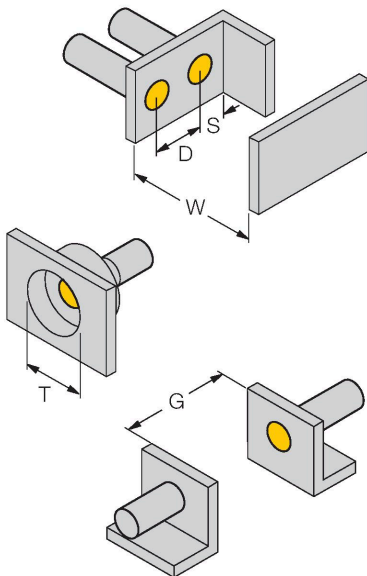
Type	BI1.5-EH6.5-LU
ID	1533002
General data	
Measuring range	0.25...1.25 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 1\%$ of measuring range A - B
	0.5 %, after warm-up 0.5 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	15...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
No-load current	8 mA
Isolation test voltage	$\leq 0.5\ \text{kV}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	3-wire, Analog output
Voltage output	0...10 V
Load resistance voltage output	$\geq 4.7\ \text{k}\Omega$
Measuring sequence frequency	200 Hz
Mechanical data	
Design	Smooth barrel, 6,5 mm

Technical data

Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF20
End cap	Plastic, PP
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 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 6.5 mm

Accessories

Dimension drawing	Type	ID	
	IM43-13-SR	7540041	<p>Trip amplifier; 1-channel; input 0/4... 20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further Limit value indicators are described in our "Interface Technology" catalog.</p>