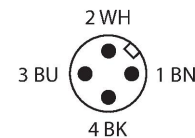
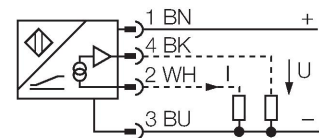


BI1.5-EH04-0.3-M12-SIU-H1141 Inductive Sensor – With Analog Output

Features

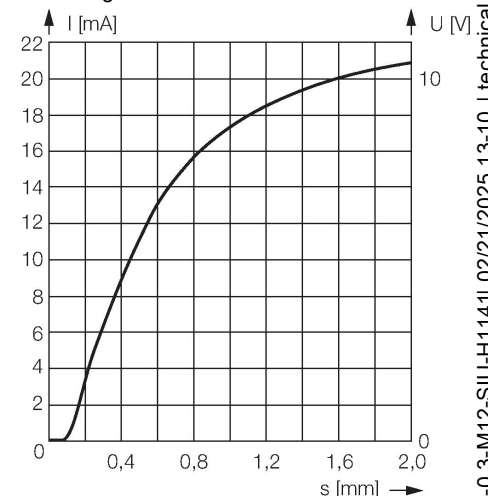
- Smooth barrel, Ø 4 mm
- Stainless steel, 1.4427
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Cable with connector, M12 × 1

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.



Technical data

Type	BI1.5-EH04-0.3-M12-SIU-H1141
ID	1533001
General data	
Measuring range	0.1...1.5 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	$\leq 14 \mu\text{m}$
	$\leq 7 \mu\text{m}$, after a warm-up time of 0.5 h
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	4-wire, Analog output, non-linear
Voltage output	0...10 V
Current output	0...20 mA
Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$

Technical data

Load resistance current output	≤ 0.4 kΩ
Measuring sequence frequency	200 Hz
Mechanical data	
Design	Smooth barrel, 4 mm
Dimensions	30 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2.4 mm, shielded, PVC, 0.3 m
Core cross-section	1 x 0.08 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
	8 mm
	Distance W
	4.5 mm
	Distance T
	3 x B
	Distance S
	6 mm
	Distance G
	9 mm
	Diameter active area B
	Ø 4 mm

Accessories

MBS40

69477

Fixing clamp; material mounting
block: Anodized aluminium

