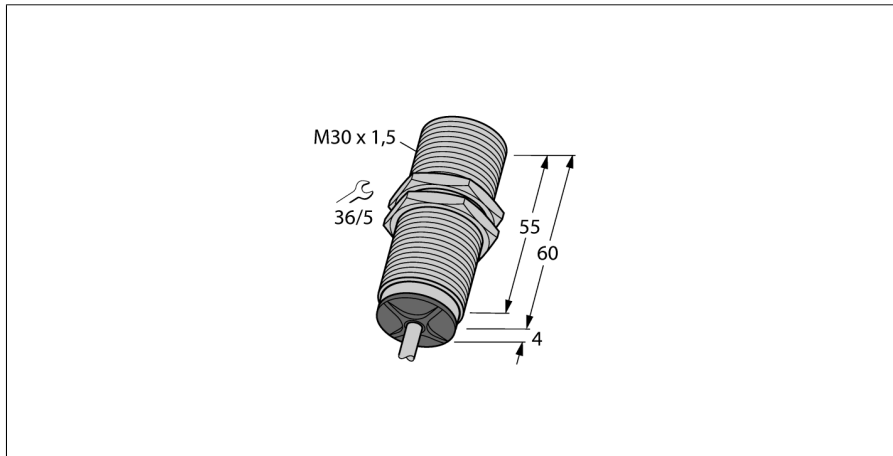
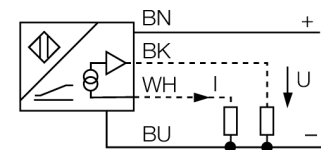


**Inductive sensor
With analog output
BI10-M30-LIU**



- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Cable connection

Wiring Diagram



Type designation	BI10-M30-LIU
Ident no.	15355

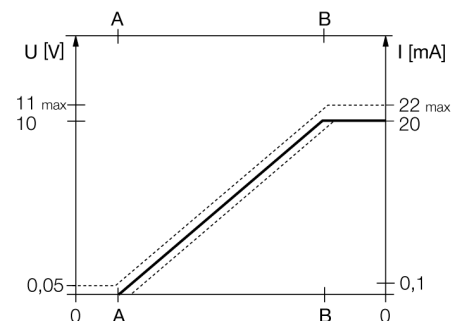
Measuring range [A...B]	3...8 mm
Mounting conditions	flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range A - B
	≤ 0.5 %, after warm-up 0.5 h
Reproducibility	≤ 50 µm
	≤ 25 µm, after a warm-up time of 0.5 h
Linearity deviation	≤ 3 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C

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.

Operating voltage	15... 30VDC
Residual ripple	≤ 10 % U _{is}
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	no/ complete
Output function	4-wire, Analog output
Voltage output	0...10VDC
Current output	0...20mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ
Measuring sequence frequency	140 Hz

Measuring Range

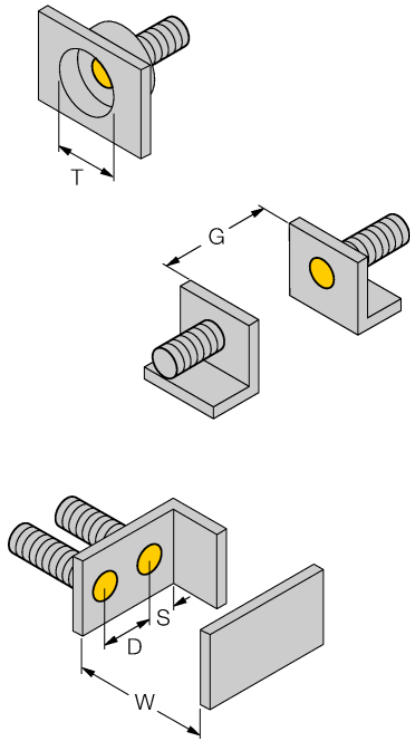


Construction	Threaded barrel, M30 x 1.5
Dimensions	64 mm
Housing material	Metal, CuZn, chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque housing nut	75 Nm
Electrical connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2m
Cable cross section	4 x 0.34 mm ²
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

**Inductive sensor
With analog output
BI10-M30-LIU**

Distance D	60 mm
Distance W	27 mm
Distance T	3 x B
Distance S	45 mm
Distance G	54 mm

Diameter of the active area B \varnothing 30 mm

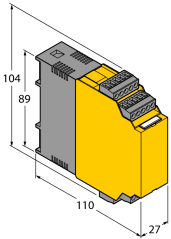
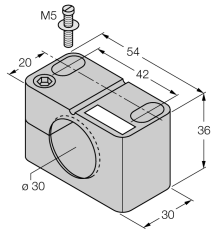
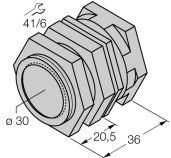
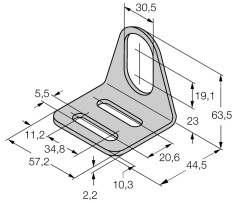


**Inductive sensor
With analog output
BI10-M30-LIU**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	
IM43-13-SR	7540041	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.	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-30	6945103	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-30	6945005	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	