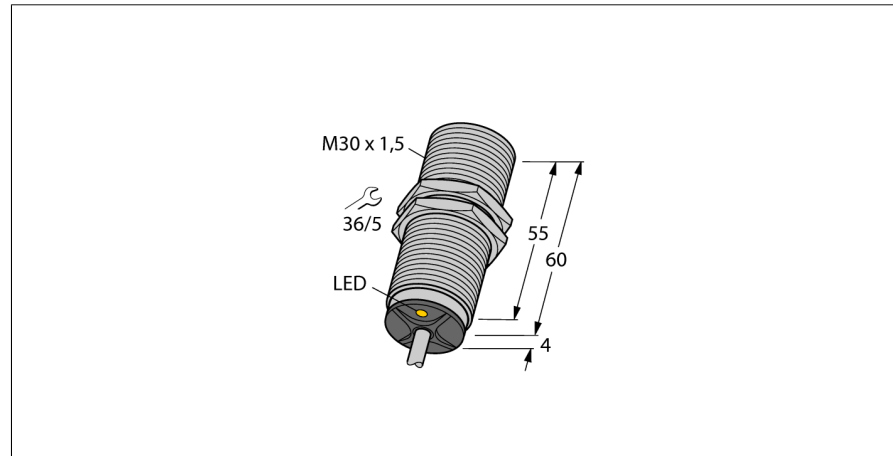
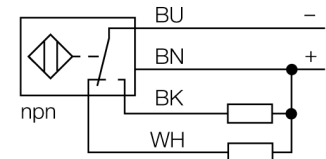


Inductive sensor
BI10-EM30-VN4X 7M



- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4301
- 4-wire DC, 10...65 VDC
- Changeover contact, NPN output
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

We offer special versions for temperatures of -60 °C up to +250 °C.

Type code	BI10-EM30-VN4X 7M
Ident no.	1561135
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, NPN
Switching frequency	0.5 kHz
Design	threaded barrel, M30 x 1.5
Dimensions	64 mm
Housing material	stainless steel, V2A (1.4301)
Material active area	Plastic, PA
End cap	Plastic, EPTR
Max. tightening torque housing nut	75 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 7 m
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	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

**Inductive sensor
BI10-EM30-VN4X 7M**

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B \varnothing 30 mm

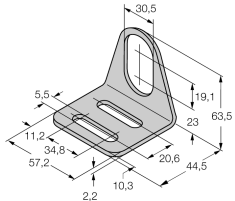
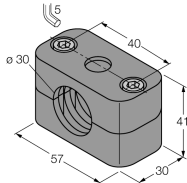


**Inductive sensor
BI10-EM30-VN4X 7M**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
MW-30	6945005	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a stainless steel mounting bracket (MW-30) for threaded barrel devices. The drawing shows a side view with the following dimensions: 5.5, 11.2, 34.8, 57.2, 2.2, 10.3, 20.6, 44.5, 30.5, 19.1, 23, and 63.5.</p>
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket (BSS-30) for smooth and threaded barrel devices. The drawing shows a perspective view with the following dimensions: 5, 40, 41, 30, 57, and 30. There are also two circular features on the top surface, each with a diameter of 30.</p>