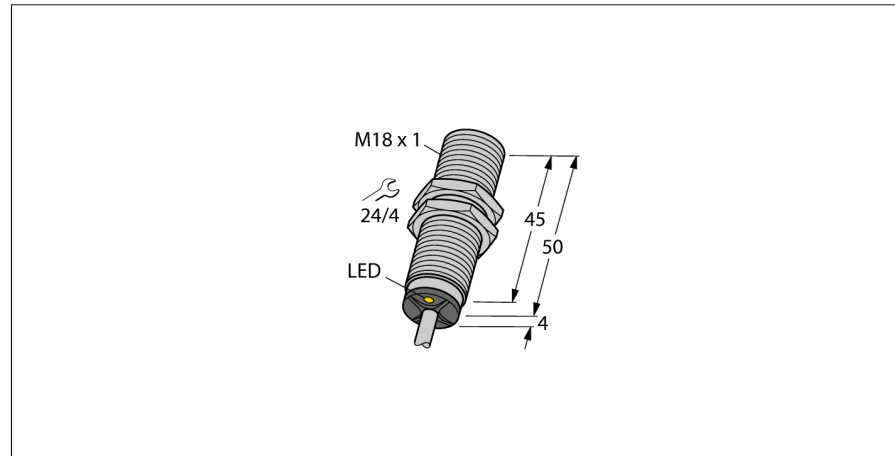
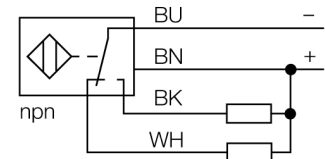


**Inductive sensor
BI5-EM18-VN4X 7M**



- Threaded barrel, M18 x 1
- 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	BI5-EM18-VN4X 7M
Ident no.	1561131
Rated operating distance Sn	5 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, M18 x 1
Dimensions	54 mm
Housing material	stainless steel, V2A (1.4305)
Material active area	Plastic, PA
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 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
BI5-EM18-VN4X 7M**

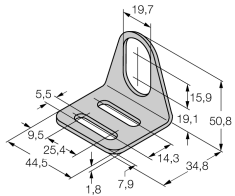
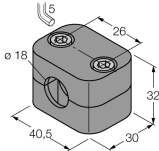
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
<hr/>	
Diameter of the active area B	Ø 18 mm



**Inductive sensor
BI5-EM18-VN4X 7M**



Accessories

Type code	Ident no.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a stainless steel mounting bracket for threaded barrel devices. The drawing shows a side view with the following dimensions: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (height of the main body), 34.8 (width of the main body), 14.3 (width of the mounting hole), 7.9 (width of the mounting hole), 1.8 (thickness of the main body), 44.5 (total width), 25.4 (width of the mounting hole), 9.5 (width of the mounting hole), and 5.5 (width of the top flange).</p>
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket for smooth and threaded barrel devices. The drawing shows a side view with the following dimensions: 5 (height of the top flange), 26 (width of the top flange), 32 (total height), 30 (width of the main body), 40.5 (total width), and 18 (diameter of the mounting hole).</p>