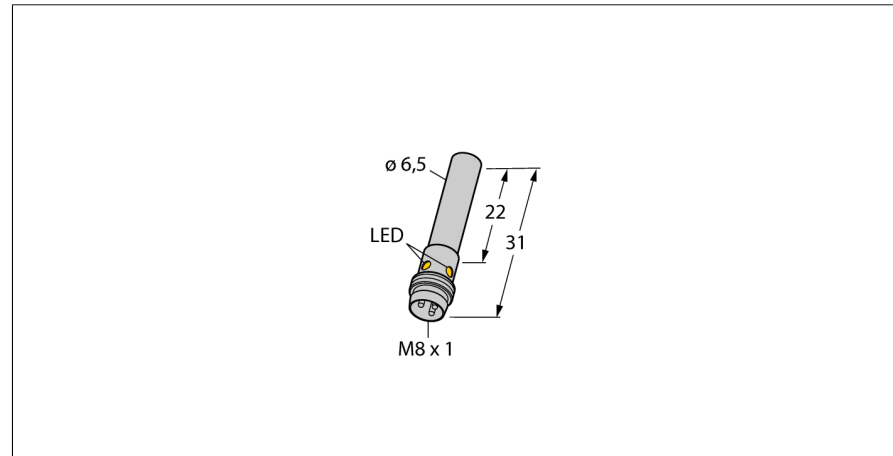
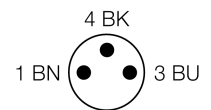
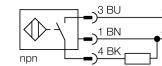


**Inductive sensor
with extended switching distance
BI2-EH6,5K-AN6X-V1131**



- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4404
- Large detection range
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Male M8 x 1

Wiring diagram



Type code	BI2-EH6,5K-AN6X-V1131
Ident no.	4610120
Rated operating distance Sn	2 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...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 150 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 _e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	3 kHz
Design	smooth barrel, 6.5 mm
Dimensions	31 mm
Housing material	metal, V4A (1.4404)
Material active area	Plastic, PA
Connection	male, M8 x 1
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

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.

**Inductive sensor
with extended switching distance
BI2-EH6,5K-AN6X-V1131**

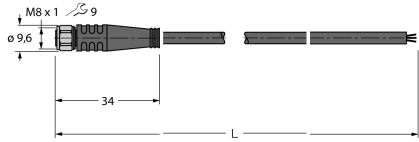
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B \varnothing 6.5 mm



**Inductive sensor
with extended switching distance
BI2-EH6,5K-AN6X-V1131**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
PKG3M-2/TEL	6625385	Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	 <p>The drawing shows a side view of the cable assembly. On the left, there is an M8 x 1 female connector with a 9mm thread length. A dimension line indicates a distance of 34mm from the start of the cable sheath to the end of the connector. The total length of the cable is labeled as L.</p>