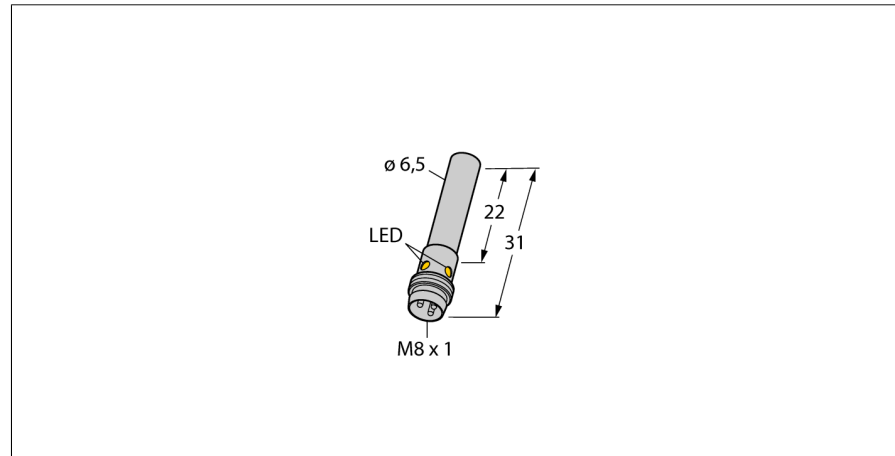
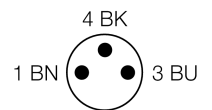
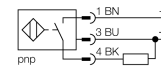


**Inductive sensor  
with extended switching distance  
BI2-EH6,5K-AP6X-V1131**



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

**Wiring diagram**



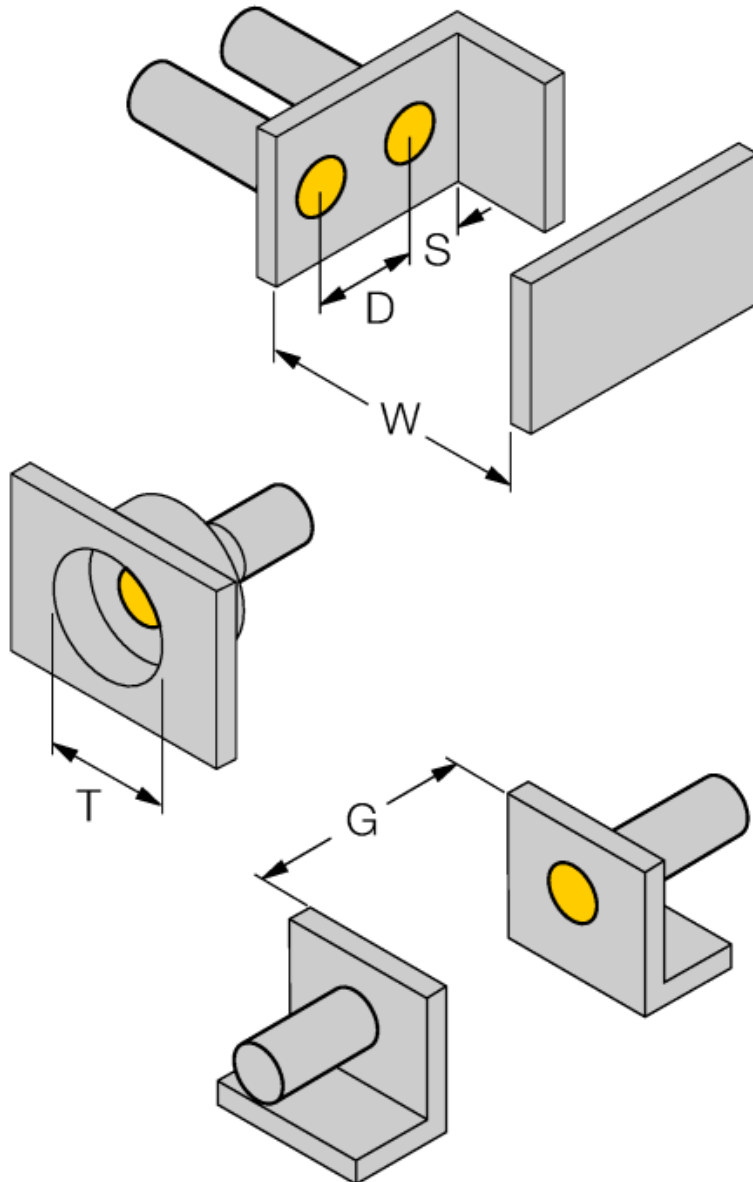
<b>Type code</b>	BI2-EH6,5K-AP6X-V1131
Ident no.	4610020
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
<b>Design</b>	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
<b>Switching state</b>	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.

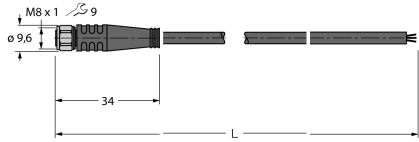
**Inductive sensor  
with extended switching distance  
BI2-EH6,5K-AP6X-V1131**

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
<hr/>	
Diameter of the active area B	Ø 6.5 mm



**Inductive sensor  
with extended switching distance  
BI2-EH6,5K-AP6X-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 <a href="http://www.turck.com">www.turck.com</a>	 <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. The main cable has a diameter of 9.6mm. A dimension line indicates a length of 34mm from the connector to the start of the main cable. The total length of the assembly is labeled as L.</p>