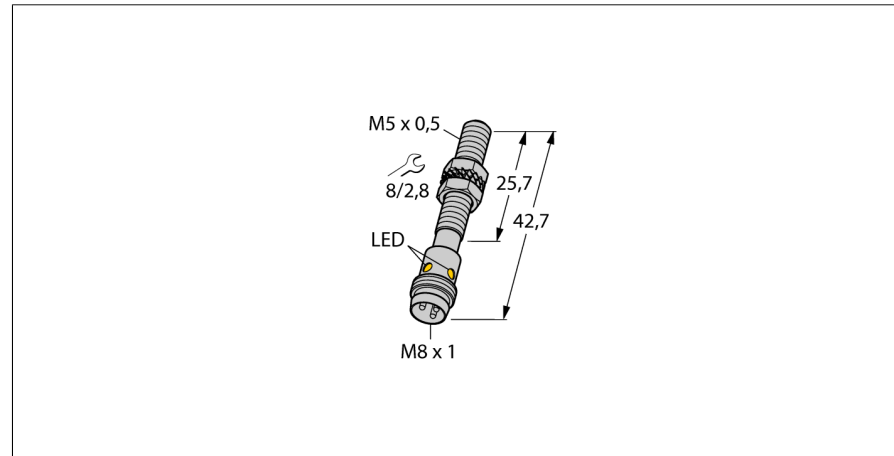
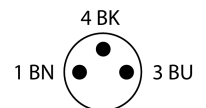
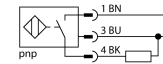


**Inductive sensor**  
**BI1-EG05-AP6X-V1331**



- M5 × 0.5 threaded barrel
- Stainless steel, 1.4427 SO
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 × 1 male connector

**Wiring Diagram**



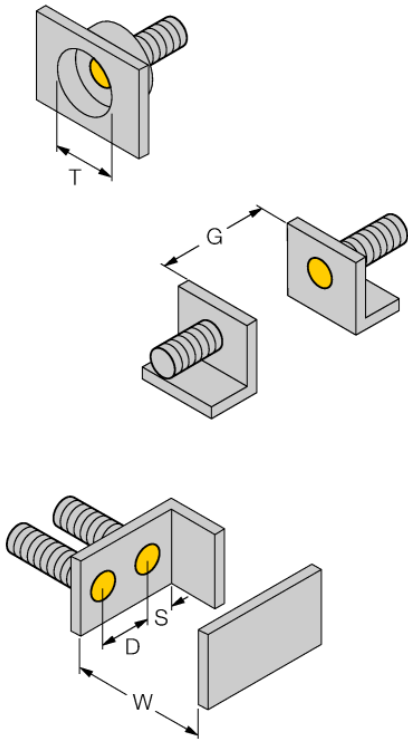
<b>Type designation</b>	BI1-EG05-AP6X-V1331
Ident no.	4608640
<b>Rated switching distance Sn</b>	1 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Reverse polarity protection	Complete
Switching frequency	3 kHz
<b>Design</b>	Threaded barrel, M5 × 0.5
Dimensions	42.7 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12
Max. tightening torque housing nut	5 Nm
Electrical connection	Connector, M8 × 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**  
**BI1-EG05-AP6X-V1331**

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 active area B	Ø 5 mm



# Inductive sensor BI1-EG05-AP6X-V1331

**TURCK**

Industrial  
Automation

## Wiring accessories

Type code	Ident no.	Description	
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>	