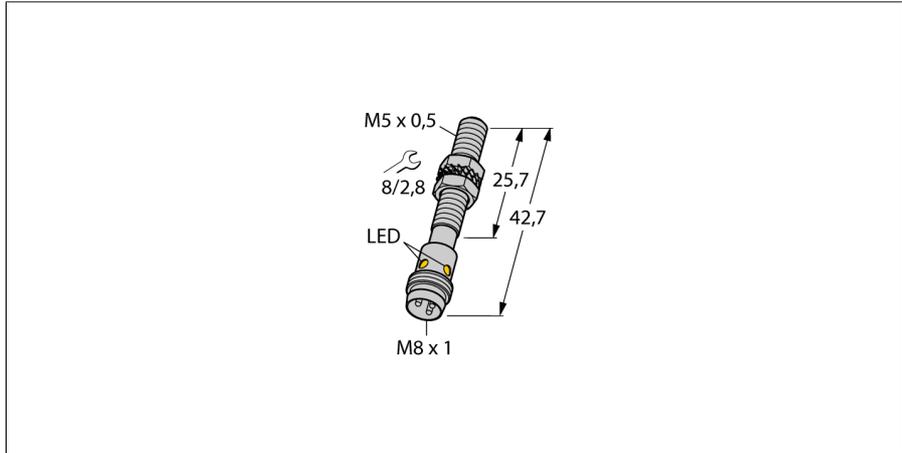
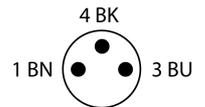
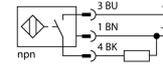


Inductive sensor BI1-EG05-AN6X-V1331



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

Wiring Diagram



Type designation	BI1-EG05-AN6X-V1331
Ident-No.	4608740
Rated switching distance S_n	1 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test 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	3-wire, NO contact, NPN
Switching frequency	3 kHz
Design	Threaded barrel, M5 × 0.5
Dimensions	42.7 mm
Housing material	Stainless steel, 1.4427 SO
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
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.

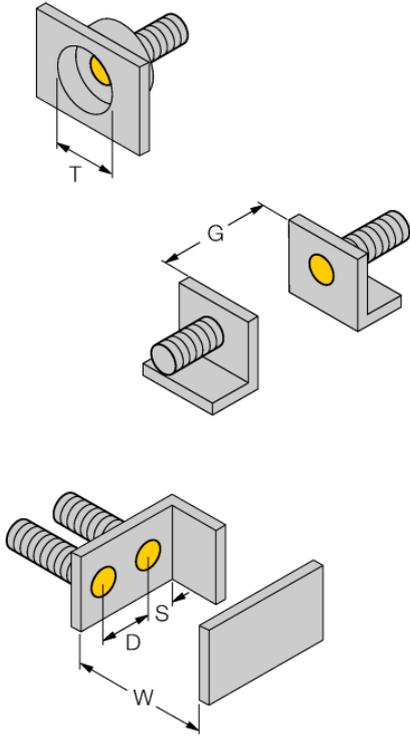
Inductive sensor BI1-EG05-AN6X-V1331

TURCK
works

Industrial
Automation

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 active area B \varnothing 5 mm



Inductive sensor
BI1-EG05-AN6X-V1331



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 www.turck.com	A technical drawing of a 3-pin connection cable. The drawing shows a stainless steel coupling nut on the left, which is 34 mm long. The cable has a diameter of 9.6 mm. The cable length is labeled as 'L'. The cable ends in a 3-pin connector that is 50 mm long. The drawing also shows a detail of the coupling nut with an M8 x 1 thread and a 9 mm diameter.