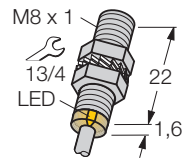


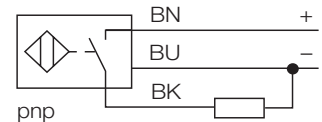
Inductive sensor

Bi1,5-EG08K-AP6X



- threaded barrel, M8 x 1
- stainless steel, 1.4404
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

Wiring diagram



Functional principle

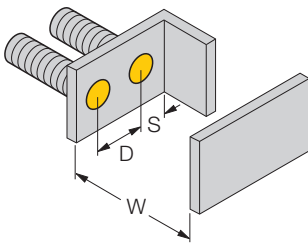
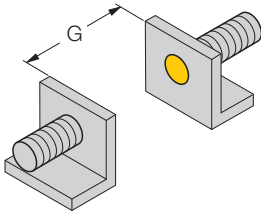
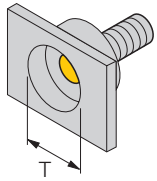
Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi1,5-EG08K-AP6X
Ident-No.	4669040
Rated operating distance Sn	1.5 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Temperature drift	$\leq \pm 10\%$
Hysteresis	3... 15 %
Ambient temperature	-25... + 70 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10\% U_{ss}$
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, normally open, pnp
Switching frequency	≤ 3 kHz
Housing	threaded barrel, M8 x 1
Dimensions	23.6 mm
Housing material	metal, AISI 316L
Material active face	plastic, plastic, PA12-GF20
End cap	plastic, PP
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 4, LifYY-11Y, PUR, 2 m
Cable cross section:	3 x 0.25mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	LED yellow

Inductive sensor
Bi1,5-EG08K-AP6X

Mounting instructions	minimum distances
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 8 mm

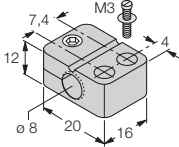

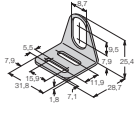



Inductive sensor Bi1,5-EG08K-AP6X

TURCK

Industrial
Automation

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-08B	6947210	fixing clamp with dead-stop; material: PA6	 <p>Technical drawing of a rectangular fixing clamp. Dimensions: 7.4 (width), 12 (height), 20 (length), 16 (depth), and 0.8 (radius). It features an M3 screw on top and a circular opening on the side.</p>
QM-08	6945100	quick-mount fixing clamp with dead-stop; material: chrome-plated brass male thread M12 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	 <p>Technical drawing of a quick-mount fixing clamp. Dimensions: 8.8 (width), 17.5 (length), and 32 (height).</p>
MW-08	6945008	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a U-shaped mounting bracket. Dimensions: 9.5 (width), 7.9 (height), 17.9 (length), 25.4 (total length), 1.8 (thickness), 7.1 (radius), and 26.7 (total width).</p>
BSS-08	6901322	fixing clamp; material: polypropylene	 <p>Technical drawing of a cylindrical fixing clamp. Dimensions: 11.5 (width), 12 (height), 20.5 (length), and 12 (radius).</p>