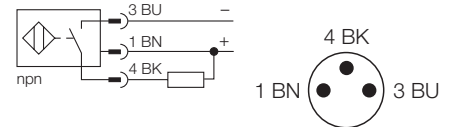


Inductive sensor with extended switching distance Bi2-EG08K-AN6X-V1131

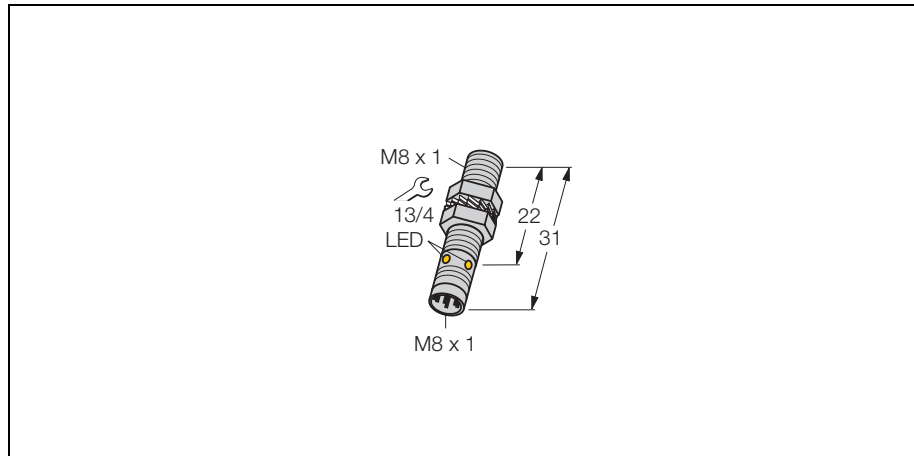
- threaded barrel, M8 x 1
- stainless steel, 1.4404
- large detection range
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M8 x 1

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. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

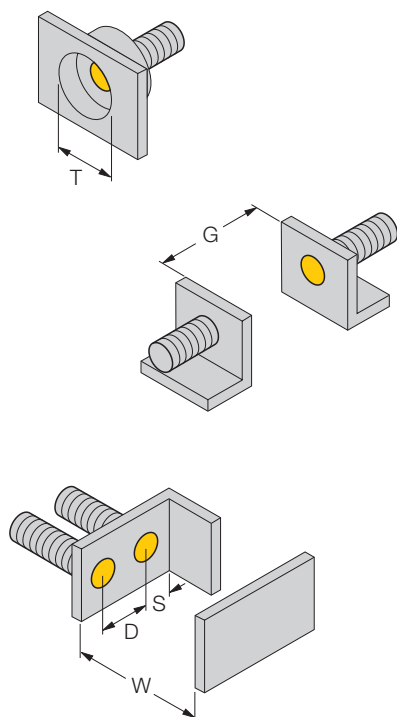


Type	Bi2-EG08K-AN6X-V1131
Ident-No.	4669550
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n) \text{ mm}$
Correction factors	$St37 = 1, V2A \sim 0,7, Ms \sim 0,4, Al \sim 0,3$
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3... 15 %
Ambient temperature	-25... + 70 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10 \% U_{ss}$
DC rated operational current	$\leq 150 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0,1 \text{ mA}$
Rated insulation voltage	$\leq 0,5 \text{ kV}$
Short-circuit protection	yes / cyclic
Voltage drop at I_e	$\leq 1,8 \text{ V}$
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, npn
Switching frequency	$\leq 3 \text{ kHz}$
Housing	threaded barrel, M8 x 1
Dimensions	31 mm
Housing material	metal, AISI 316L
Material active face	plastic, plastic, PA12-GF20
Tightening torque of housing nut	10 Nm
Connection	connectors, M8 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	LED yellow

Inductive sensor with extended switching distance Bi2-EG08K-AN6X-V1131

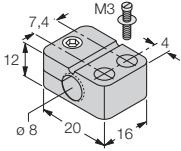
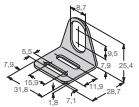
Mounting instructions	minimum distances
Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1,5 \times B$
Distance G	$6 \times S_n$

Diameter of the active area B	$\varnothing 8 \text{ mm}$
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Inductive sensor with extended switching distance Bi2-EG08K-AN6X-V1131

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-08B	6947210	fixing clamp with dead-stop; material: PA6	
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.	
MW-08	6945008	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-08	6901322	fixing clamp; material: polypropylene	