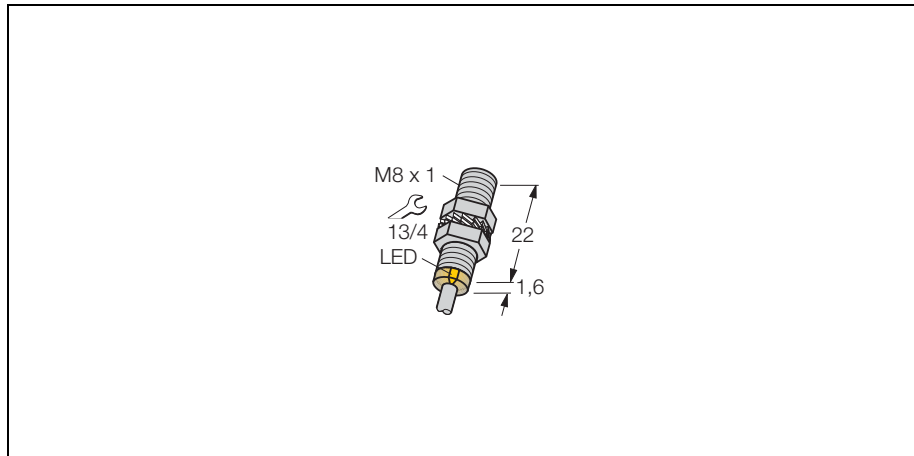
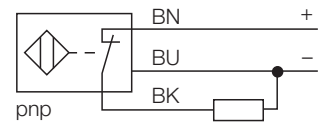


**Inductive sensor
with extended switching distance
Bi2-EG08K-RP6X**



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

Wiring diagram



Functional principle

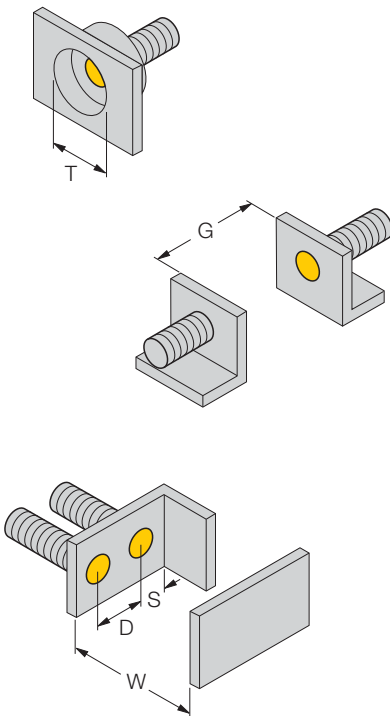
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type	Bi2-EG08K-RP6X
Ident-No.	4669407
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	3... 15 %
Ambient temperature	-25...+ 70 °C
Operating voltage	10... 30 VDC
Residual ripple	≤ 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, NC contact, PNP
Switching frequency	≤ 3kHz
Housing	threaded barrel, M8 x 1
Dimensions	23.6 mm
Housing material	Metal, V2A (1.4301)
Material active face	Plastic, plastic, PA12-GF20
End cap	Plastic, PP
Tightening torque of housing nut	10 Nm
Electrical connection	cables
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)
Protection class	IP67
Switching state	LED yellow

**Inductive sensor
with extended switching distance
Bi2-EG08K-RP6X**

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	Ø 8 mm
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**Inductive sensor
with extended switching distance
Bi2-EG08K-RP6X**

Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-08B	6947210	Fixing clamp with dead-stop; material: PA6	
QM-08	6945100	Quick-mount bracket 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-mount brackets.	
MW-08	6945008	Mounting bracket; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-08	6901322	Fixing clamp; material: Polypropylene	