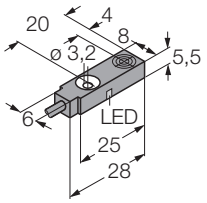
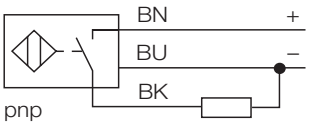
Inductive sensor

Bi2-Q5,5-AP6X



- **rectangular, height 5.5mm**
- **top active face**
- **plastic, PA12-GF30**
- **3-wire DC, 10...30 VDC**
- **normally open pnp output**
- **cable connection**

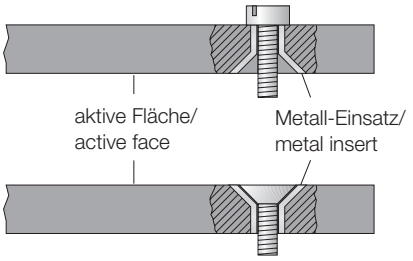
Wiring diagram



Type	Bi2-Q5,5-AP6X
Ident-No.	1613000
Rated operating distance Sn	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	-25 ...+ 85 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U_{pp}
Rated operational current (DC) I_e	≤ 150 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 2 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Housing style	rectangular; Q5,5
Dimensions	28 x 8 x 5,5 mm
Housing material	plastic, PA12-GF30
Active face	plastic, PA12-GF30
Wiring	cable
Cable	Ø 3, LifYY-11Y, PUR, 2 m
Cable cross section	3 x 0,14 mm^2
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED yellow

Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this 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.



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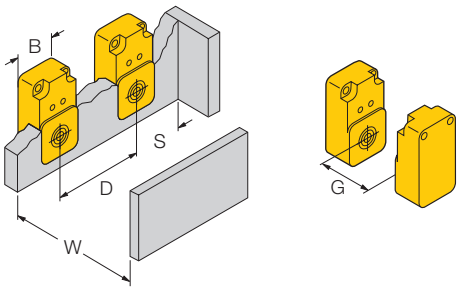
Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap S	1 x B
Gap G	6 x Sn
Width of active face B	8 mm



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