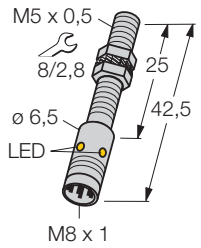
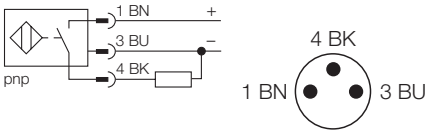
Inductive sensor

Bi1-EG05-AP6X-V1331



- **threaed barrel, M5 x 0,5**
- **stainless steel, 1.4301**
- **3-wire DC, 10...30 VDC**
- **normally open pnp output**
- **connector, M8 x 1**

Wiring diagram



Type	Bi1-EG05-AP6X-V1331
Ident-No.	4608640
Rated operating distance Sn	1 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	-25 ...+ 70 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U_{pp}
Rated operational current (DC) I_e	≤ 100 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 3 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	threaded barrel; M5 x 0,5
Dimensions	42,5 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PA12-GF20
Max. fixing torque of coupling nut	5 Nm
Wiring	connector, M8 x 1
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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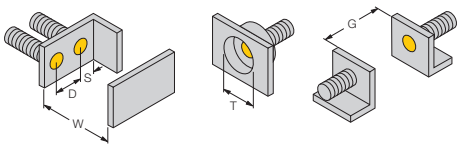
Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn
Diameter of active face B	Ø 5 mm



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