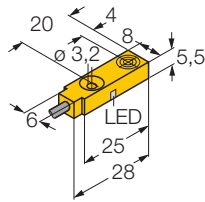
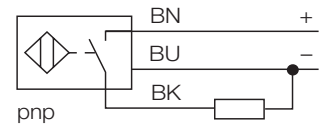


**Inductive sensor  
magnetic field immune  
Bi2-Q5,5-AP6X/S34**



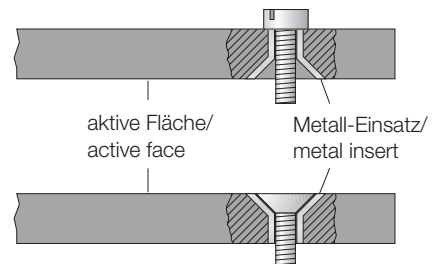
- rectangular, height 5.5mm
- top active face
- plastic, PP
- magnetic field immunity (welding resistance) to DC and AC fields
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

**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. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil. Magnetic field sensors incorporate a special ferrite core which makes them immune to magnetic AC and DC fields. They may thus be used in welding applications.



<b>Type</b>	Bi2-Q5,5-AP6X/S34
Ident-No.	1613001
<b>Rated operating distance Sn</b>	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
<b>Operating voltage</b>	10... 30VDC
Residual ripple	10 % U <sub>SS</sub>
DC rated operational current	150 mA
No-load current I <sub>0</sub>	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Switching frequency	2 kHz
<b>Housing</b>	rectangular, Q5.5
Dimensions	28 x 8 x 5.5 mm
Housing material	plastic, PP-GF20
Material active face	plastic, PP-GF20
Connection	cable
Cable quality	Ø 3, LifYY-11Y, PUR, 2 m
Cable cross section:	3 x 0.14mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
<b>Display switch state</b>	LED yellow

## Inductive sensor magnetic field immune Bi2-Q5,5-AP6X/S34

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

**Width of the active face B** 8 mm

