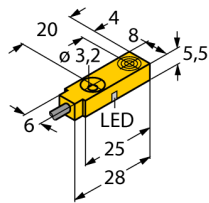
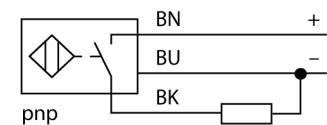


**Inductive sensor
magnetic field immune
BI2-Q5,5-AP6X/S34**



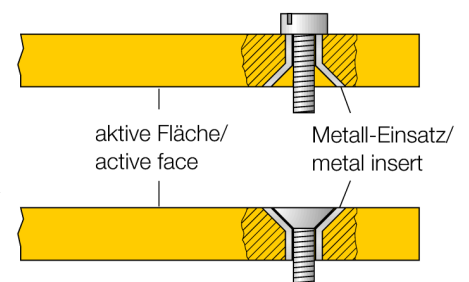
- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- Magnetic field immune (weld-resistant) to DC and AC fields
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

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. Magnetic field sensors incorporate a special ferrite core making them immune to magnetic AC and DC fields. Hence, they can be applied in welding systems.



Type code	BI2-Q5,5-AP6X/S34
Ident no.	1613001
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
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 _N	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	2 kHz
Design	rectangular, Q5.5
Dimensions	28 x 8 x 5.5 mm
Housing material	plastic, PP
Tightening torque fixing screw	0.5 Nm
Connection	cable
Cable quality	3 mm, grey, LIF2X11XFHF, TPU, 2 m Flame retardant acc. to VDE 0472, part 804B
Cable cross section	3 x 0.14 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

**Inductive sensor
magnetic field immune
BI2-Q5,5-AP6X/S34**

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width of the active face B 8 mm

