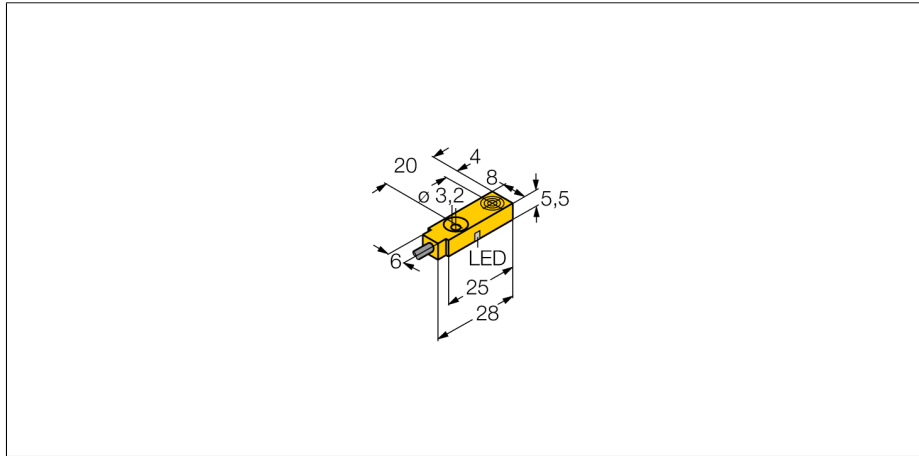


# Inductive sensor BI2-Q5,5-AN6X

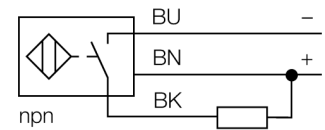
**TURCK**

Industrial  
Automation



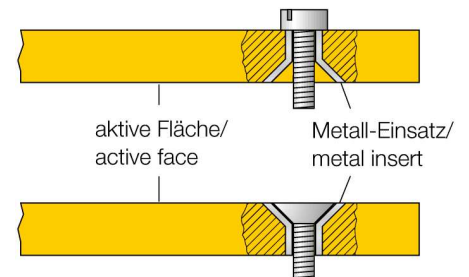
- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

### 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.



<b>Type code</b>	BI2-Q5,5-AN6X
Ident no.	1613100
<b>Rated operating distance Sn</b>	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
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+85 °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>N</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	2 kHz
<b>Design</b>	rectangular, Q5.5
Dimensions	28x 8x 5.5 mm
Housing material	Plastic, PP
Tightening torque fixing screw	0.5 Nm
Connection	cable
Cable quality	3 mm, LifYY-11Y, PUR, 2 m
Cable cross section	3 x 0.14 mm <sup>2</sup>
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
<b>Switching state</b>	● yellow

**Inductive sensor  
BI2-Q5,5-AN6X**

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

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Width of the active face B 8 mm

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