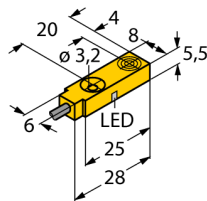


Inductive sensor BI2-Q5.5-AP6X

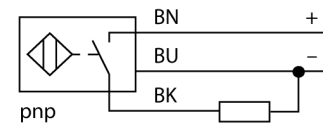
TURCK
works

Industrial
Automation



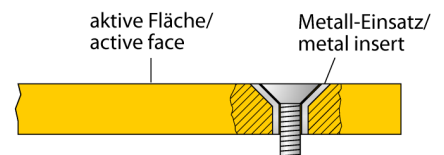
- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring Diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Type designation	BI2-Q5.5-AP6X
Ident-No.	1613000
Ident-No (TUSA)	S1613000
Rated switching distance Sn	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Ambient temperature	-25...+85 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \% U_{in}$
DC rated operational current	$\leq 150 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at I_0	$\leq 1.8 \text{ V}$
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-GF20
Tightening torque fixing screw	0.5 Nm
Electrical connection	Cable
Cable quality	3mm, Gray, Lif9Y-11Y, PUR, 2 Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
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

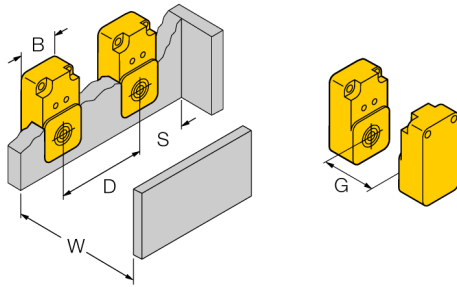
Inductive sensor BI2-Q5.5-AP6X

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

Width active area B	8 mm
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Inductive sensor
BI2-Q5.5-AP6X



Accessories

Type code	Ident-No.	Description	
MW-Q4.7/Q5.5	6945013	Mounting bracket for rectangular Q4.7 or Q5.5; material VA 1.4401	