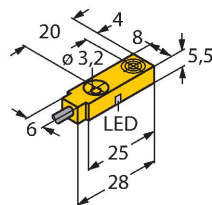


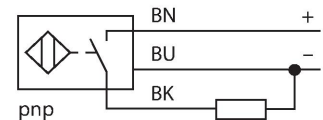
BI2-Q5.5-AP6X Inductive Sensor



Features

- 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

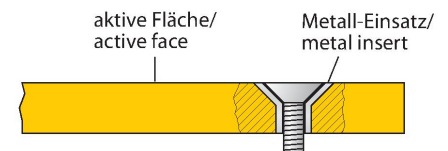


Technical data

Type	BI2-Q5.5-AP6X
ID	1613000
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 150 mA
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	2 kHz
Mechanical data	
Design	Rectangular, Q5,5
Dimensions	28 x 8 x 5.5 mm
Housing material	Plastic, PP-GF20

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.

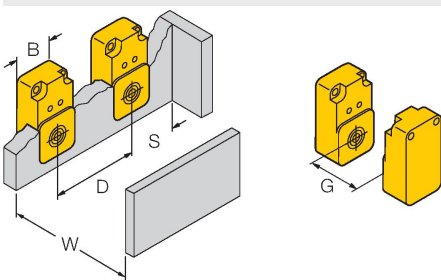


Technical data

Active area material	PP-GF20
Tightening torque fixing screw	0.5 Nm
Electrical connection	Cable
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 2 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm²
Environmental conditions	
Ambient temperature	-25...+70 °C
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

Mounting instructions

Mounting instructions/Description



The image contains two technical diagrams. The left diagram shows two yellow sensor units mounted on a grey rail. Dimension lines indicate: 'B' for the width of one sensor, 'D' for the distance between the centers of the two sensors, 'S' for the distance from the end of the rail to the center of the first sensor, and 'W' for the total width of the rail assembly. The right diagram shows a single yellow sensor unit with a dimension line 'G' indicating its height.

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area	8 mm
B	

Accessories

MW-Q4.7/Q5.5	6945013
Mounting bracket for rectangular Q4.7 or Q5.5; material VA 1.4401	

