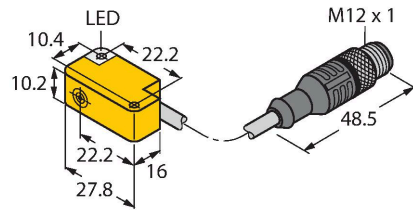


BI2-Q10S-VP6X-0.2-RS4.4T

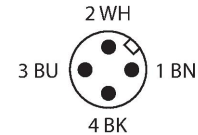
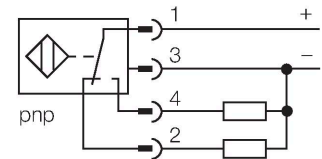
Inductive Sensor



Features

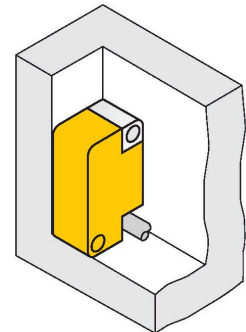
- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable with male end M12 x 1

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.



Technical data

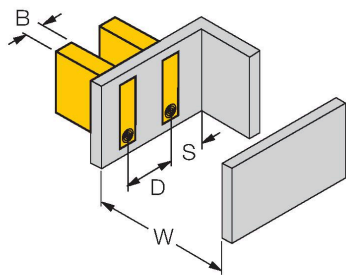
Type	BI2-Q10S-VP6X-0.2-RS4.4T
ID	16093891
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 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 break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	2 kHz
Mechanical data	
Design	Rectangular, Q10S

Technical data

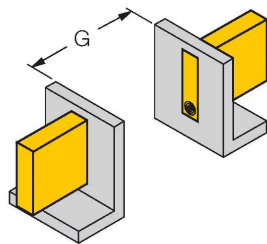
Dimensions	27.8 x 16 x 10.2 mm
Housing material	Plastic, PP-GF20
Active area material	PP-GF20
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11YFHF, PUR, 0.2 m
Core cross-section	4 x 0.14 mm ²
Environmental conditions	
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



This diagram illustrates the front view of a sensor mounting bracket. It shows a grey L-shaped bracket with two vertical slots. Two yellow rectangular sensors are shown being inserted into these slots. Dimension lines indicate: 'B' for the width of the sensor, 'S' for the distance between the centers of the two slots, 'D' for the distance from the bottom of the bracket to the center of the slots, and 'W' for the total width of the bracket.



This diagram illustrates the side view of the sensor mounting bracket. It shows the grey L-shaped bracket and a yellow rectangular sensor. A dimension line labeled 'G' indicates the distance from the front face of the bracket to the center of the slot where the sensor is mounted.

Distance D	3 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area B	10.2 mm

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