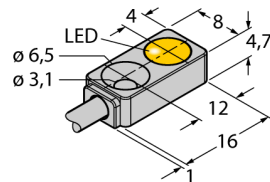


Inductive sensor BI2-Q4,7-AP6X

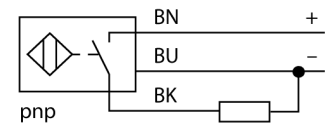
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- Rectangular, height 4.7 mm
- Active face on top
- Metal housing, GD-ZnAl
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

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 code	BI2-Q4,7-AP6X
Ident-No.	1614000
Rated switching distance Sn	2 mm
Mounting conditions	flush
Assured switching distance	$\leq (0,81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Ambient temperature	0...+85 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10 \%$ U _{ss}
DC rated operational current	$\leq 100 \text{ mA}$
No-load current I ₀	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Rated insulation 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	1 kHz
Construction	rectangular, Q4,7
Dimensions	16 x 8 x 4.7 mm
Housing material	metal, GD-ZnAl
Material active area	plastic, PA
Tightening torque fixing screw	0.5 Nm
Connection	cable
Cable quality	3 mm, grey, Lif9Y-11Y, PUR, 2m 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)
IP Rating	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Inductive sensor BI2-Q4,7-AP6X

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Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$

Width of the active face B	8 mm
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