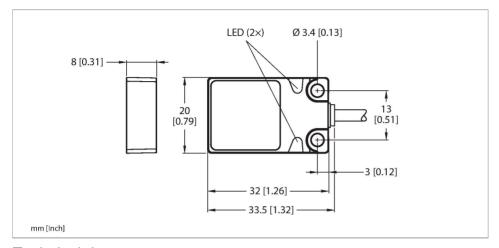


BI7-Q08-AP6X2 7M Inductive Sensor – With Increased Switching Distance



Technical data

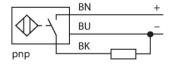
ID 1601607 General data Rated switching distance 7 mm Mounting conditions Flush Secured operating distance ≤ (0.81 × Sn) Correction factors St37 = 1; AI = = 0.4 Repeat accuracy ≤ 2 % of full sometimes Temperature drift ≤ ±10 % Hysteresis 315 % Electrical data Operating voltage 1030 VDC Residual ripple ≤ 10 % U _{ss} DC rated operational current ≤ 200 mA No-load current 15 mA Residual current ≤ 0.1 mA	0.3; stainless steel = 0.7; Ms
Rated switching distance 7 mm Mounting conditions Flush Secured operating distance $\leq (0.81 \times Sn)$ Correction factors $\leq 1.7 \times 1$	0.3; stainless steel = 0.7; Ms
Mounting conditionsFlushSecured operating distance $\leq (0.81 \times Sn)$ Correction factors $St37 = 1$; Al = $= 0.4$ Repeat accuracy $\leq 2 \%$ of full some function of the second of the second operation operation operation of the second operation operation operation operation operation of the second operation	0.3; stainless steel = 0.7; Ms
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Electrical data Operating voltage 1030 VDC Residual ripple \leq 10 % U _{ss} DC rated operational current \leq 200 mA No-load current 15 mA	
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Residual ripple $\leq 10 \% \text{ U}_{ss}$ DC rated operational current $\leq 200 \text{ mA}$ No-load current 15 mA	
DC rated operational current ≤ 200 mA No-load current 15 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 _e ≤ 1.8 V	
Wire breakage/Reverse polarity protection yes / Complet	
Output function 3-wire, NO co	
Switching frequency 0.5 kHz	



Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel-plated
- Large sensing range
- ■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.

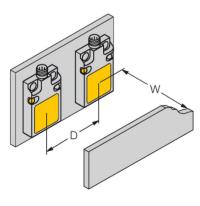


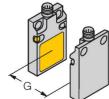
Technical data

Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, Zamak, Nickel Plated
Active area material	Plastic, PP, yellow
Electrical connection	Cable
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 7 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	IP68
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description





Distance D	40 mm
Distance W	24 mm
Distance G	48 mm
Width active area B	20 mm