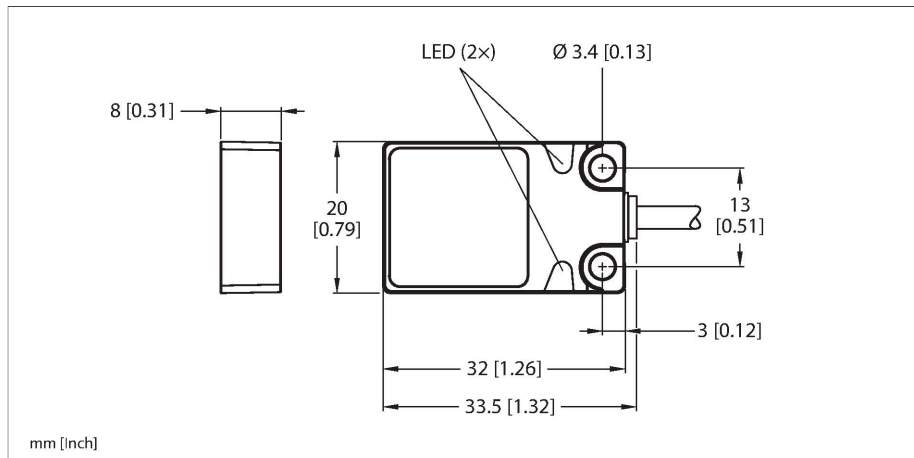


BI5-Q08-AP6X2/S34

Inductive Sensor – Resistant to Magnetic Fields



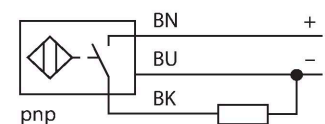
Technical data

Type	BI5-Q08-AP6X2/S34
ID	16008
Special version	S34 corresponds to: Resistant to magnetic fields
General data	
Rated switching distance	5 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	≤ 200 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	0.03 kHz
Mechanical data	
Design	Rectangular, Q08

Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel-plated
- Resistant to magnetic fields (weld resistant), for DC and AC fields
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



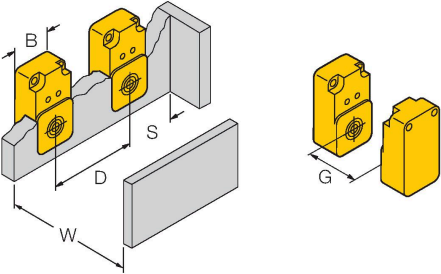
Functional principle

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

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, LIF2X11XFHF, TPU, 2 m
	Flame retardant acc. to VDE 0472, part 804B
Core cross-section	3 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
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description		
	Distance D	40 mm
	Distance W	24 mm
	Distance S	1 × B
	Distance G	48 mm
	Width active area	20 mm
	B	