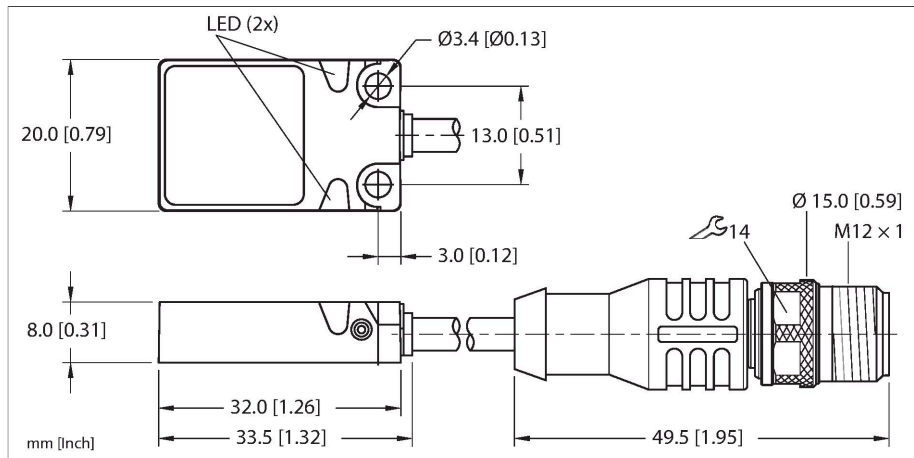


BI5-Q08-AP6X2/S34-1XOR-RS4

Inductive Sensor – Resistant to Magnetic Fields



Technical data

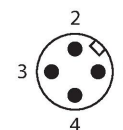
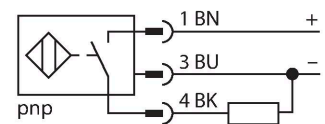
Type	BI5-Q08-AP6X2/S34-1XOR-RS4
ID	1600801
Special version	S34 Corresponds to:Resistant to magnetic fields
General data	
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
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	≤ 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 break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.03 kHz
Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm



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
- Pigtail with male end M12 x 1

Wiring diagram



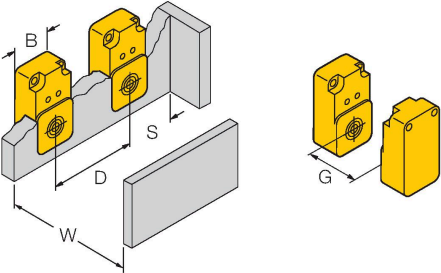
Functional principle

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

Housing material	Metal, Zamak, Nickel Plated
Active area material	Plastic, PP, yellow
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 4 mm, Orange, LifXX, PVC, 1 m
Core cross-section	3 x 0.25 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	