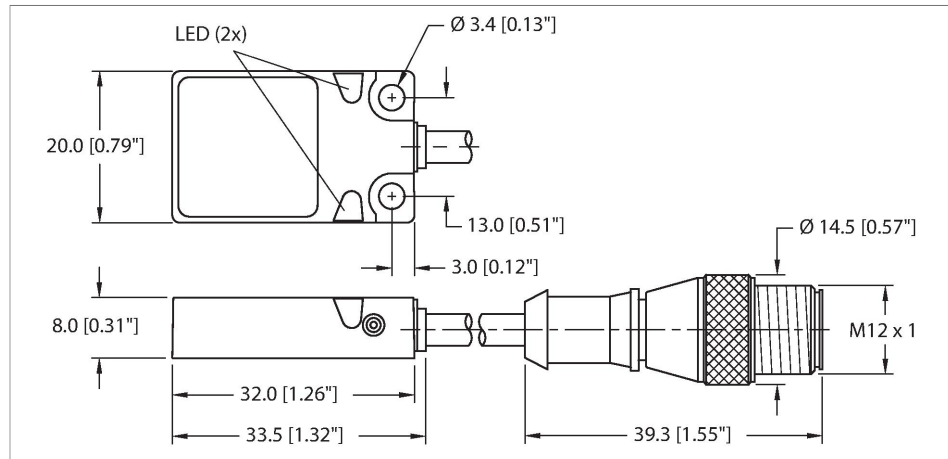


BI5-Q08-AP6X2-0.3-RS4T/S34

Inductive Sensor – Resistant to Magnetic Fields



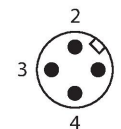
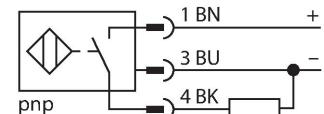
Technical data

Type	BI5-Q08-AP6X2-0.3-RS4T/S34
ID	1600891
Special version	S34 Corresponds to: Weld-field immune proximity sensors
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

Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel-plated
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

Wiring diagram



Functional principle

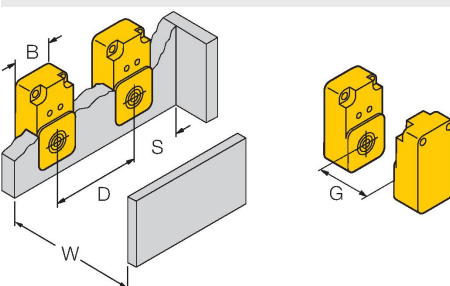
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
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 3 mm, Gray, Lif9Y-11Y, PUR, 0.3 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
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



The image contains two technical diagrams illustrating the mounting of the Q08 sensor. The primary diagram shows two yellow sensors mounted on a grey rail. Dimension lines indicate: 'B' for the width of the sensor, 'D' for the distance between the centers of the two sensors, 'S' for the distance from the sensor face to the rail end, and 'W' for the total width of the rail assembly. A secondary diagram shows a single yellow sensor with dimension 'G' indicating its height.

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