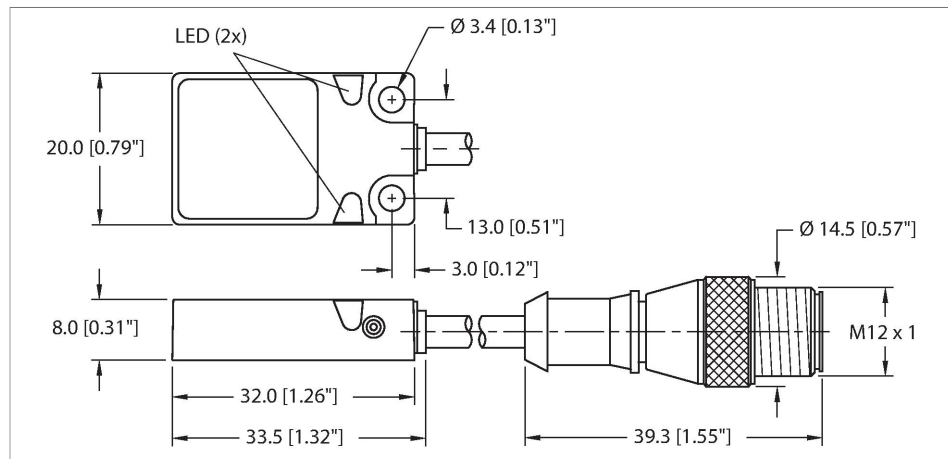


BI5-Q08-AP6X2-0.2-RS4T/S34

Inductive Sensor – Resistant to Magnetic Fields



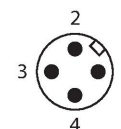
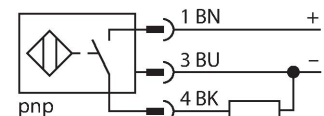
Technical data

Type	BI5-Q08-AP6X2-0.2-RS4T/S34
ID	1600892
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	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 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, 0.2 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 the following measurements: 'B' is the width of the sensor; 'D' is the distance between the centers of the two sensors; 'S' is the distance from the center of a sensor to the back of the rail; 'W' is the total width of the rail assembly; and 'G' is the distance from the front of the rail to the center of the sensor. A secondary diagram to the right shows a single yellow sensor and a grey rail segment, with dimension 'G' indicating the distance from the front of the rail to the center of the sensor.

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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BI5-Q08-AP6X2-0.2-RS4T/S34 02/21/2025 14-00 | technical changes reserved