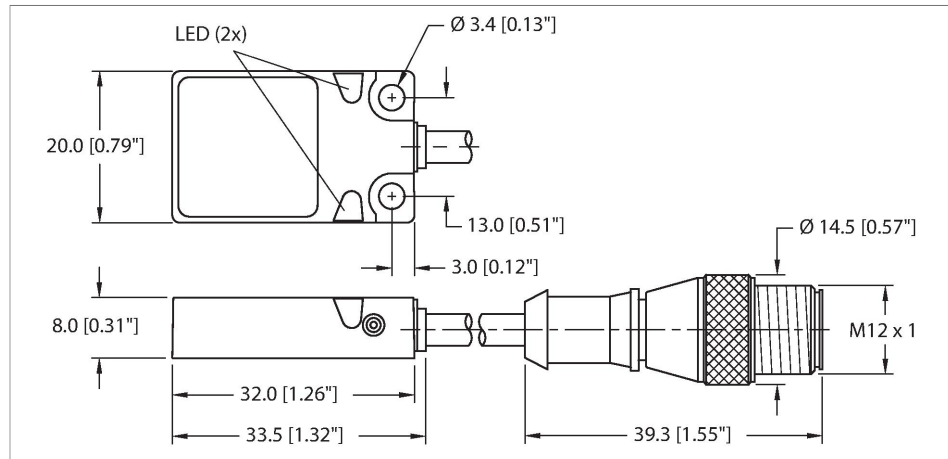


BI5-Q08-AD4X-0.2-RS4.2T/S34

Inductive Sensor – Resistant to Magnetic Fields



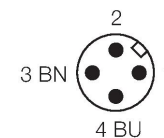
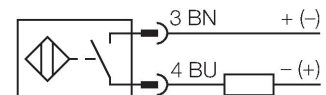
Technical data

Type	BI5-Q08-AD4X-0.2-RS4.2T/S34
ID	44145851
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
Hysteresis	1...15 %
Electrical data	
Operating voltage U_B	10...65 VDC
Ripple U_{rs}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_B	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_B	≤ 5 V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.03 kHz

Features

- Rectangular, height 8 mm
- Active face on top
- Metal, Zamak, nickel-plated
- DC 2-wire, 10...65 VDC
- NO contact
- Cable with male end

Wiring diagram



Functional principle

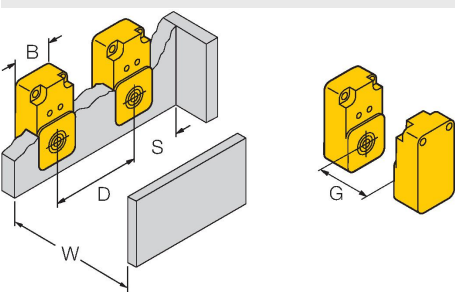
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

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, LifY-11Y, PUR, 0.2 m
Core cross-section	2 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
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



The image contains two technical diagrams. The left diagram shows two yellow Q08 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 center of a sensor to the back of the rail, and 'W' for the total width of the rail assembly. The right diagram shows a side view of 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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