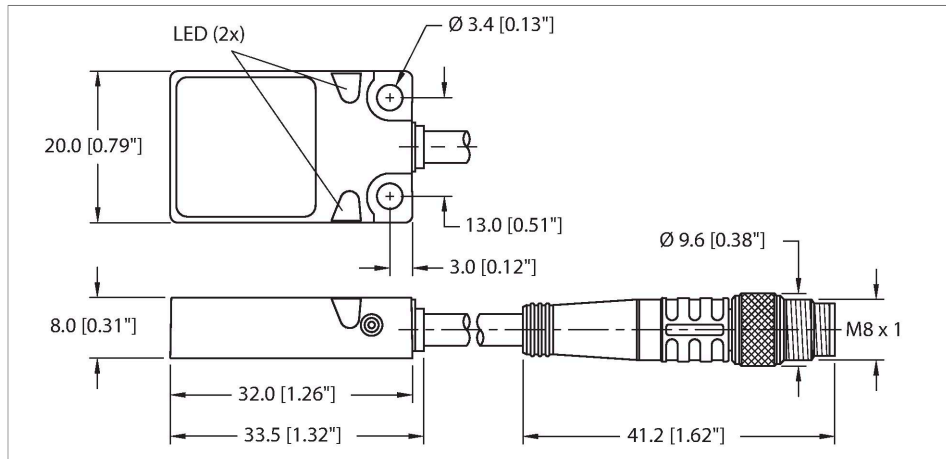


# BI5-Q08-AP6X2-0.2-PSG3M/S34 Inductive Sensor – Resistant to Magnetic Fields



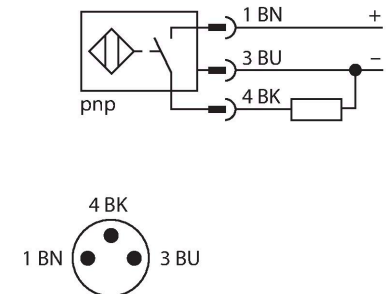
## Technical data

Type	BI5-Q08-AP6X2-0.2-PSG3M/S34
ID	1600882
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	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	15 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/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 M8 x 1

## Wiring diagram



## Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Magnetic field sensors incorporate a special ferrite core making them immune to magnetic AC and DC fields. Hence, they can be applied in welding systems.

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
Electrical connection	Cable with connector, M8 × 1
Cable quality	Ø 3 mm, Gray, LIF2X11XFHF, TPU, 0.2 m
	Flame retardant acc. to VDE 0472, part 804B
Core cross-section	3 x 0.14 mm <sup>2</sup>
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 B
	20 mm

BI5-Q08-AP6X2-0.2-PSG3M/S341 | 11/07/2023 14-19 | technical changes reserved