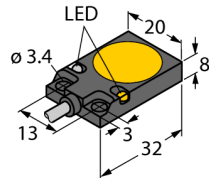


Inductive sensor

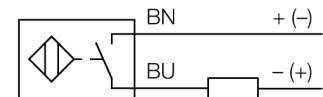
Resistant to magnetic fields

BI5-Q08-AD4X/S34



- DC 2-wire, 10...65 VDC
- NO contact
- Cable connection

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.

Type designation	BI5-Q08-AD4X/S34
Ident-No.	4414550
Special version	S34 = Weld-field immune proximity sensors
Rated switching distance Sn	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	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65 VDC
Residual ripple	$\leq 10\% U_{in}$
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I_n	≤ 5 V
Smallest operating current I_{min}	≥ 3 mA
Switching frequency	0.03 kHz
Design	Rectangular,Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, GD-Zn
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Cables
Cable quality	4mm, LifY-11Y, PUR, 2
Cable cross section	2 x 0.25 mm ²
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
Packaging unit	1
Switching state	LED,Yellow

Inductive sensor
Resistant to magnetic fields
BI5-Q08-AD4X/S34

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area B	20 mm

