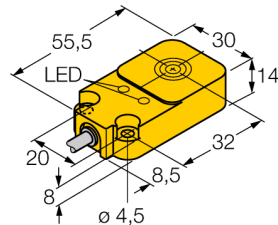


Inductive sensor

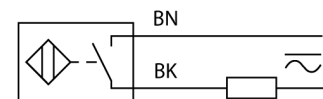
Resistant to magnetic fields

BI10-Q14-ADZ32X2/S34



- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Resistant to magnetic fields (weld resistant), for DC and AC fields
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring Diagram



Functional principle

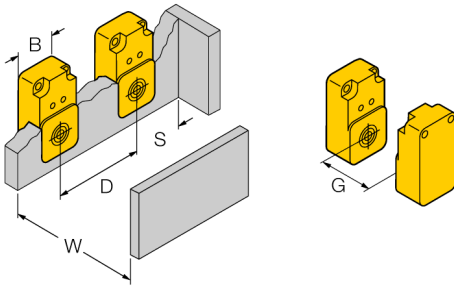
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Magnetic field sensors incorporate a special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

Type designation	BI10-Q14-ADZ32X2/S34
Ident-No.	4256225
Rated switching distance S_n	10 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 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 1 A (≤ 10 ms max. 5 Hz)
Short-circuit protection	yes/ Latching
Voltage drop at I_n	≤ 6 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	2-wire, NO contact
Smallest operating current I_m	≥ 3 mA
Switching frequency	0.02 kHz
Design	Rectangular, Q14
Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Cable
Cable quality	5.2mm, Gray, LifYY-11Y, PUR, 2
Cable cross section	2 x 0.34 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
Power-on indication	LED, Green
Switching state	LED, Red

Inductive sensor Resistant to magnetic fields BI10-Q14-ADZ32X2/S34

Distance D	1.5 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width active area B 30 mm



Inductive sensor
Resistant to magnetic fields
BI10-Q14-ADZ32X2/S34



Accessories

Type code	Ident-No.	Description	
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	