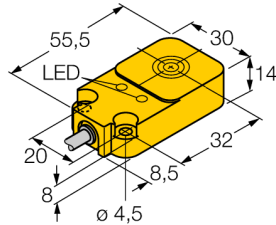
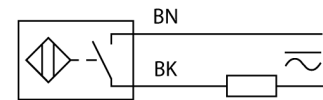


**Inductive sensor
magnetic field immune
BI10-Q14-ADZ32X2/S34**



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

Wiring diagram



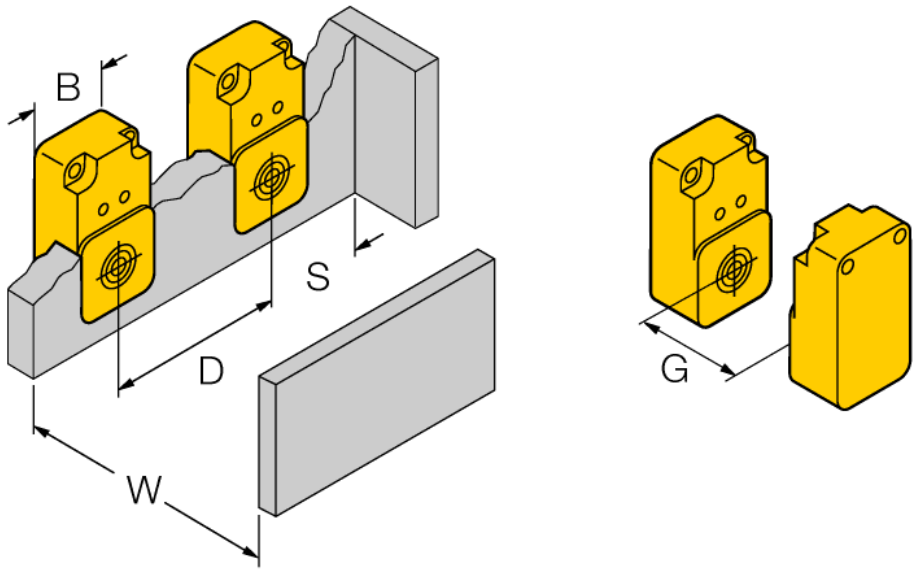
Functional principle

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 code	BI10-Q14-ADZ32X2/S34
Ident no.	4256225
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10...300VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation 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 _o	≤ 3 mA
Switching frequency	0.02 kHz
Design	rectangular, Q14
Dimensions	52 x 30 x 14 mm
Housing material	plastic, PBT
Connection	cable
Cable quality	5.2 mm, grey, LifYY-11Y, PUR, 2 m
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

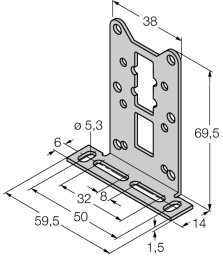
**Inductive sensor
magnetic field immune
BI10-Q14-ADZ32X2/S34**

Distance D	1.5 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
<hr/>	
Width of the active face B	30 mm



**Inductive sensor
magnetic field immune
BI10-Q14-ADZ32X2/S34**

Accessories

Type code	Ident no.	Description	Dimension drawing
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	
MH-Q14MONTAGEHÜLSEN	6950011	Mounted with active face downwards, for Q14	