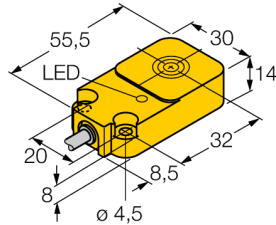


Inductive sensor Bi10-Q14-AD4X 7M

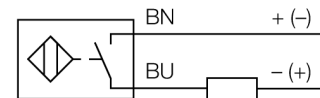
TURCK
works

Industrial
Automation



- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- 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.

Type	Bi10-Q14-AD4X 7M
Ident-No.	4414561
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Temperaturdrift	10 %
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_n	≤ 5 V
Output function	2-wire, NO contact, 2-wire
Smallest operating current I_m	≤ 3 mA
Switching frequency	0.15 kHz
Design	rectangular, Q14
Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Connection	cable
Cable quality	5.2 mm, LiYY-11Y, PUR, 7 m
Cable cross section	2 x 0.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow