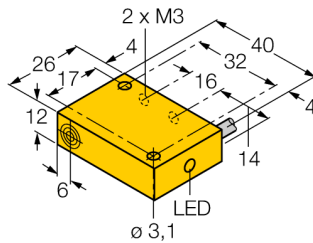


Inductive sensor NI4-Q12-AZ31X

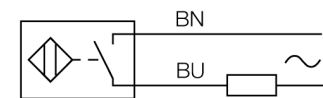
TURCK

Industrial
Automation



- Rectangular, height 12 mm
- Active face, lateral
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- NO contact
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

We offer special versions for temperatures of -60 °C up to +250 °C.

Type code	NI4-Q12-AZ31X
Ident no.	13102
Rated operating distance Sn	4 mm
Mounting condition	non-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)
Voltage drop at I _n	≤ 6 V
Output function	2-wire, NO contact
Smallest operating current I _m	≤ 3 mA
Switching frequency	0.02 kHz
Design	rectangular, Q12
Dimensions	40 x 26 x 12 mm
Housing material	plastic, PA
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 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
Switching state	LED red

**Inductive sensor
NI4-Q12-AZ31X**

Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$

Width of the active face B 12 mm

