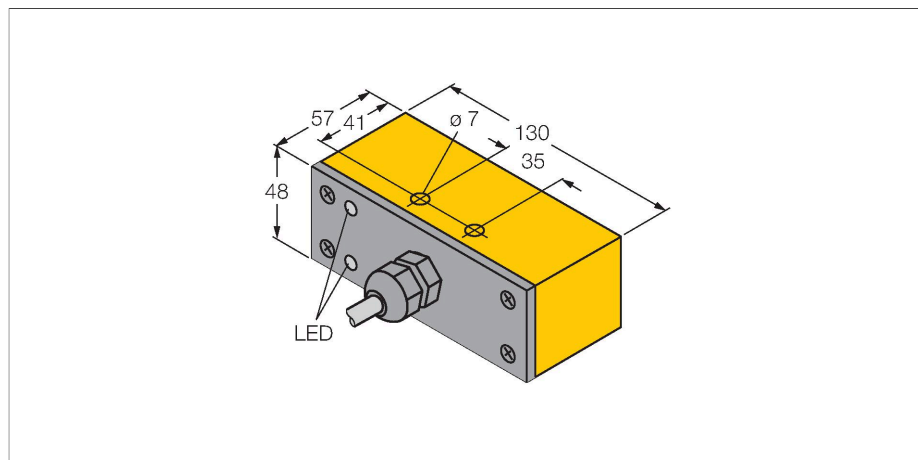


NI30-Q130-ADZ30X2

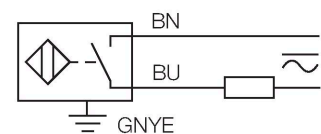
Inductive Sensor



Features

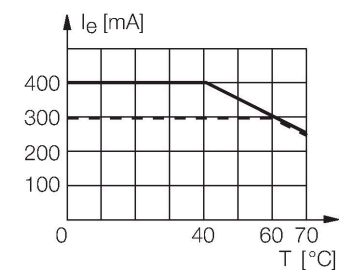
- Rectangular, height 48 mm
- Active face in front
- Plastic, PBT
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, 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.



Technical data

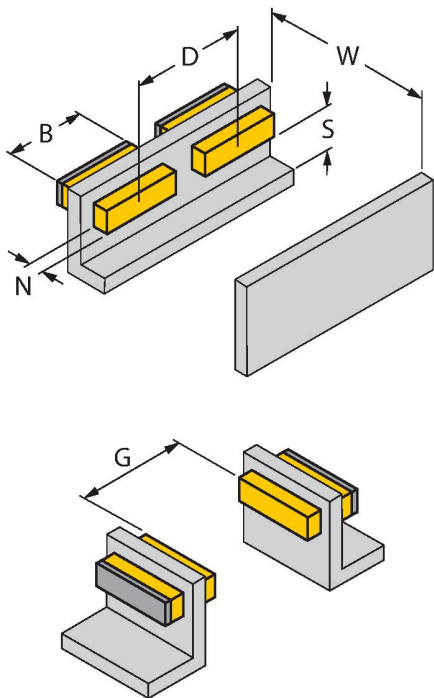
| | |
|---|---|
| Type | NI30-Q130-ADZ30X2 |
| ID | 42095 |
| General data | |
| Rated switching distance | 30 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | $\leq \pm 10$ % |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | $\geq 50 \dots \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 3 A (≤ 20 ms max. 5 Hz) |
| Short-circuit protection | yes / Latching |
| Voltage drop at I _e | ≤ 6 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 2-wire, NO contact, 2-wire |
| Smallest operating current | ≥ 3 mA |
| Switching frequency | 0.02 kHz |

Technical data

| Mechanical data | |
|--------------------------|--|
| Design | Rectangular, Q130 |
| Dimensions | 130 x 57 x 48 mm |
| Housing material | Plastic, PBT |
| Active area material | Plastic, PBT |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY, PVC, 2 m |
| Core cross-section | 3 x 0.5 mm ² |
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| 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 |

Mounting instructions

Mounting instructions/Description



| | |
|---------------------|---------|
| Distance D | 180 mm |
| Distance W | 3 x Sn |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 2 x Sn |
| Width active area B | 130 mm |

Flush mounting of the sensor in metal.