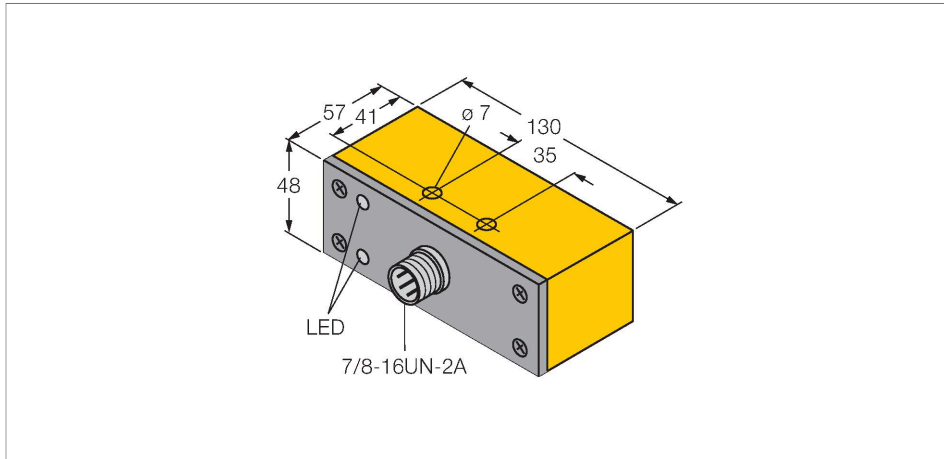


# NI30-Q130-ADZ30X2-B1131

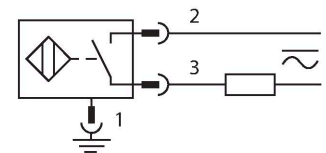
## Inductive Sensor



### Features

- Rectangular, height 48 mm
- Active face in front
- Plastic, PBT
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

### Wiring diagram

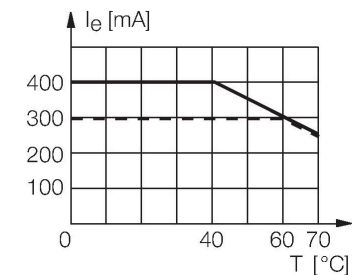


### Technical data

|   |   |
|---|---|
| Type                                      | NI30-Q130-ADZ30X2-B1131                             |
| Ident. no.                                | 42100   |
| 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                           | $\leq 2\%$ of full scale                            |
| Temperature drift                         | $\leq \pm 10\%$                                     |
| Hysteresis                                | 3...15 %  |
| Ambient temperature                       | -25...+70 °C  |
| Operating voltage                         | 20...250 VAC  |
| Operating voltage                         | 10...300 VDC  |
| AC rated operational current              | $\leq 400$ mA                                       |
| DC rated operational current              | $\leq 300$ mA                                       |
| Frequency                                 | $\geq 50... \leq 60$ Hz                             |
| Residual current                          | $\leq 1.7$ mA                                       |
| Isolation test voltage                    | $\leq 1.5$ kV                                       |
| Surge current                             | $\leq 3$ A ( $\leq 20$ ms max. 5 Hz)                |
| Short-circuit protection                  | yes / Latching                                      |
| Voltage drop at $I_e$                     | $\leq 6$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 2-wire, NO contact                                  |
| Smallest operating current                | $\geq 3$ mA   |
| Switching frequency                       | 0.02 kHz  |

### Functional principle

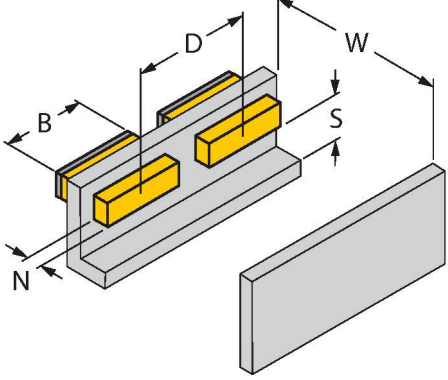
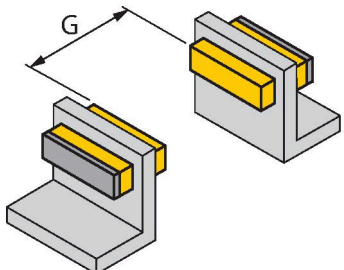
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



## Technical data

|                       |  |
|-----------------------|--|
| Design                | Rectangular, Q130                          |
| Dimensions            | 130 x 57 x 48 mm                           |
| Housing material      | Plastic, PBT                               |
| Active area material  | Plastic, PBT                               |
| Electrical connection | Connector, 7/8"                            |
| 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.