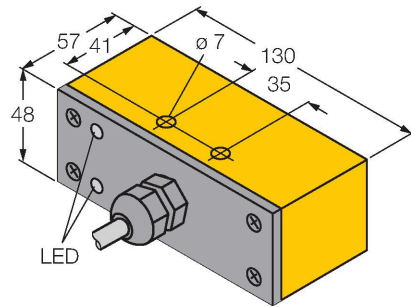


# NI30-Q130-VN4X2

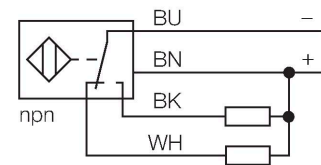
## Inductive Sensor



### Features

- Rectangular, height 48 mm
- Active face in front
- Plastic, PBT
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- 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

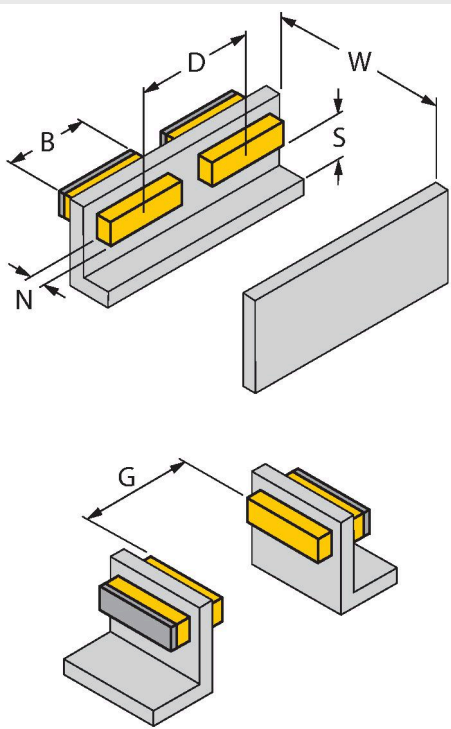
|                                        |                                                     |
|----------------------------------------|-----------------------------------------------------|
| Type                                   | NI30-Q130-VN4X2                                     |
| ID                                     | 15178                                               |
| 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                        | $\leq 2$ % of full scale                            |
| Temperature drift                      | $\leq \pm 10$ %                                     |
| Hysteresis                             | 3...15 %                                            |
| Electrical data                        |                                                     |
| Operating voltage $U_b$                | 10...65 VDC                                         |
| Ripple $U_{ss}$                        | $\leq 10$ % $U_{Bmax}$                              |
| DC rated operating current $I_b$       | $\leq 200$ mA                                       |
| No-load current                        | $\leq 15$ mA                                        |
| Residual current                       | $\leq 0.1$ mA                                       |
| Isolation test voltage                 | 0.5 kV                                              |
| Short-circuit protection               | yes/Cyclic                                          |
| Voltage drop at $I_b$                  | $\leq 1.8$ V                                        |
| Wire break/reverse polarity protection | yes/Complete                                        |
| Output function                        | 4-wire, Complementary contact, NPN                  |
| Switching frequency                    | 0.06 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, Gray, LifYY, PVC, 2 m            |
| Core cross-section       | 4 x 0.34 mm <sup>2</sup>                   |
| 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, Yellow                                |

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.

NI30-Q130-VN4X2 | 02/21/2025 13-10 | technical changes reserved