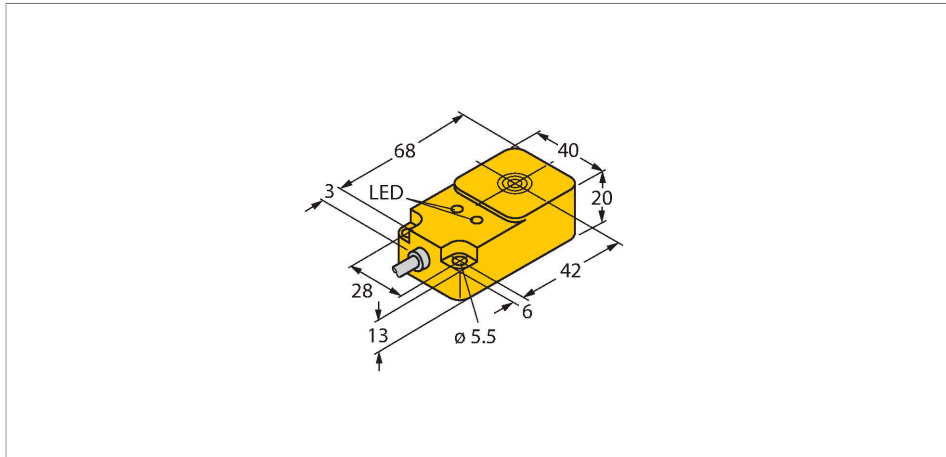


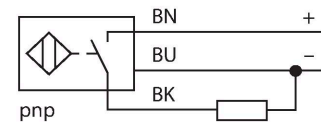
NI25-Q20-AP6X2 Inductive Sensor



Features

- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

| | |
|---|---|
| Type | NI25-Q20-AP6X2 |
| Ident. no. | 1602700 |
| Rated switching distance | 25 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 | 10...30 VDC |
| Residual ripple | $\leq 10\% U_s$ |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_e | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, PNP |
| Switching frequency | 0.25 kHz |
| Design | Rectangular, Q20 |
| Dimensions | 68 x 40 x 20 mm |
| Housing material | Plastic, PBT-GF30-V0 |

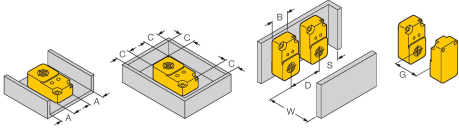
Functional principle

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.

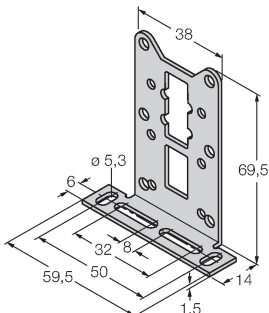
Technical data

| | |
|-----------------------|--|
| Active area material | PBT-GF30-V0 |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY-11Y, PUR, 2 m |
| Core cross-section | 3 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 |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |

Mounting instructions

| Mounting instructions/Description | | |
|--|---------------------|---------|
|  | Distance D | 3 x B |
| | Distance W | 3 x Sn |
| | Distance S | 1.5 x B |
| | Distance G | 6 x Sn |
| | Distance N | 2 x Sn |
| | Distance A | 1 x Sn |
| | Distance C | 2 x Sn |
| | Width active area B | 40 mm |

Accessories

| | |
|---|---------|
| MW-Q14/Q20 | 6945006 |
|  | |
| Mounting bracket for rectangular Q14 or Q20; material VA 1.4301 | |