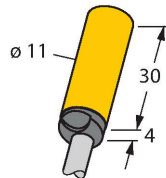


NI5-K11-Y0

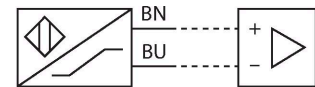
Inductive Sensor



Features

- Smooth barrel, Ø 11 mm
- Plastic, PA12-GF30
- DC 2-wire, nom. 8.2 VDC
- Output acc. to EN 60947-5-6 (NAMUR)
- Cable connection

Wiring diagram



Technical data

| | |
|----------------------------------|---|
| Type | NI5-K11-Y0 |
| ID | 1005455 |
| General data | |
| Rated switching distance | 5 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 |
| Hysteresis | 1...10 % |
| Electrical data | |
| Output function | 2-wire, NAMUR |
| Switching frequency | 2 kHz |
| Voltage | Nom. 8.2 VDC |
| Non-actuated current consumption | ≥ 2.1 mA |
| Actuated current consumption | ≤ 1.2 mA |
| Mechanical data | |
| Design | Smooth barrel, 11 mm |
| Dimensions | 34 mm |
| Housing material | Plastic, PA12-GF30 |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, EPTR |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, Blue, LiYY, PVC, 2 m |

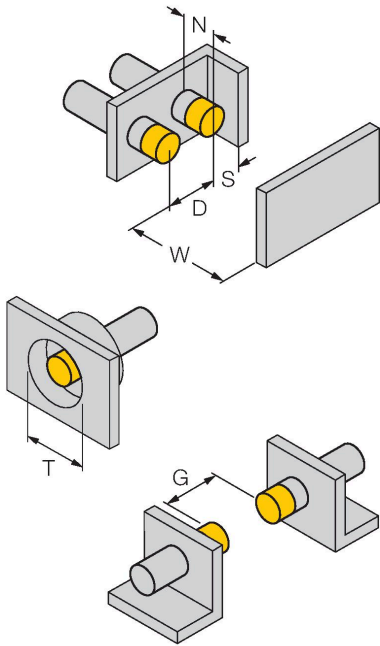
Functional principle

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

| | |
|--------------------------|--|
| Core cross-section | 2 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 | 6198 years acc. to SN 29500 (Ed. 99) 40 °C |
| Included in delivery | BS11 |

Mounting instructions

| Mounting instructions/Description | | |
|--|------------------------|---------|
|  | Distance D | 3 x B |
| | Distance W | 3 x Sn |
| | Distance T | 3 x B |
| | Distance S | 1.5 x B |
| | Distance G | 6 x Sn |
| | Distance N | 2 x Sn |
| | Diameter active area B | Ø 11 mm |
| | | |

Accessories

| | |
|--|-------|
| BS 11 | 69462 |
| Fixing clamp; material mounting block: PBT | |

