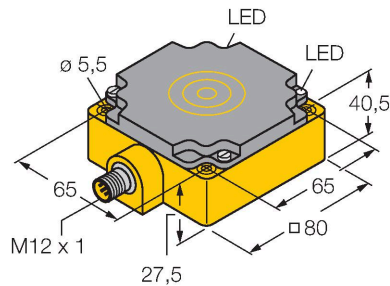


NI75U-CP80-VP4X2-H1141

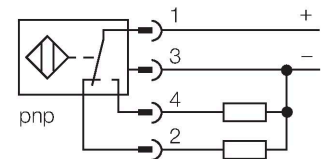
Inductive Sensor – With Increased Switching Distance



Features

- Rectangular, height 41 mm
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- Large coverage
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

Wiring diagram



Technical data

| | |
|--|--|
| Type | NI75U-CP80-VP4X2-H1141 |
| ID | 1540802 |
| General data | |
| Rated switching distance | 75 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Temperature drift | $\leq \pm 10 \%$ |
| | $\leq \pm 15 \%, \leq -25 \text{ }^{\circ}\text{C} \vee \geq +70 \text{ }^{\circ}\text{C}$ |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage U_b | 10...65 VDC |
| Ripple U_{ss} | $\leq 10 \%$ U_{Bmax} |
| DC rated operating current I_o | ≤ 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_o | ≤ 1.8 V |
| Wire break/reverse polarity protection | yes/Complete |
| Output function | 4-wire, Complementary contact, PNP |
| DC field stability | 300 mT |
| AC field stability | 300 mT _{ss} |
| Insulation class | □ |

Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.


Technical data

| | |
|---------------------------------|---|
| Switching frequency | 0.25 kHz |
| Mechanical data | |
| Design | Rectangular, CP80 |
| Dimensions | 80 x 80 x 41 mm |
| Housing material | Plastic, PBT-GF30-V0 |
| Active area material | PBT-GF30-V0 |
| Electrical connection | Connector, M12 × 1 |
| Environmental conditions | |
| Ambient temperature | -30...+85 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 874 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 A |
| | 1 x B |
| | Distance C |
| | 1 x B |
| Width active area B 80 mm | |

Wiring accessories

| Dimension drawing | Type | ID | |
|---|---------------|---------|---|
|  | RKC4.4T-2/TEL | 6625013 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |