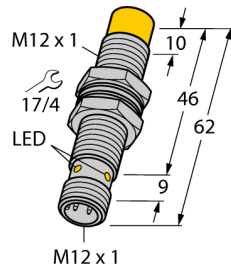


Inductive Sensor With Extended Switching Distance NI10U-M12E-VN44X-H1141



| | |
|------|------------------------|
| Type | NI10U-M12E-VN44X-H1141 |
| ID | 1634875 |

| | |
|-------------------|---|
| Remark to product | Product discontinued. Please use the alternative product 100003655 with an operating voltage of 10...30 VDC. |
|-------------------|---|

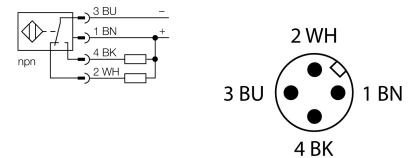
| General data | |
|--------------------------------|---|
| Rated switching distance S_n | 10 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...15 % |

| Electrical data | |
|---|------------------------------------|
| Operating voltage | 10...55 VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| DC rated operational current | ≤ 200 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ Cyclic |
| Voltage drop at I_n | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes/ Complete |
| Output function | 4-wire, Complementary contact, NPN |
| DC field stability | 300 mT |
| AC field stability | 300 mT _{ss} |
| Insulation class | □ |
| Switching frequency | 1 kHz |

| Mechanical data | |
|---------------------------------------|----------------------------|
| Design | Threaded barrel, M12 x 1 |
| Dimensions | 62 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, LCP |
| Max. tightening torque of housing nut | 10 Nm |
| Electrical connection | Connector, M12 x 1 |

- M12 x 1 threaded barrel
- Long version
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Integrated protection against predamping
- Little metal-free spaces
- DC 4-wire, 10...55 VDC
- Changeover contact, NPN output
- M12 x 1 male connector

Wiring Diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

| | |
|--------------------------|---|
| Environmental conditions | |
| Ambient temperature | -30...+85 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP68 |
| MTTF | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | |
| | LED, Yellow |

Accessories

| Type code | Ident no. | | Dimension drawing |
|-----------|-----------|--|-------------------|
| BST-12B | 6947212 | Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6 | |
| QM-12 | 6945101 | Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets. | |
| MW-12 | 6945003 | Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304) | |
| BSS-12 | 6901321 | Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene | |