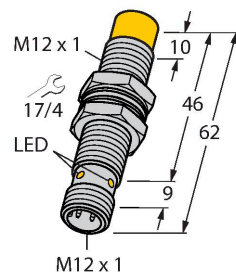


NI8U-M12E-VP4X-H1141

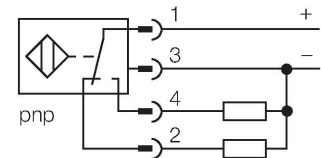
Inductive Sensor



Features

- M12 × 1 threaded barrel
- Long version
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- M12 × 1 male connector

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. approx 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

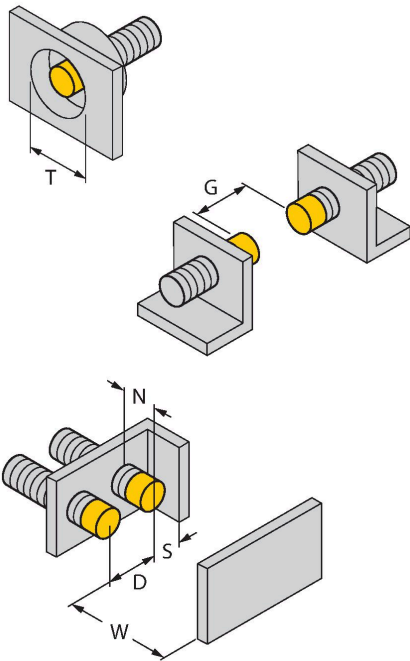
| | |
|---|--|
| Type | NI8U-M12E-VP4X-H1141 |
| Ident. no. | 1580454 |
| Rated switching distance | 8 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n) \text{ mm}$ |
| Repeat accuracy | $\leq 2 \text{ \% of full scale}$ |
| Temperature drift | $\leq \pm 10 \text{ \%}$ |
| | $\leq \pm 15 \text{ \%}, \leq -25 \text{ }^\circ\text{C} \vee \geq +70 \text{ }^\circ\text{C}$ |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...65 VDC |
| Residual ripple | $\leq 10 \text{ \% } U_{ss}$ |
| DC rated operational current | $\leq 200 \text{ mA}$ |
| No-load current | $\leq 15 \text{ mA}$ |
| Residual current | $\leq 0.1 \text{ mA}$ |
| Isolation test voltage | $\leq 0.5 \text{ kV}$ |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_o | $\leq 1.8 \text{ V}$ |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 4-wire, Complementary contact, PNP |
| Insulation class | □ |
| Switching frequency | 2 kHz |
| Design | Threaded barrel, M12 × 1 |
| Dimensions | 62 mm |

Technical data

| | |
|---------------------------------------|---|
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, PBT |
| Max. tightening torque of housing nut | 10 Nm |
| Electrical connection | Connector, M12 × 1 |
| 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 |

Mounting instructions

Mounting instructions/Description

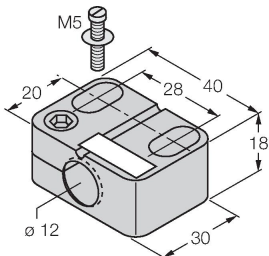


| | |
|------------------------|---------|
| Distance D | 48 mm |
| Distance W | 3 x Sn |
| Distance T | 45 mm |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 2 x Sn |
| Diameter active area B | Ø 12 mm |

Accessories

BST-12B

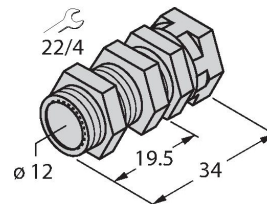
6947212



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QM-12

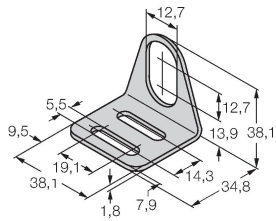
6945101



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

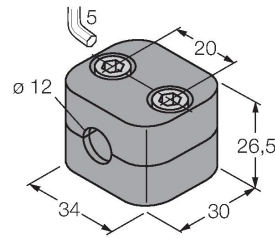
6945003



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

Wiring accessories

Dimension drawing

Type

RKC4.4T-2/TEL

Ident. no.

6625013

Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

