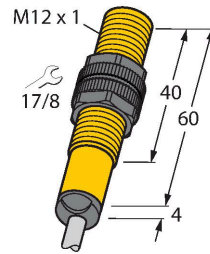


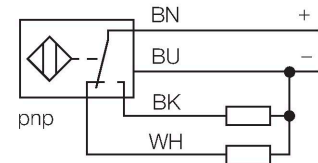
BI2-S12-VP6/S52 5M Inductive Sensor



Features

- M12 × 1 threaded barrel
- Plastic, PA12-GF30
- Cable exit approx. 20 mm internally glued heat shrink
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

Wiring diagram



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

| | |
|---|--|
| Type | BI2-S12-VP6/S52 5M |
| Ident. no. | 1695410 |
| Special version | S52 corresponds to: PUR cable Cable outlet with approx. 20 mm of cable with internally glued heat shrink |
| Rated switching distance | 2 mm |
| Mounting conditions | 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 |
| Temperature drift | $\leq \pm 10$ % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...30 VDC |
| Residual ripple | ≤ 10 % U_{ss} |
| DC rated operational current | ≤ 150 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 breakage/Reverse polarity protection | yes / Complete |
| Output function | 4-wire, Complementary contact, PNP |
| Switching frequency | 2 kHz |

Technical data

| | |
|---------------------------------------|--|
| Design | Threaded barrel, M12 × 1 |
| Dimensions | 64 mm |
| Housing material | Plastic, PA12-GF30 |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, EPTR |
| Max. tightening torque of housing nut | 1 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, LifYY-11Y, PUR, 5 m |
| Core cross-section | 4 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 |

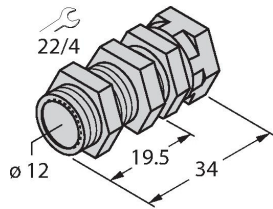
Mounting instructions

| Mounting instructions/Description | |
|-----------------------------------|------------------------|
| | Distance D |
| | 2 x B |
| | Distance W |
| | 3 x Sn |
| | Distance T |
| | 3 x B |
| | Distance S |
| | 1.5 x B |
| | Distance G |
| | 6 x Sn |
| | Diameter active area B |
| | Ø 12 mm |

Accessories

QM-12

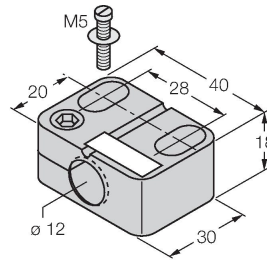
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Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-12B

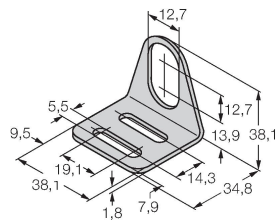
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW-12

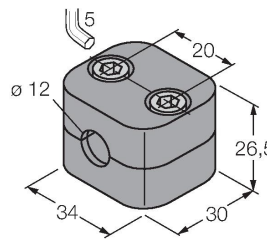
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-12

6901321



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene