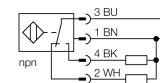




- Threaded barrel, M30 x 1.5
- Brass, PTFE-coated
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 4-wire DC, 10...65 VDC
- Changeover contact, NPN output
- Male M12 x 1

Wiring diagram



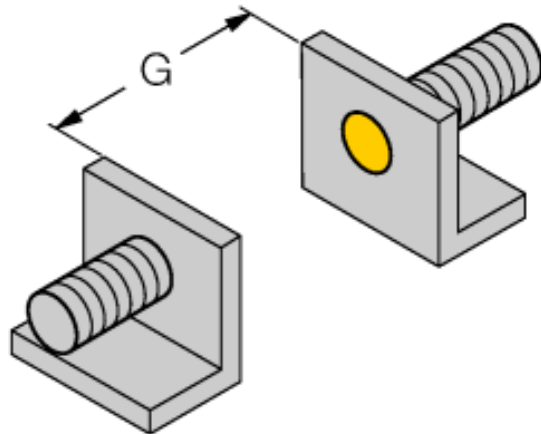
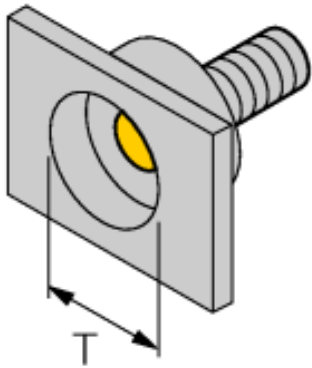
| | |
|---|---|
| Type code | BI10U-MT30-VN4X-H1141 |
| Ident no. | 1582353 |
| Rated operating distance Sn | 10 mm |
| Mounting condition | flush |
| Assured sensing range | ≤ (0,81 x Sn) mm |
| Repeatability | ≤ 2 % of full scale |
| Temperature drift | 10 % |
| | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...65VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ cyclic |
| Voltage drop at I ₀ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, changover contact, NPN |
| Protection class | □ |
| Switching frequency | 1 kHz |
| Design | threaded barrel, M30 x 1.5 |
| Dimensions | 62 mm |
| Housing material | metal, CuZn, PTFE-coated |
| Material active area | Plastic, PBT, PTFE-coated |
| Max. tightening torque housing nut | 75 Nm |
| Connection | male, M12 x 1 |
| 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 |
| Switching state | LED yellow |

Functional principle

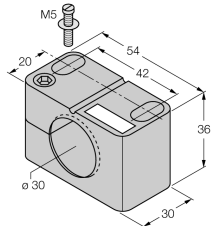
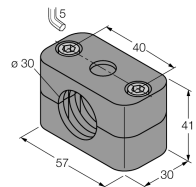
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, uprox®+ sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Inductive sensor
BI10U-MT30-VN4X-H1141

| | |
|-------------------------------|---------|
| 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 of the active area B | Ø 30 mm |



Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|---|
| BST-30B | 6947216 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 |  |
| BSS-30 | 6901319 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene |  |