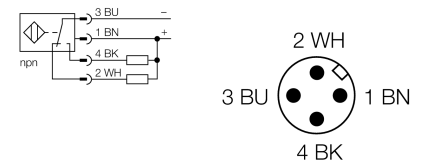


- Threaded barrel, M30 x 1.5
- Brass, PTFE-coated
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 connector

#### Wiring diagram



#### Functional principle

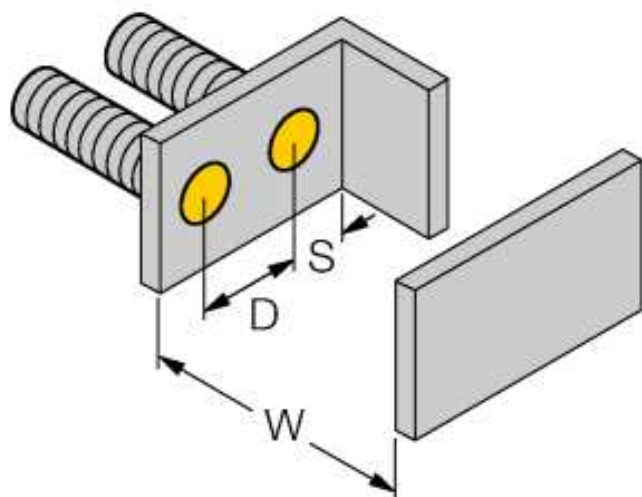
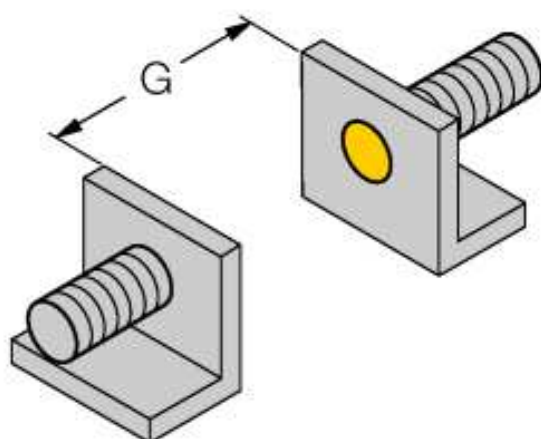
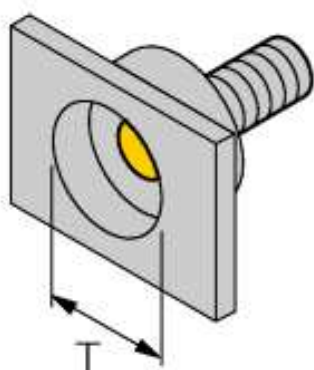
Inductive sensors detect metal objects contactless and wear-free. Due to the patented ferrite-less 3-coil system, *uprox®* factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

|                                                    |                                           |
|----------------------------------------------------|-------------------------------------------|
| <b>Type code</b>                                   | BI10U-MT30-VN4X-H1141                     |
| <b>Ident no.</b>                                   | 1582353                                   |
| <b>Rated operating distance Sn</b>                 | 10 mm                                     |
| <b>Mounting condition</b>                          | flush                                     |
| <b>Assured sensing range</b>                       | ≤ (0,81 x Sn) mm                          |
| <b>Repeatability</b>                               | ≤ 2 % of full scale                       |
| <b>Temperaturdrift</b>                             | 10 %                                      |
|                                                    | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C             |
| <b>Hysteresis</b>                                  | 3...15 %                                  |
| <b>Ambient temperature</b>                         | -30...+85 °C                              |
| <b>Operating voltage</b>                           | 10...65VDC                                |
| <b>Residual ripple</b>                             | ≤ 10 % U <sub>ss</sub>                    |
| <b>DC rated operational current</b>                | ≤ 200 mA                                  |
| <b>No-load current I<sub>0</sub></b>               | ≤ 15 mA                                   |
| <b>Residual current</b>                            | ≤ 0.1 mA                                  |
| <b>Rated insulation voltage</b>                    | ≤ 0.5 kV                                  |
| <b>Short-circuit protection</b>                    | yes/ cyclic                               |
| <b>Voltage drop at I<sub>0</sub></b>               | ≤ 1.8 V                                   |
| <b>Wire breakage / Reverse polarity protection</b> | yes/ complete                             |
| <b>Output function</b>                             | 4-wire, changover contact, NPN            |
| <b>Protection class</b>                            | □                                         |
| <b>Switching frequency</b>                         | 1 kHz                                     |
| <b>Design</b>                                      | threaded barrel, M30 x 1.5                |
| <b>Dimensions</b>                                  | 62 mm                                     |
| <b>Housing material</b>                            | Metal, CuZn, PTFE-coated                  |
| <b>Material active face</b>                        | Plastic, PBT, PTFE-coated                 |
| <b>Max. tightening torque housing nut</b>          | 75 Nm                                     |
| <b>Connection</b>                                  | male, M12 x 1                             |
| <b>Vibration resistance</b>                        | 55 Hz (1 mm)                              |
| <b>Shock resistance</b>                            | 30 g (11 ms)                              |
| <b>Protection class</b>                            | IP67                                      |
| <b>MTTF</b>                                        | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| <b>Switching state</b>                             | • yellow                                  |

|            |         |
|------------|---------|
| 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 |                   |