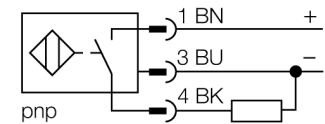


- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- Duroplast front cap, very resistant to thermal and mechanical load
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Male M12 x 1

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicore 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.

|   |   |
|---|---|
| <b>Type code</b>                            | BI5U-MT18H-AP6X-H1141                     |
| Ident no.                                   | 1635212                                   |
| <b>Rated operating distance Sn</b>          | 5 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                              |
| <b>Operating voltage</b>                    | 10...30VDC                                |
| Residual ripple                             | ≤ 10 % U <sub>ss</sub>                    |
| DC rated operational current                | ≤ 200 mA                                  |
| No-load current I <sub>0</sub>              | ≤ 15 mA                                   |
| Residual current                            | ≤ 0.1 mA                                  |
| Rated insulation voltage                    | ≤ 0.5 kV                                  |
| Short-circuit protection                    | yes/ cyclic                               |
| Voltage drop at I <sub>0</sub>              | ≤ 1.8 V                                   |
| Wire breakage / Reverse polarity protection | yes/ complete                             |
| Output function                             | 3-wire, NO contact, PNP                   |
| Protection class                            | ☐   |
| Switching frequency                         | 2.5 kHz                                   |
| <b>Design</b>                               | threaded barrel, M18 x 1                  |
| Dimensions                                  | 52 mm                                     |
| Housing material                            | metal, CuZn, PTFE-coated                  |
| Material active area                        | Plastic, Duroplast, PTFE-coated           |
| Max. tightening torque housing nut          | 15 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 |
| <b>Switching state</b>                      | LED 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                     $\varnothing$  18 mm



**Accessories**

| Type code | Ident no. | Description   | Dimension drawing |
|-----------|-----------|---|-------------------|
| BST-18B   | 6947214   | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6   |                   |
| QMT-18    | 6945104   | Quick-mount bracket with dead-stop; material: brass, PTFE-coated; male thread M24 x 1,5. Note: The switching distance of the proximity switches may reduce when using quick-mount brackets. |                   |
| BSS-18    | 6901320   | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene  |                   |