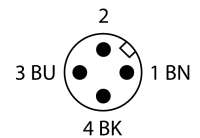
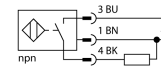


- Threaded barrel, M18 x 1
- Plastic, PBT-GF30
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

**Wiring Diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. *uprox®* Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

|   |   |
|---|---|
| <b>Type designation</b>                   | BI5U-S18-AN6X-H1141                       |
| Ident-No.                                 | 1635620                                   |
| <b>Rated switching distance Sn</b>        | 5 mm                                      |
| Mounting conditions                       | Flush                                     |
| Secured operating distance                | ≤ (0,81 x Sn) mm                          |
| Repeat accuracy                           | ≤ 2 % of full scale                       |
| Temperature drift                         | ≤ ± 10 %                                  |
| Hysteresis                                | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C             |
| Ambient temperature                       | 3...15 %<br>-30...+85 °C                  |
| <b>Operating voltage</b>                  | 10...30 VDC                               |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>                    |
| DC rated operational current              | ≤ 200 mA                                  |
| No-load current I <sub>0</sub>            | ≤ 20 mA                                   |
| Residual current                          | ≤ 0.1 mA                                  |
| Isolation test 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, NPN                   |
| Protection class                          | ☐   |
| Switching frequency                       | 2.5 kHz                                   |
| <b>Design</b>                             | Threaded barrel, M18 x 1                  |
| Dimensions                                | 52 mm                                     |
| Housing material                          | Plastic, PBT-GF30                         |
| Active area material                      | Plastic, PBT-GF30                         |
| Max. tightening torque housing nut        | 2 Nm                                      |
| Electrical connection                     | Connector, M12 x 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 |
| <b>Switching state</b>                    | LED, Yellow                               |

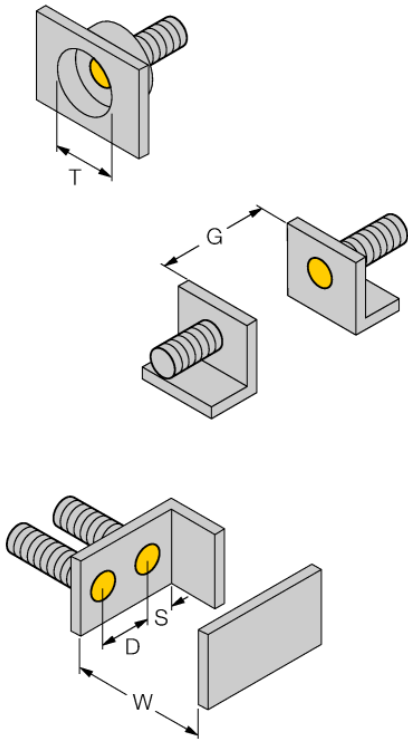
**Inductive sensor  
BI5U-S18-AN6X-H1141**

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

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|                        |         |
|------------------------|---------|
| Diameter active area B | Ø 18 mm |
|------------------------|---------|



**Accessories**

| Type code | Ident-No. | Description  |  |
|-----------|-----------|--|--|
| QM-18     | 6945102   | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. |  |
| BST-18B   | 6947214   | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6  |  |
| MW-18     | 6945004   | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)   |  |
| BSS-18    | 6901320   | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene   |  |

**Wiring accessories**

| Type code   | Ident-No. | Description  |  |
|-------------|-----------|--|--|
| RKC4T-2/TEL | 6625010   | Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |  |