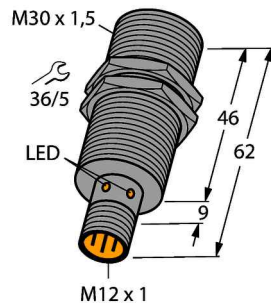


# BI15U-M30-AP6X-H1141

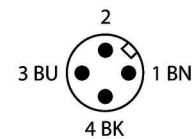
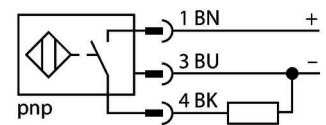
## Inductive sensor



### Features

- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

### Wiring diagram



Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup>+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

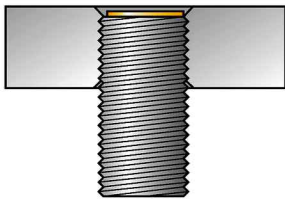
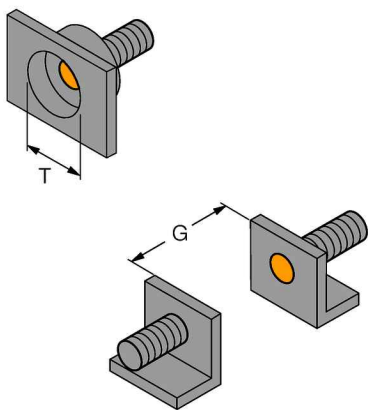
### Technical data

|                                           |                               |
|-------------------------------------------|-------------------------------|
| <b>Type</b>                               | BI15U-M30-AP6X-H1141          |
| ID number                                 | 1636732                       |
| Rated switching distance                  | 15 mm                         |
| Mounting conditions                       | Flush                         |
| Secured operating distance                | ≤ (0,81 x S <sub>n</sub> ) mm |
| Repeat accuracy                           | ≤ 2 % of full scale           |
| Temperature drift                         | ≤ ± 10 %                      |
|                                           | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C |
| Hysteresis                                | 3...15 %                      |
| Ambient temperature                       | -30...+85 °C                  |
| Operating voltage                         | 10...30 VDC                   |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>        |
| DC rated operational current              | ≤ 200 mA                      |
| No-load current                           | ≤ 20 mA                       |
| Residual current                          | ≤ 0.1 mA                      |
| Isolation test voltage                    | ≤ 0.5 kV                      |
| Short-circuit protection                  | yes / Cyclic                  |
| Voltage drop at                           | ≤ 1.8 V                       |
| Wire breakage/Reverse polarity protection | yes / Complete                |
| Output function                           | 3-wire, NO contact, PNP       |
| Protection class                          | ☐                             |
| Switching frequency                       | 1 kHz                         |
| <b>Design</b>                             | Threaded barrel, M30 × 1.5    |
| Dimensions                                | 62 mm                         |
| Housing material                          | Metal, CuZn, Chrome-plated    |
| Active area material                      | Plastic, LCP                  |
| Max. tightening torque housing nut        | 75 Nm                         |

Technical data

|                       |                                           |
|-----------------------|-------------------------------------------|
| Electrical connection | Connector, M12 × 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 |
| Switching state       | LED yellow                                |

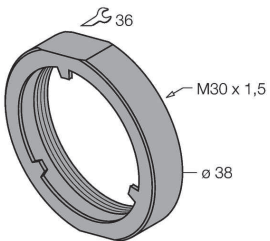
Mounting instructions/Description



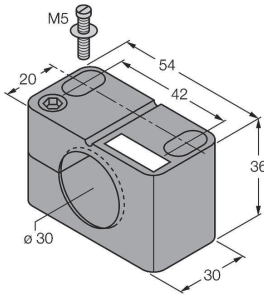
|                        |         |
|------------------------|---------|
| Distance D             | 60 mm   |
| Distance W             | 3 x Sn  |
| Distance T             | 3 x B   |
| Distance S             | 1.5 x B |
| Distance G             | 6 x Sn  |
| Diameter active area B | Ø 30 mm |

All flush mountable *uprox*®+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

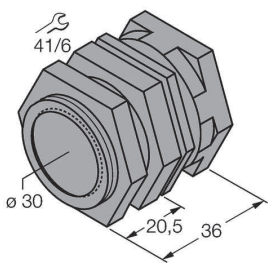
Mounting accessories



**PN-M30      6905308**  
Protective nut for M30 x 1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)

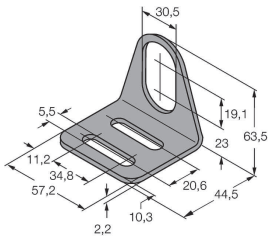


**BST-30B      6947216**  
Fixing clamp for threaded barrel devices, with dead-stop; material: PA6



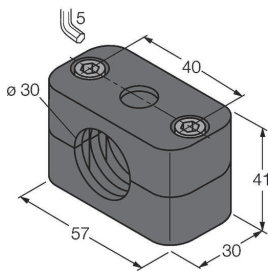
**QM-30**                      **6945103**

Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.



**MW-30**                      **6945005**

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



**BSS-30**                      **6901319**

Mounting bracket for smooth and threaded barrel devices; material: Polypropylene

Wiring accessories

| Type        | ID number |                                                                                                                                                                                                                  |
|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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> |

