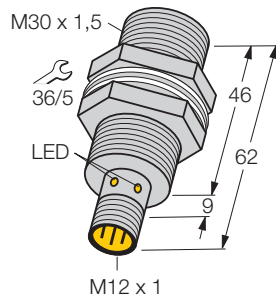


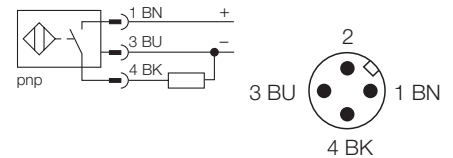
## Inductive sensor

### Bi10U-MT30-AP6X-H1141



- threaded barrel, M30 x 1,5
- teflon-coated brass
- factor 1 for all metals
- magnetic field immune
- extended temperature range
- high switching frequency
- 3-wire DC, 10...30 VDC
- normally open pnp output
- connector, M12 x 1

#### Wiring diagram



#### Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. Due to a ferrite-less 3-coil system, Uprox factor 1 sensor have distinct advantages. The detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

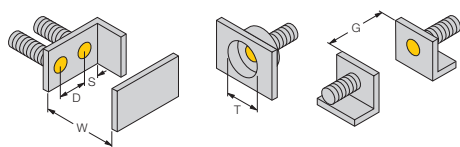
|                                                        |                                                 |
|--------------------------------------------------------|-------------------------------------------------|
| <b>Type</b>                                            | Bi10U-MT30-AP6X-H1141                           |
| Ident-No.                                              | 1636240                                         |
| <b>Rated operating distance <math>S_n</math></b>       | 10 mm                                           |
| Mounting mode                                          | flush                                           |
| Hysteresis (switching distance)                        | 3... 15 %                                       |
| Min. repeat accuracy                                   | ≤ 2 %                                           |
| Temperature drift                                      | ≤ ± 10 %                                        |
| Operating temperature                                  | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C<br>-30 ...+ 85 °C |
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 10... 30 VDC                                    |
| Max. ripple                                            | ≤ 10 % $U_{pp}$                                 |
| Rated operational current (DC) $I_e$                   | ≤ 200 mA                                        |
| No-load current $I_0$                                  | ≤ 15 mA                                         |
| Max. OFF-state current                                 | ≤ 0,1 mA                                        |
| Max. switching frequency                               | ≤ 0,25 kHz                                      |
| Rated insulation voltage                               | ≤ 0,5 kV                                        |
| Output function                                        | 3-wire, normally open, PNP                      |
| Short-circuit protection                               | yes, cyclic                                     |
| Max. voltage drop at $I_e$                             | ≤ 1,8 V                                         |
| Wire breakage / reverse polarity protection            | yes / complete                                  |
| Protection class                                       | □                                               |
| <b>Housing style</b>                                   | threaded barrel; M30 x 1,5                      |
| Dimensions                                             | 62 mm                                           |
| Housing material                                       | metal, CuZn, teflon-coated                      |
| Active face                                            | plastic, PBT                                    |
| Max. fixing torque of coupling nut                     | 90 Nm                                           |
| Wiring                                                 | connector, M12 x 1                              |
| Vibration resistance                                   | 55 Hz (1 mm)                                    |
| Shock resistance                                       | 30 x g (11 ms)                                  |
| Degree of protection                                   | IP67                                            |
| <b>Switching status indication</b>                     | LED yellow                                      |

**Inductive sensor****Bi10U-MT30-AP6X-H1141****Mounting instructions**

|       | minimum gap |
|-------|-------------|
| Gap D | 2 x B       |
| Gap W | 3 x Sn      |
| Gap T | 3 x B       |
| Gap S | 1,5 x B     |
| Gap G | 6 x Sn      |

**Diameter of active face B**

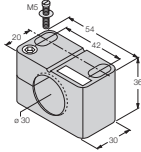
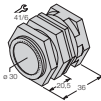
Ø 30 mm



**Inductive sensor**

**Bi10U-MT30-AP6X-H1141**

**Accessories**

| Typ     | Ident-No. | Description                                                                                       | Dimension drawing                                                                                                                                                       |
|---------|-----------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BST-30B | 6947216   | fixing clamp with dead-stop; material: PA6                                                        |   |
| QMT-30  | 6945105   | quick-mount fixing clamp with dead-stop; material: teflon-coated brass external thread M36 x 1,5. |                                                                                                                                                                         |