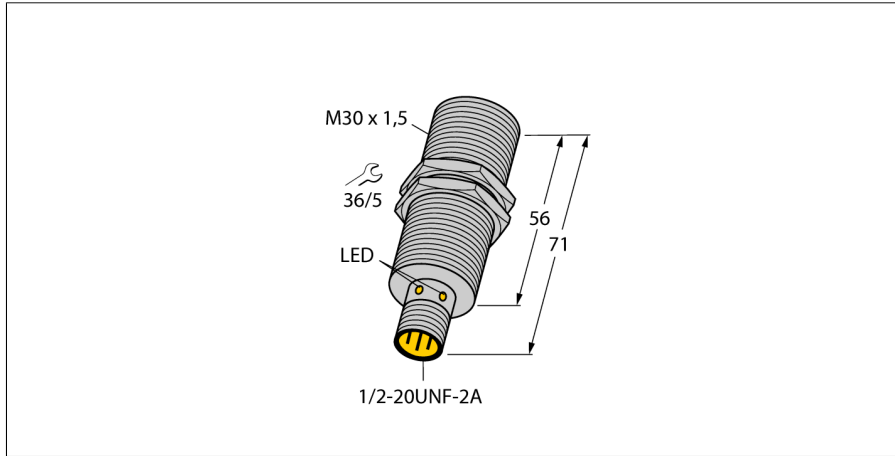


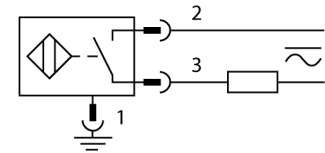
**Inductive sensor
BI10U-G30-ADZ30X2-B3131**

Industrial
Automation



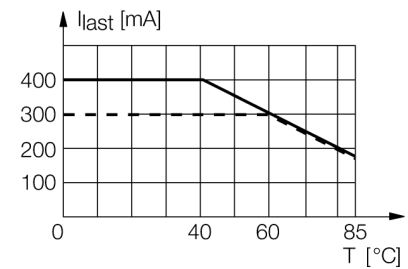
- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- NO contact
- Male 1/2"

Wiring diagram



Functional principle

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



| | |
|---|---|
| Type code | BI10U-G30-ADZ30X2-B3131 |
| Ident no. | 4281613 |
| Rated operating distance Sn | 10 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 |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | ≥ 50...≤ 60 Hz |
| Residual current | ≤ 1.7 mA |
| Rated insulation voltage | ≤ 1.5 kV |
| Surge current | ≤ 3 A (≤ 20 ms max. 5 Hz) |
| Short-circuit protection | yes/ latching |
| Voltage drop at I _n | ≤ 6 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 2-wire, NO contact |
| Smallest operating current I _m | ≤ 3 mA |
| Switching frequency | 0.02 kHz |
| Design | threaded barrel, M30 x 1.5 |
| Dimensions | 71 mm |
| Housing material | metal, CuZn, chrome-plated |
| Material active area | Plastic, PBT |
| Max. tightening torque housing nut | 75 Nm |
| Connection | male, 1/2" |
| 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 |
| Power-on indication | LED green |
| Switching state | LED yellow |

**Inductive sensor
BI10U-G30-ADZ30X2-B3131**

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