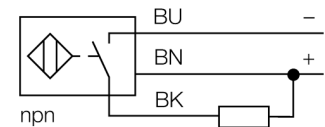


- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4404
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- High switching frequency
- Recessed mountable
- 3-wire DC, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



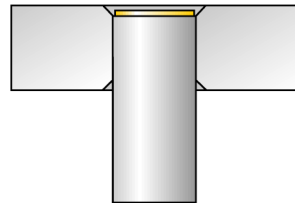
Functional principle

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

| | |
|---|---|
| Type code | BI2U-EH6,5-AN6X |
| Ident no. | 4281170 |
| Rated operating distance Sn | 2 mm |
| Mounting condition | flush |
| Assured sensing range | ≤ (0,81 x Sn) mm |
| Repeatability | ≤ 2 % of full scale |
| Temperature drift | 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | ≤ 10 % U _s |
| DC rated operational current | ≤ 150 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ cyclic |
| Voltage drop at I ₀ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 3-wire, NO contact, NPN |
| Protection class | □ |
| Switching frequency | 2 kHz |
| Design | smooth barrel, 6.5 mm |
| Dimensions | 42 mm |
| Housing material | metal, V2A (1.4301) |
| Material active area | Plastic, PA |
| End cap | Plastic, PP |
| Connection | cable |
| Cable quality | 4 mm, LifYY-11Y, PUR, 2 m |
| Cable cross section | 3 x 0.25 mm ² |
| 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 |

| | |
|------------|-------|
| Distance D | 13 mm |
| Distance W | 6 mm |
| Distance T | 20 mm |
| Distance S | 10 mm |
| Distance G | 12 mm |

Diameter of the active area B \varnothing 6.5 mm



Flush and recessed mounting of all *uprox[®]+* threaded barrel sensors. Safe operation is ensured if the sensor is screwed in 0.5 mm.