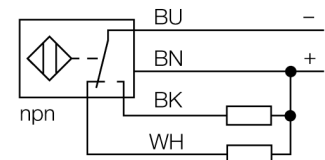


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- Recessed mountable
- 4-wire DC, 10...55 VDC
- Changeover contact, NPN output
- Cable connection

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 | BI8U-M18M-VN44X |
| Ident no. | 1634880 |
| Rated operating distance Sn | 8 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 | 10...55VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 20 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 | 4-wire, changover contact, NPN |
| Protection class | ☐ |
| Switching frequency | 1.5 kHz |
| Design | threaded barrel, M18 x 1 |
| Dimensions | 64 mm |
| Housing material | metal, CuZn, chrome-plated |
| Material active area | Plastic, LCP |
| End cap | Plastic, EPTR |
| Max. tightening torque housing nut | 25 Nm |
| Connection | cable |
| Cable quality | 5.2 mm, LifYY, PVC, 2 m |
| Cable cross section | 4 x 0.34 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 | 36 mm |
| Distance W | 24 mm |
| Distance T | 54 mm |
| Distance S | 27 mm |
| Distance G | 48 mm |

Diameter of the active area B \varnothing 18 mm



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

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|-------------------|
| PN-M18 | 6905310 | Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303) | |
| 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 | |