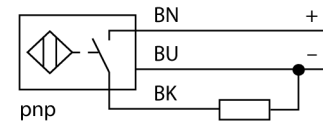


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- Integrated protection against pre-attenuation
- Little metal-free spaces
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

| | |
|---|---|
| Type code | NI15U-M18-AP6X |
| Ident no. | 1635330 |
| Rated operating distance Sn | 15 mm |
| Mounting condition | non-flush |
| Assured sensing range | $\leq (0,81 \times S_n)$ mm |
| Repeatability | $\leq 2\%$ of full scale |
| Temperature drift | 10 % |
| | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | $\leq 10\%$ U_{ss} |
| DC rated operational current | ≤ 200 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, PNP |
| Protection class | ☐ |
| Switching frequency | 1.5 kHz |
| Design | threaded barrel, M18 x 1 |
| Dimensions | 54 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 | 3 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 |

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.

| | |
|------------|-------|
| Distance D | 72 mm |
| Distance W | 45 mm |
| Distance T | 54 mm |
| Distance S | 27 mm |
| Distance G | 90 mm |
| Distance N | 20 mm |

Diameter of the active area B \varnothing 18 mm



All non-flush mountable *uprox⁺* threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 70 mm must be observed.

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|-------------------|
| BST-18B | 6947214 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 | |
| QM-18 | 6945102 | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. | |
| 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 | |