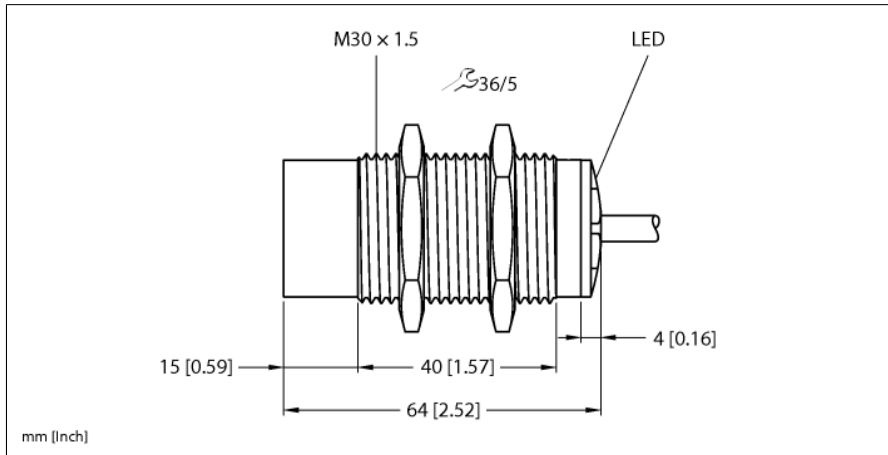


Inductive Sensor

Ni15U-M30-AD4X



| | |
|------|----------------|
| Type | Ni15U-M30-AD4X |
| ID | 4405076 |

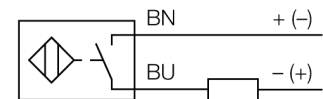
| General data | |
|--------------------------------|---|
| Rated switching distance S_n | 15 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...20 % |

| Electrical data | |
|----------------------------------|----------------------------|
| Operating voltage U_o | 10...65 VDC |
| Ripple U_r | $\leq 10\%$ U_{Bmax} |
| DC rated operating current I_o | ≤ 100 mA |
| Residual current | ≤ 0.8 mA |
| Isolation test voltage | 0.5 kV |
| Short-circuit protection | yes/Cyclic |
| Voltage drop at I_o | ≤ 5 V |
| Output function | 2-wire, NO contact, 2-wire |
| DC field stability | 300 mT |
| AC field stability | 300 mT _{ss} |
| Smallest operating current I_m | ≥ 3 mA |
| Switching frequency | 0.01 kHz |

| Mechanical data | |
|---------------------------------------|---------------------------------------|
| Design | Threaded barrel, M30 x 1.5 |
| Dimensions | 64 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, LCP |
| End cap | Plastic, EPTR |
| Max. tightening torque of housing nut | 75 Nm |
| Electrical connection | Cable |
| Cable quality | $\varnothing 5.2$ mm, LifYY, PVC, 2 m |
| Core cross-section | 2×0.34 mm ² |

- M30 × 1.5 threaded tube
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- Cable connection

Wiring Diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

| | |
|--------------------------|---|
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| 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 |

Accessories

| Type code | Ident no. | | Dimension drawing |
|----------------|-----------|--|-------------------|
| BST-30B | 6947216 | Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6 | |
| QM-30 | 6945103 | Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets. | |
| MW-30 | 6945005 | Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304) | |
| BSS-30 | 6901319 | Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene | |
| BL20-4DI-NAMUR | 6827212 | 4 digital inputs acc. to EN 60947-5-6 For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors. | |