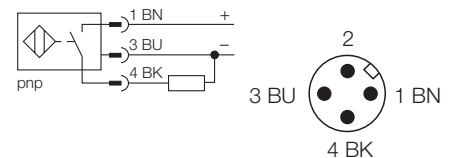


- threaded barrel, M30 x 1.5
- Chrome-plated brass
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

Wiring diagram



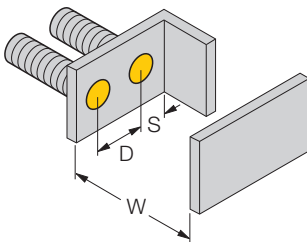
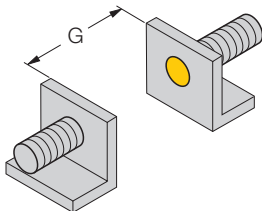
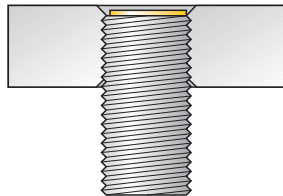
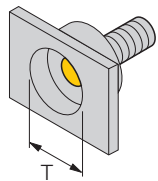
Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. uprox+ sensors have considerable advantages due to their patented multi-coil system. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardisation.

| | |
|---|---|
| Type | Bi15U-M30-AP6X-H1141 |
| Ident-No. | 1636732 |
| Rated operating distance Sn | 15 mm |
| Mounting condition | flush |
| Assured sensing range | $\leq (0,81 \times S_n)$ mm |
| Repeatability | $\leq 2\%$ |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Ambient temperature | -30...+ 85 °C |
| Operating voltage | 10... 30VDC |
| Residual ripple | $\leq 10\% U_{SS}$ |
| DC rated operational current | $\leq 200\text{ mA}$ |
| No-load current I_0 | $\leq 15\text{ mA}$ |
| Residual current | $\leq 0.1\text{ mA}$ |
| Rated insulation voltage | $\leq 0.5\text{ kV}$ |
| Short-circuit protection | yes / cyclic |
| Voltage drop at I_e | $\leq 1.8\text{ V}$ |
| Wire breakage / Reverse polarity protection | yes / complete |
| Output function | 3-wire, normally open, pnp |
| Insulation class | □ |
| Switching frequency | $\leq 0.75\text{ kHz}$ |
| Housing | threaded barrel, M30 x 1.5 |
| Dimensions | 62 mm |
| Housing material | metal, CuZn, chrome-plated |
| Material active face | plastic, LCP-GF30 |
| Tightening torque of housing nut | 75 Nm |
| Connection | Connectors, M12 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30g (11 ms) |
| Degree of protection | IP68 |
| Display switch state | LED yellow |

| Mounting instructions | minimum distances |
|-----------------------|-------------------|
| Distance D | 60 mm |
| Distance W | 45 mm |
| Distance T | 90 mm |
| Distance S | 45 mm |
| Distance G | 90 mm |

Diameter of the active area B Ø 30 mm



All flush mountable uprox+ threaded barrel switches allow recessed mounting. Safe operation is ensured if the sensor is recessed mounted by half a turn of the thread.

Accessories

| Type code | Ident-No. | Short text | Dimension drawing |
|-----------|-----------|--|-------------------|
| PN-M30 | 6905308 | Screw cap; material: Stainless steel A2 1.4305 (AISI 303) | |
| BST-30B | 6947216 | fixing clamp with dead-stop; material: PA6 | |
| QM-30 | 6945103 | quick-mount fixing clamp 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 mounting brackets. | |
| MW-30 | 6945005 | mounting bracket; material: stainless steel A2 1.4301 (AISI 304) | |
| BSS-30 | 6901319 | fixing clamp; material: polypropylene | |