

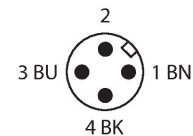
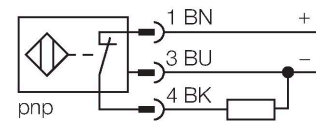
BI8U-MT18-RP6X-H1143

Inductive sensor

Features

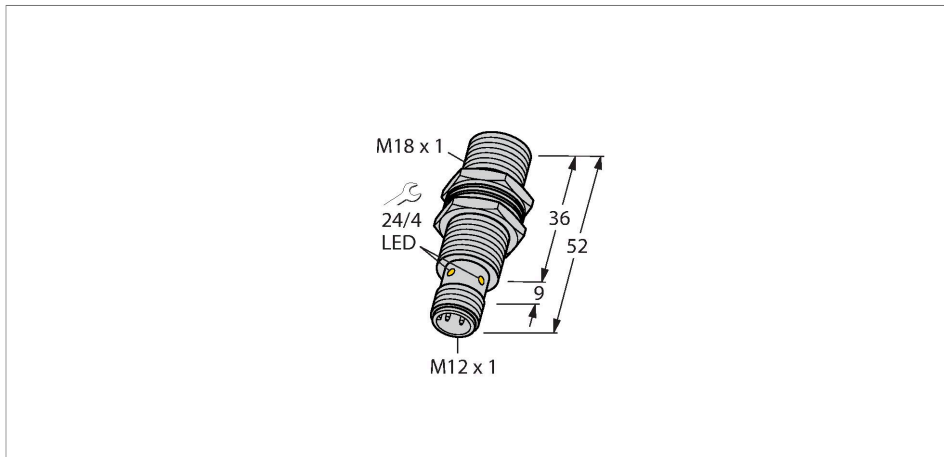
- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NC contact, PNP output
- M12 x 1 male connector

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.



Technical data

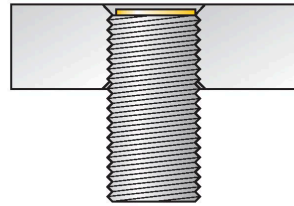
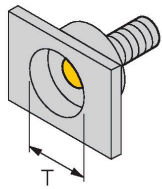
Type	BI8U-MT18-RP6X-H1143
Ident. no.	1644770
Rated switching distance	8 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x S _n) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I _e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NC contact, PNP
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP, PTFE-coated

Technical data

Max. tightening torque housing nut	15 Nm
Electrical connection	Connector, M12 × 1
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

Mounting instructions

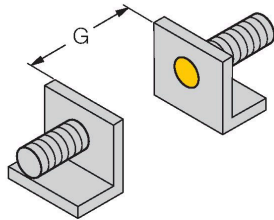
Mounting instructions/Description



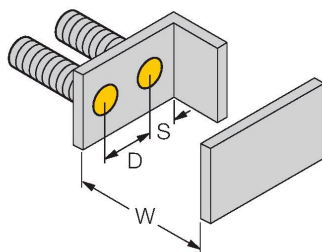
Distance D 36 mm

Distance T 3 x B

Diameter active area Ø 18 mm
B



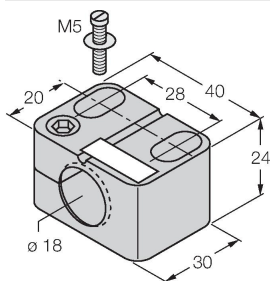
All flush mountable *uprox*[®]+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.



Accessories

BST-18B

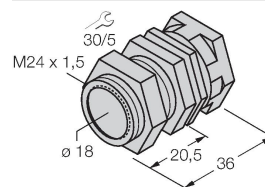
6947214



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QMT-18

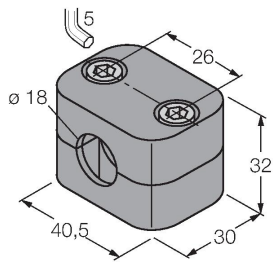
6945104



Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BSS-18

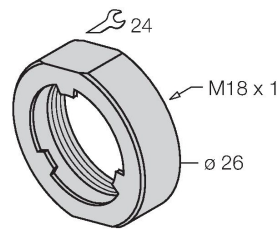
6901320



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

PN-M18

6905310



Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)