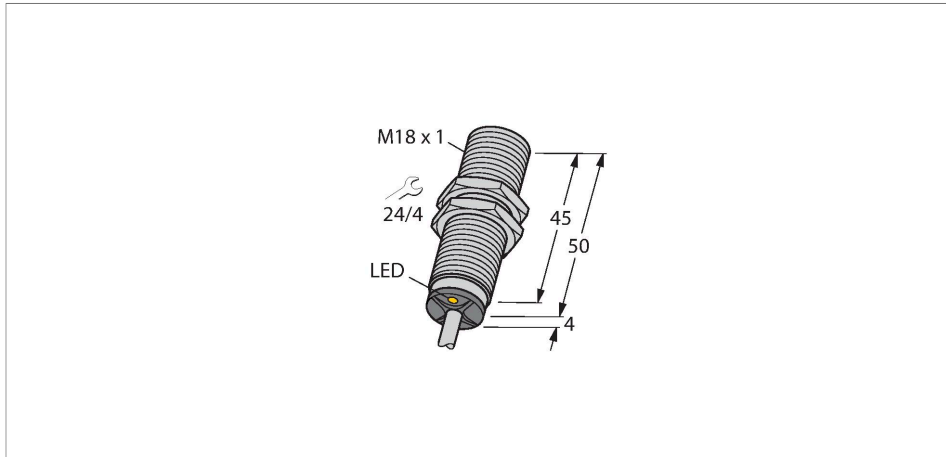


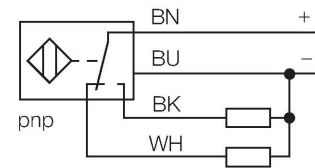
BI10U-M18-VP6X Inductive Sensor



Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. *uprox*^{®3} sensors have significant advantages due to their patented ferrite-coreless multicore system. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

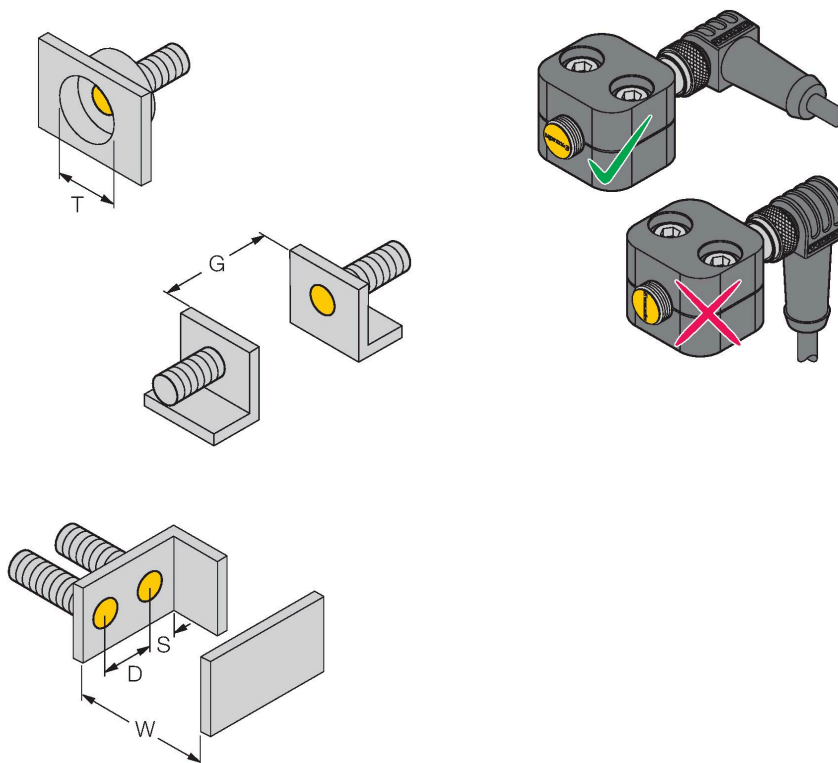
Type	BI10U-M18-VP6X
Ident. no.	1644842
Rated switching distance	10 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 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	4-wire, Complementary contact, PNP
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 × 1
Dimensions	54 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP

Technical data

End cap	Plastic, EPTR
Max. tightening torque housing nut	10 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, Gray, LifYY, PVC, 2 m
Core 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

Mounting instructions

Mounting instructions/Description



Distance D	36 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 18 mm

Accessories

BST-18B

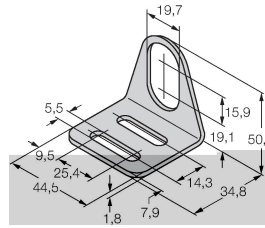
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW18

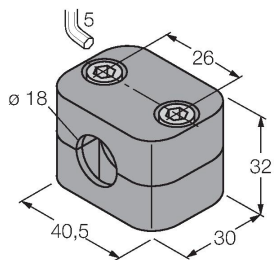
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-18

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