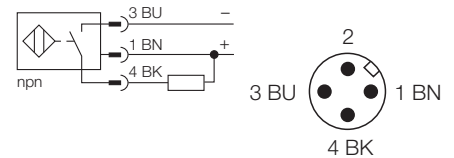


- threaded barrel, M12 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Magnetic field immune
- Extended temperature range
- High switching frequency
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M12 x 1

Wiring diagram



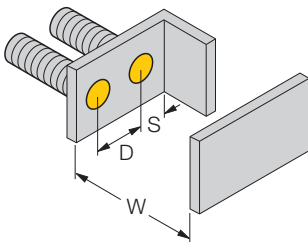
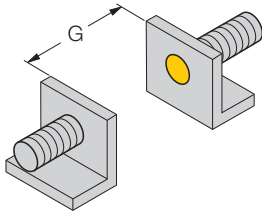
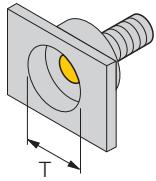
Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.


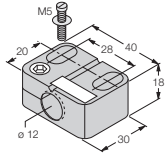
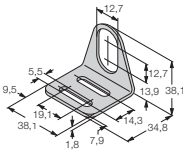
Type	BI3U-M12-AN6X-H1141
Ident-No.	1634150
Rated operating distance Sn	3 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	-30...+ 85 °C
Operating voltage	10... 30 VDC
Residual ripple	≤ 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 _e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, NO contact, NPN
Protection class	☐
Switching frequency	≤ 3kHz
Housing	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	metal, CuZn, chrome-plated
Material active face	Plastic, LCP-GF30
Tightening torque of housing nut	10 Nm
Electrical connection	Connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection class	IP67
Display switch state	LED yellow

Mounting instructions	minimum distances
Distance D	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm

Diameter of the active area B	Ø 12 mm
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Accessories

Type code	Ident-No.	Short text	Dimension drawing
QM-12	6945101	Quick-mount fixing clamp with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	
BST-12B	6947212	Fixing clamp with dead-stop; material: PA6	
MW-12	6945003	Mounting bracket; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Fixing clamp; material: Polypropylene	