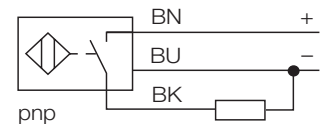


- threaded barrel, M12 x 1
- Chrome-plated brass
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

Wiring diagram



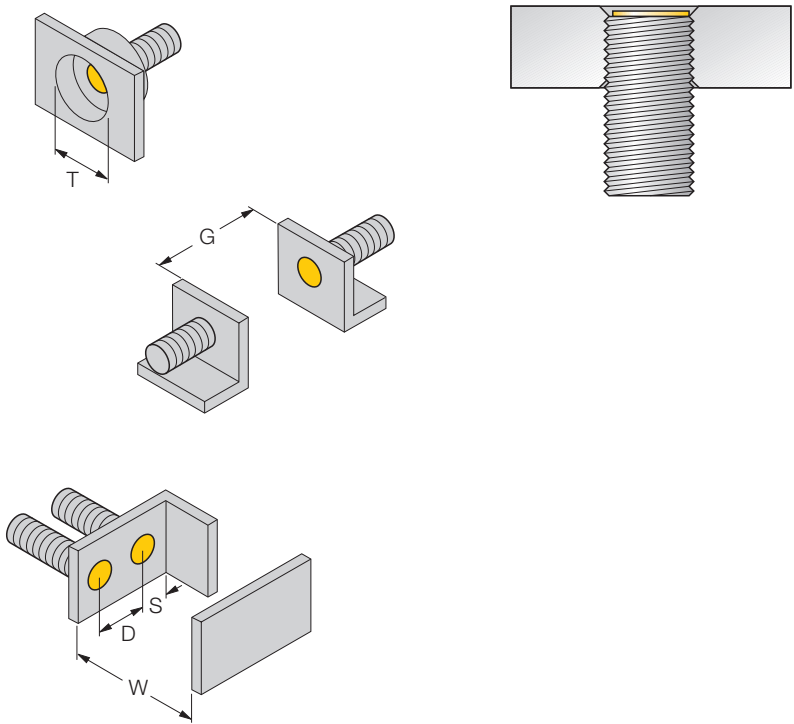
Functional principle

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	Bi4U-M12-AP6X
Ident-No.	1634803
Rated operating distance Sn	4 mm
Mounting condition	flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3... 15 %
	-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 dip at I _e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
Housing	threaded barrel, M12 x 1
Dimensions	54 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, LCP-GF30
End cap	plastic, EPTR
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	3 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
Display switch state	LED yellow



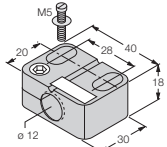
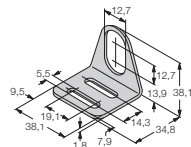
Mounting instructions	minimum distances
Distance D	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm

Diameter of the active area B	Ø 12 mm
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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-M12	6905309	Screw cap; material: Stainless steel A2 1.4305 (AISI 303)	
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	