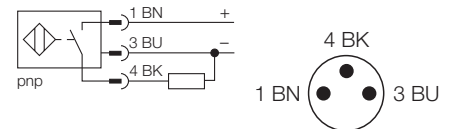


- threaded barrel, M12 x 1
- Chrome-plated brass
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M8 x 1

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.

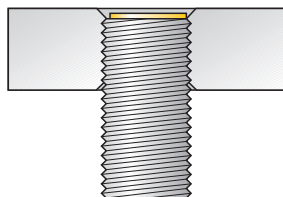
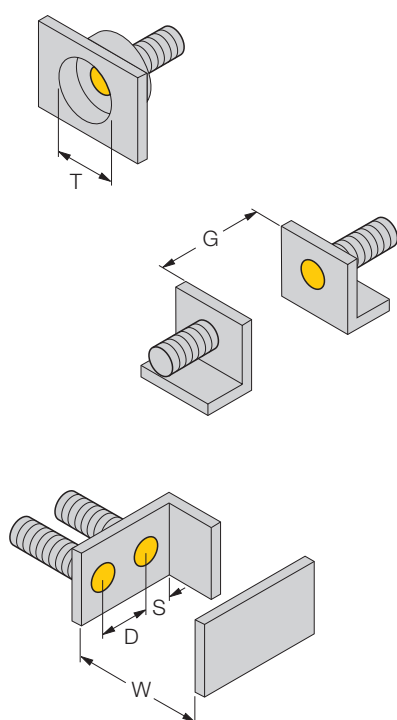
Type	Bi4U-M12-AP6X-V1131
Ident-No.	1634780
Rated operating distance Sn	4 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$
Hysteresis	3... 15 %
Ambient temperature	-30...+ 85 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10 \%$ 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, normally open, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
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
Connection	Connectors, M8 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	24 mm
Distance W	12 mm
Distance T	36 mm
Distance S	18 mm
Distance G	24 mm


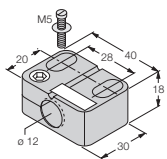
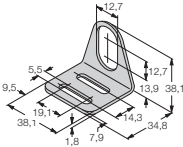

Diameter of the active area B

Ø 12 mm



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
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	
PN-M12	6905309	Screw cap; material: Stainless steel A2 1.4305 (AISI 303)	