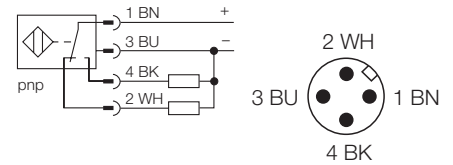


- threaded barrel, M12 x 1
- Chrome-plated brass
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 4-wire DC, 10...55 VDC
- change-over, pnp output
- connector, M12 x 1

**Wiring diagram**



**Functional principle**

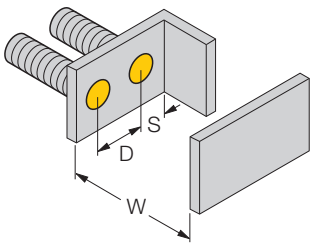
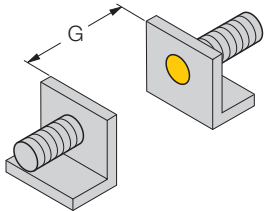
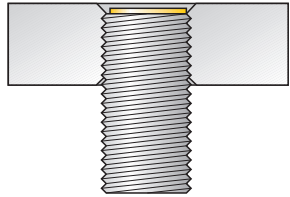
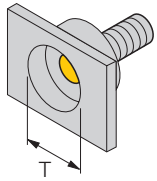
Inductive sensors are designed for wear-free and non-contact detection of metal objects. uprox+ sensors have considerable advantages due to their patented multi-coil system. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardisation.

<b>Type</b>	Bi4U-M12-VP44X-H1141 L80
Ident-No.	1634918
<b>Rated operating distance Sn</b>	4 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
<b>Operating voltage</b>	10... 55VDC
Residual ripple	≤ 10 % U <sub>SS</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	4-wire, change-over, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
<b>Housing</b>	threaded barrel, M12 x 1
Dimensions	80 mm
Housing material	metal, CuZn, chrome-plated
Material active face	plastic, LCP-GF30
Tightening torque of housing nut	10 Nm
Connection	connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
<b>Display switch state</b>	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)	