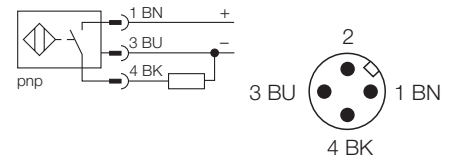


- Threaded barrel, M18 x 1
- Chrome-plated brass
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

**Wiring diagram**



**Functional principle**

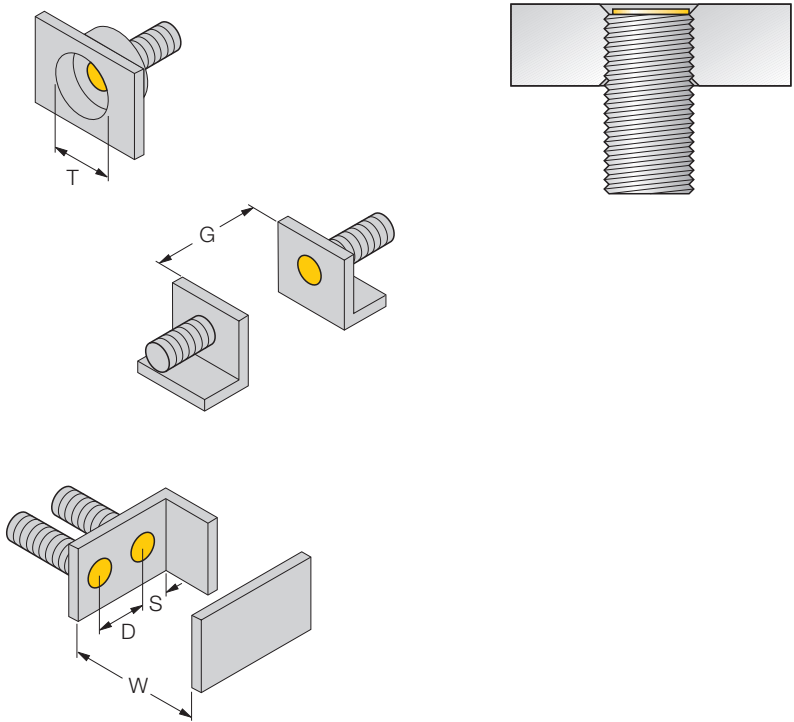
Inductive sensors are designed for wear-free and non-contact detection of metal objects. uprox+ sensors have considerable advantages due to their patented multi-coil system. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardisation.

<b>Type</b>	Bi8U-M18-AP6X-H1141
Ident-No.	1644731
<b>Rated operating distance Sn</b>	8 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
<b>Operating voltage</b>	10... 30 VDC
Residual ripple	≤ 10 % U <sub>SS</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage dip at I <sub>e</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 1.5 kHz
<b>Housing</b>	threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, LCP-GF30
Tightening torque of housing nut	25 Nm
Connection	Connector, 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	36 mm
Distance W	24 mm
Distance T	54 mm
Distance S	27 mm
Distance G	48 mm

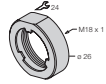
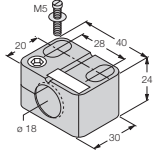
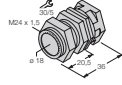
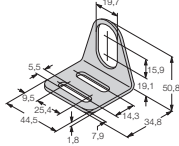
---

<b>Diameter of the active area B</b>	Ø 18 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
PN-M18	6905310	Screw cap; material: Stainless steel A2 1.4305 (AISI 303)	
BST-18B	6947214	fixing clamp with dead-stop; material: PA6	
QM-18	6945102	quick-mount fixing clamp with dead-stop; material: chrome-plated brass male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	
MW-18	6945004	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	fixing clamp; material: polypropylene	