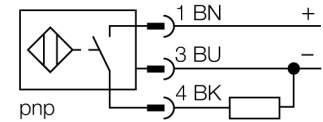


- Threaded barrel, M18 x 1
- Long version
- Brass, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- Recessed mountable
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Male M12 x 1

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

<b>Type code</b>	BI8U-MT18E-AP6X-H1141
Ident no.	1644752
<b>Rated operating distance Sn</b>	8 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2\%$ of full scale
Temperature drift	10 %
	$\leq \pm 15\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	$\leq 10\%$ $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Rated insulation voltage	$\leq 0.5$ kV
Short-circuit protection	yes/ cyclic
Voltage drop at $I_0$	$\leq 1.8$ V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	1.5 kHz
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	72 mm
Housing material	metal, CuZn, PTFE-coated
Material active area	Plastic, LCP, PTFE-coated
Max. tightening torque housing nut	15 Nm
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Switching state</b>	LED yellow

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Distance D	36 mm
Distance W	24 mm
Distance T	54 mm
Distance S	27 mm
Distance G	48 mm

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Diameter of the active area B                     $\varnothing$  18 mm



Flush and recessed mounting of all *uprox<sup>®</sup>+* threaded barrel sensors. Safe operation is ensured if the sensor is screwed in by half a turn.

### Accessories

Type code	Ident no.	Description	Dimension drawing
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QMT-18	6945104	Quick-mount bracket with dead-stop; material: brass, PTFE-coated; male thread M24 x 1,5. Note: The switching distance of the proximity switches may reduce when using quick-mount brackets.	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	