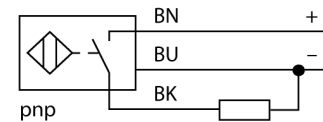


- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

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.

Type designation	BI8U-M18-AP6X
Ident no.	1644733
Rated switching distance S_n	8 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Ambient temperature	$-30\text{...}+85\text{ °C}$
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\%$ U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Reverse polarity protection	Complete
Protection class	☐
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 x 1
Dimensions	54 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	5.2 mm, LifYY, PVC, 2m
Cable cross section	$3 \times 0.34\text{ mm}^2$
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
Switching state	LED yellow

Accessories

Type code	Ident no.	Description	
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket 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-mount brackets.	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	