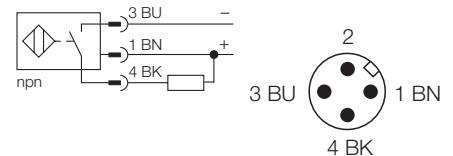


- Threaded barrel, M18 x 1
- stainless steel, 1.4301
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- high switching distance
- recessed mounting possible
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M12 x 1

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.

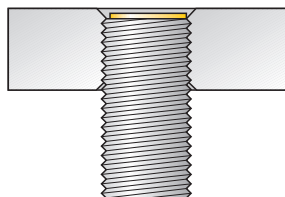
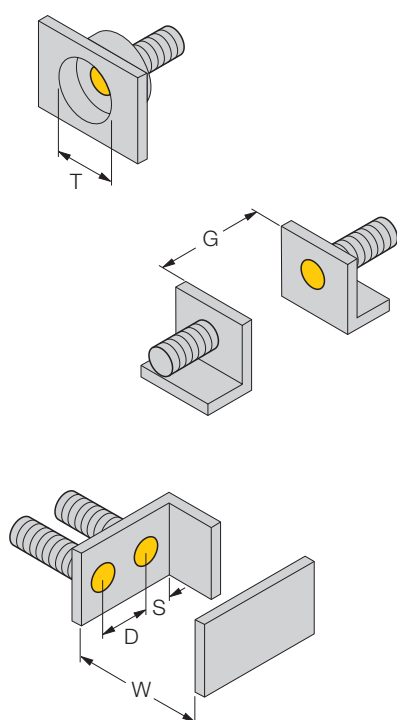
Type	Bi8U-EM18-AN6X-H1141
Ident-No.	1644738
Rated operating distance Sn	8 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n) \text{ mm}$
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Hysteresis	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$
Ambient temperature	$-30...+85^\circ\text{C}$
Operating voltage	10... 30VDC
Residual ripple	$\leq 10 \% U_{ss}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Rated insulation voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / cyclic
Voltage drop at I_e	$\leq 1.8 \text{ V}$
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, npn
Switching frequency	$\leq 1.5 \text{ kHz}$
Housing	threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	metal, AISI 304
Material active face	plastic, LCP-GF30
Tightening torque of housing nut	25 Nm
Connection	Connectors, M12 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	36 mm
Distance W	24 mm
Distance T	54 mm
Distance S	27 mm
Distance G	48 mm

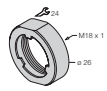
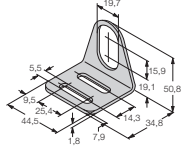
Diameter of the active area B

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)	
MW-18	6945004	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	fixing clamp; material: polypropylene	