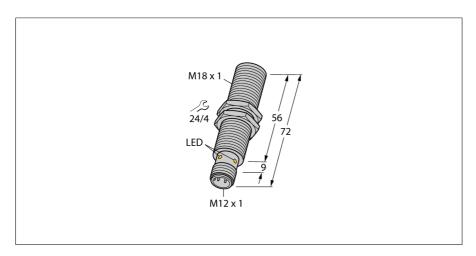


## Inductive sensor BI8U-EM18E-AP6X-H1141





Type designation	BI8U-EM18E-AP6X-H1141 1634865	
Ident-No.		
Rated switching distance Sn	8 mm	
Mounting conditions	Flush	
Secured operating distance	≤ (0,81 x Sn) mm	
Repeat accuracy	≤ 2 % of full scale	
Temperature drift	≤ ± 10 %	
	$\leq$ ± 15 %, $\leq$ -25 °C v $\geq$ +70 °C	
Hysteresis	315 %	

Ambient temperature	-30+85 °C	
Operating voltage	1030 VDC	
Residual ripple	≤ 10 % U₅s	
DC rated operational current	≤ 200 mA	
No-load current I₀	≤ 20 mA	
Residual current	≤ 0.1 mA	
Isolation test voltage	≤ 0.5 kV	
Short-circuit protection	yes/ Cyclic	
Voltage drop at I <sub>e</sub>	≤ 1.8 V	
Wire breakage/Reverse polarity protection	yes/ Complete	
Output function	3-wire, NO contact, PNP	
Switching frequency	1.5 kHz	

3 - 4 - 5	
Design	Threaded barrel,M18 × 1
Dimensions	72 mm
Housing material	Stainless steel, V2A (1.4301)
Active area material	Plastic, LCP
Max. tightening torque housing nut	25 Nm
Electrical connection	Connector, M12 × 1

 Vibration resistance
 55 Hz (1 mm)

 Shock resistance
 30 g (11 ms)

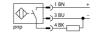
 Protection class
 IP68

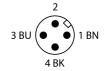
 MTTF
 874 years acc. to SN 29500 (Ed. 99) 40 °C

Switching state LED,Yellow

- Threaded barrel, M18 x 1
- Stainless steel, 1.4301
- 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
- M12 x 1 male connector

#### Wiring Diagram





#### **Functional principle**

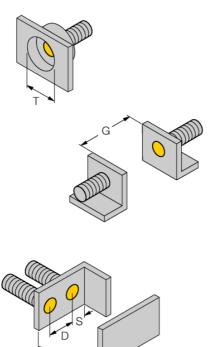
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*®+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

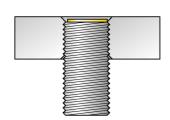


# Inductive sensor BI8U-EM18E-AP6X-H1141



Distance D	36 mm	
Distance W	3 x Sn	
Distance T	3 x B	
Distance S	1.5 x B	
Distance G	6 x Sn	
Diameter active area B	Ø 18 mm	





All flush mountable *uprox*®+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.





### **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)	S 24 M18 x 1 − a 26
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.	M24 x 1,5
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	M5 28 40 24 24 24
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	19.7 15.9 19.1 50.8 44.6 1,8 7.9
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	0 18 32 40.5 30