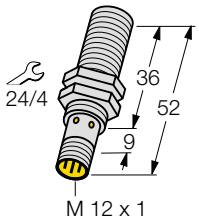
Inductive Sensor uprox®

Bi5U-EM18H-AP6X-H1141

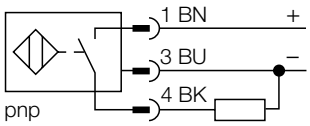


- **Threaded barrel, M18x1**
- **Stainless steel**
- **Duroplast front cap, high mechanical and thermical resistance**
- **Factor 1 for all metals**
- **Degree of protection IP68**
- **Magnetic field immune**
- **Increased temperature range**
- **High switching frequency**

Type	Bi5U-EM18H-AP6X-H1141
Ident-No.	1635112
Rated operating distance Sn	5,0 mm
Mounting mode	flush
Hysteresis H	3...15 %
Max. relative temperature drift	≤ 15 % v.E
Min. repeat accuracy	≤ 2 % v.E
Operation temperature	-30...85 °C
Rated operational voltage (DC) U_e	10...30 VDC
Max. ripple	≤ 10 % U_{ss}
Rated operational current (DC) I_e	200 mA
No-load current I_0	≤ 15,0 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 2,5 kHz
Rated insulation voltage	0,5 kV
Output function	normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	≤ 1,8 V
Wire brakage and reverse polarity protection	yes, complete
Degree of protection / protection class	IP 68
Housing style	threaded barrel; EM18H
Housing diameter	18,0 mm
Dimensions	52,0 mm
Housing material	stainless steel; V2A 1.4301
Active face	plastic; Duroplast
Max. fixing torque of coupling nut	≤ 25,0 Nm
Wiring	connector; M12x1 eurocon
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Switching status indication	LED; yellow

3-wire DC, 10-30VDC
Normally open, PNP-output
Connector, M12x1 eurocon

Wiring diagram



Function principles

Inductive sensors serve for wear-free and non contact detection of metal objects. Uprox Factor 1-sensors have considerable advantages because of their patented ferrite-less 3-coil system. They detect all metals with the same operating distance, are magnetic field immune and have high operating distances.

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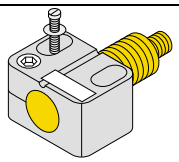
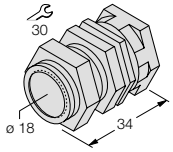
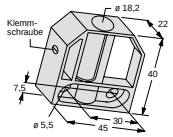
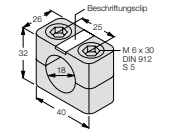
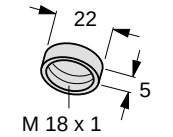
Mounting accessories

Typ	Ident-No.	Text	Dimension drawing
BST-18B	6947214	Fixing clamps; Material: PA6	
QM-18	6945102	Fixing clamps; Material: chrome-plated brass	
BS18	69471	Fixing clamps; Material: PA66-GF	
BSN18	69472	Fixing clamps; Material: PA66-GF	
SKN/M18	69663	Protective teflon caps; Material PTFE; For use in welding facilities and grinding machines with strong sparking	

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