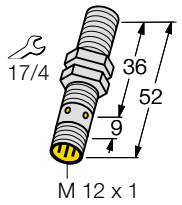
Inductive Sensor uprox®

Bi3U-EM12H-AP6X-H1141

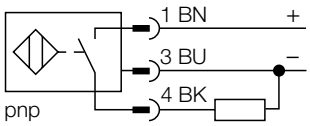


- **Threaded barrel, M12x1**
- **Stainless steel**
- **Duroplast front cap, high mechnaical and thermical resistance**
- **Factor 1 for all metals**
- **Degree of protection IP68**
- **Magnetic field immune**
- **Increased temperature range**
- **High switching frequency**

Type	Bi3U-EM12H-AP6X-H1141
Ident-No.	1634312
Rated operating distance Sn	3,0 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	≤ 3,0 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; 2
Housing style	threaded barrel; EM12H
Housing diameter	12,0 mm
Dimensions	52,0 mm
Housing material	stainless steel; V2A 1.4301
Active face	plastic; Duroplast
Max. fixing torque of coupling nut	≤ 10,0 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

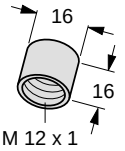
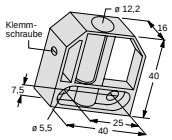
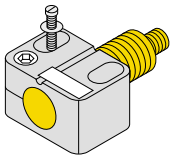
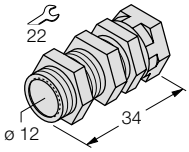
Inductive sensors serve for wear-free and non contact detection of metal objects. Uprox Factor 1-sensors have considerable advantages because of their patented ferrite-less 3-coil system. They detect all metals with the same operating distance, are magnetic field immune and have high operating distances.

Hans Turck GmbH & Co. KG Postfach • D–45466 Mülheim an der Ruhr • Telefon 02 08/49 52-0 • Telefax 02 08/49 52-264

Inductive Sensor uprox®

Bi3U-EM12H-AP6X-H1141

Mounting accessories

Typ	Ident-No.	Text	Dimension drawing
SKN/M12	69662	Protective teflon caps; Material PTFE; For use in welding facilities and grinding machines with strong sparking	
BS12	69470	Fixing clamps; Material: PBT-GF20	
BST-12B	6947212	Fixing clamps; Material: PA6	
QM-12	6945101	Fixing clamps; Material: chrome-plated brass	

• 05.05.2001 • © Hans Turck GmbH & Co.KG 1999

Hans Turck GmbH & Co. KG Postfach • D–45466 Mülheim an der Ruhr • Telefon 02 08/49 52-0 • Telefax 02 08/49 52-264