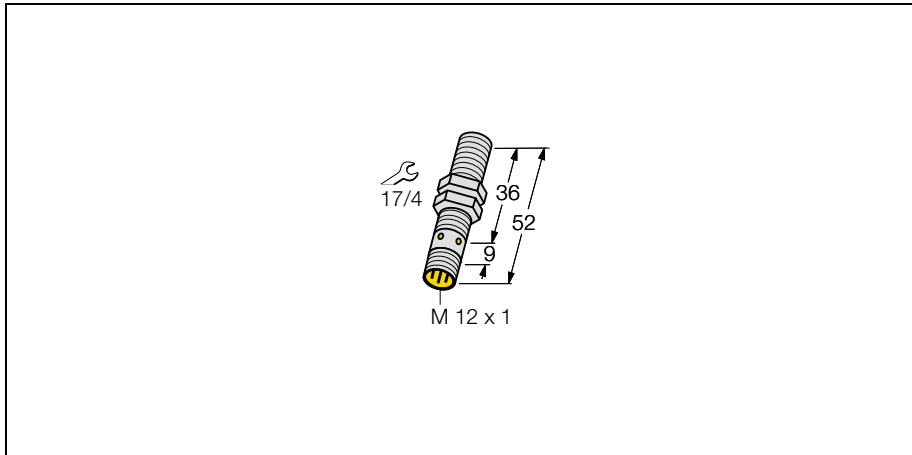


**Inductive Sensor uproX®**

**Bi3U-EM12H-AP6X-H1141**



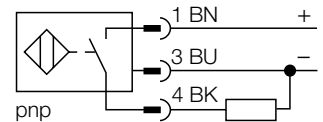
- Threaded barrel, M12x1
- Stainless steel
- Duroplast front cap, high mechanical and thermal resistance
- Factor 1 for all metals
- Degree of protection IP68
- Magnetic field immune
- Increased temperature range
- High switching frequency

<b>Type</b>	Bi3U-EM12H-AP6X-H1141
Ident-No.	1634312
<b>Rated operating distance Sn</b>	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
<b>Rated operational voltage (DC) U<sub>e</sub></b>	10...30 VDC
Max. ripple	≤ 10 % U <sub>SS</sub>
Rated operational current (DC) I <sub>e</sub>	200 mA
No-load current I <sub>0</sub>	≤ 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 <sub>e</sub>	≤ 1,8 V
Wire brakage and reverse polarity protection	yes, complete
Degree of protection / protection class	IP 68; 2
<b>Housing style</b>	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)

<b>Switching status indication</b>	LED; yellow
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3-wire DC, 10-30VDC  
Normally open, PNP-output  
Connector, M12x1 eurocon

**Wiring diagram**



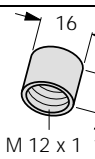
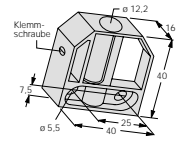
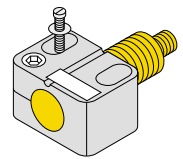
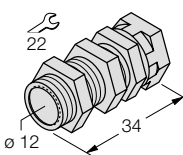
**Function principles**

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.

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	 <p>M 12 x 1</p>
BS12	69470	Fixing clamps; Material: PBT-GF20	 <p>Klammerschraube</p> <p>ø 12.2</p> <p>16</p> <p>7.5</p> <p>40</p> <p>25</p> <p>40</p> <p>ø 5.5</p>
BST-12B	6947212	Fixing clamps; Material: PA6	
QM-12	6945101	Fixing clamps; Material: chrome-plated brass	 <p>22</p> <p>34</p> <p>ø 12</p>