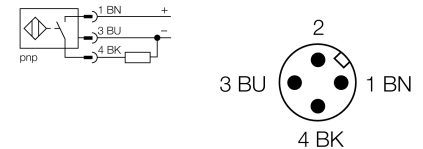


- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4301
- Factor 1 for all metals
- Protection class IP68
- Magnetic field immune
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 connector

**Wiring diagram**



<b>Type code</b>	BI10U-EM30-AP6X-H1141
<b>Ident no.</b>	1636340
<b>Rated operating distance Sn</b>	10 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	2 kHz
<b>Design</b>	threaded barrel, M30 x 1.5
Dimensions	62 mm
Housing material	Metal, V2A (1.4301)
Material active face	Plastic, PBT
Max. tightening torque housing nut	75 Nm
Connection	male, M12 x 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
<b>Switching state</b>	• yellow

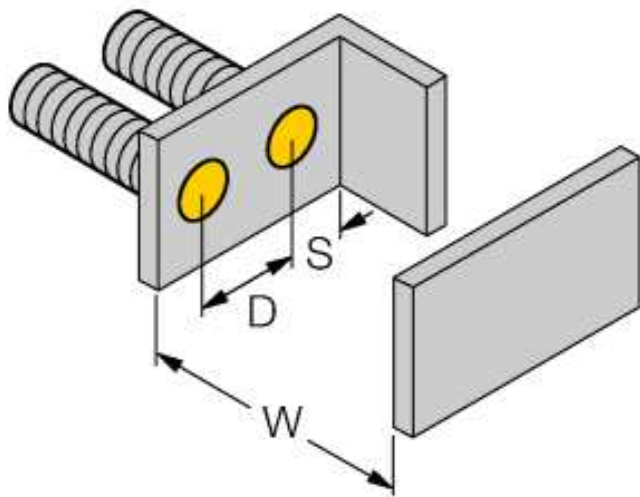
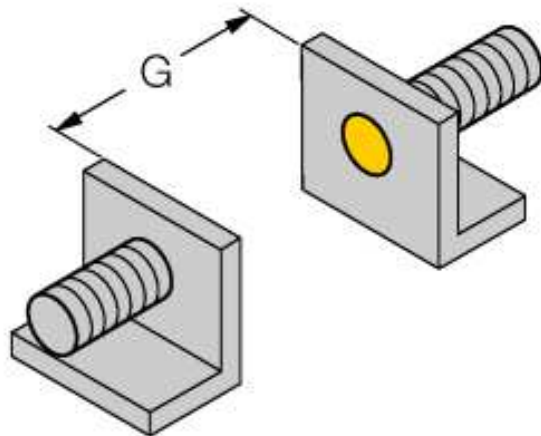
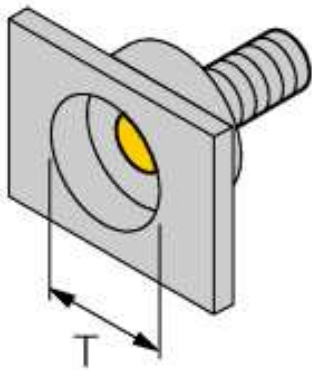
**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. Due to the patented ferrite-less 3-coil system, *uprox®* factor 1 sensors have distinct advantages compared to conventional sensors. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

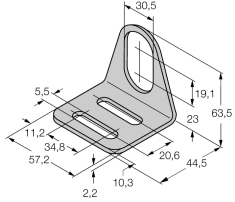
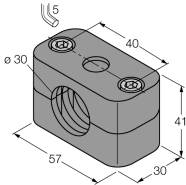
**Inductive sensor  
BI10U-EM30-AP6X-H1141**

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B                     $\varnothing$  30 mm



**Accessories**

Type code	Ident no.	Description	Dimension drawing
MW-30	6945005	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a stainless steel mounting bracket (MW-30) for threaded barrel devices. The drawing shows a side view with the following dimensions: 30.5 (width of the top flange), 19.1 (height of the top flange), 63.5 (total height), 23 (height of the main body), 44.5 (width of the main body), 20.6 (width of the mounting hole), 10.3 (width of the base), 2.2 (thickness of the base), 57.2 (total width), 34.8 (width of the mounting hole), 11.2 (width of the base), and 5.5 (width of the top flange).</p>
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket (BSS-30) for smooth and threaded barrel devices. The drawing shows a perspective view with the following dimensions: 40 (width), 41 (height), 30 (depth), 57 (total width), and 30 (width of the mounting hole). There are also two circular holes on the top surface, each with a diameter of 5 (indicated as <math>\varnothing 5</math>).</p>