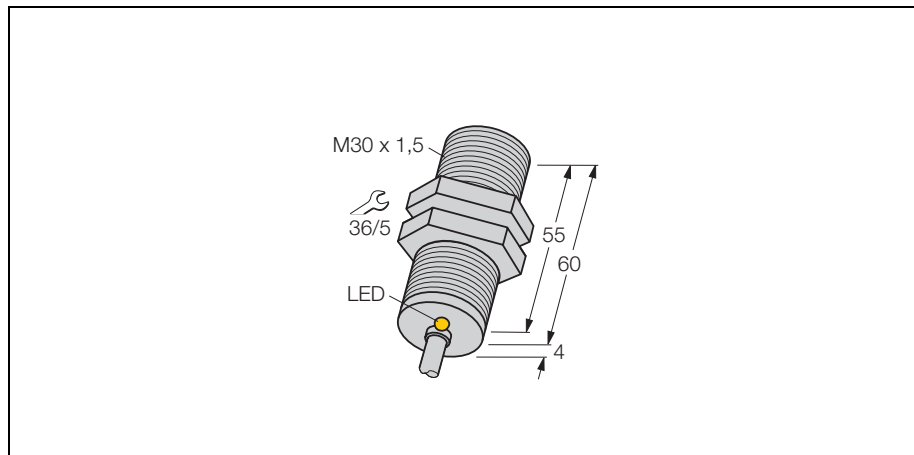


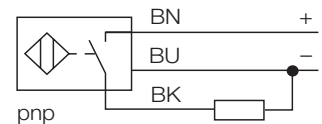
## inductive sensor

### Bi10U-EM30-AP6X



- threaded barrel, M30 x 1.5
- stainless steel, 1.4301
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

#### Wiring diagram



#### Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

<b>Type</b>	Bi10U-EM30-AP6X
Ident-No.	1636300
<b>Rated operating distance Sn</b>	10 mm
Mounting condition	flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	-30...+ 85 °C
<b>Operating voltage</b>	10... 30 VDC
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 dip at I <sub>e</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 2 kHz
<b>Housing</b>	threaded barrel, M30 x 1.5
Dimensions	64 mm
Housing material	metal, A2 1.4301 (AISI 304)
Material active area	plastic, PBT
End cap	plastic, EPTR
Tightening torque of housing nut	75 Nm
Connection	cable
Cable quality	Ø 5.2, LifYY, PVC, 2 m
Cable cross section:	3 x 0.34 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
<b>Display switch state</b>	LED yellow

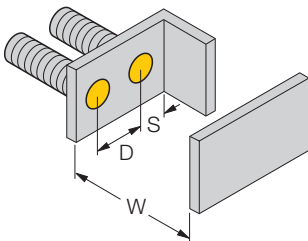
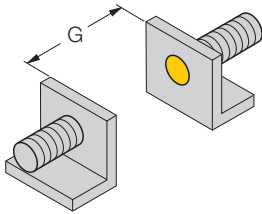
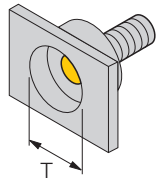
## inductive sensor

### Bi10U-EM30-AP6X

Mounting instructions	minimum distances
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

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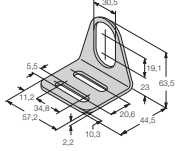
<b>Diameter of the active area B</b>	Ø 30 mm
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# inductive sensor

## Bi10U-EM30-AP6X

### Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-30	6945005	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	fixing clamp; material: polypropylene	