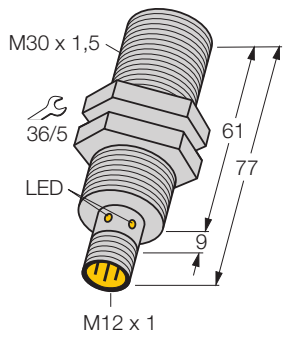
Inductive sensor
with selective performance
Bi10NF-EM30HE-AN6X2-H1141

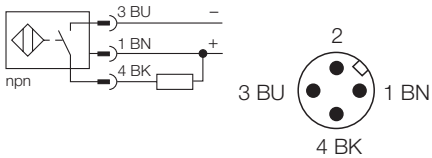
TURCK
Industrial Automation



- **threaded barrel, M30 x 1.5**
- **stainless steel, 1.4301**
- **Front cap made of Duroplast, especially temperature and impact resistant**
- **detects non-ferromagnetic metals only**
- **3-wire DC, 10…30 VDC**
- **normally open npn output**
- **connector, M12 x 1**

Type	Bi10NF-EM30HE-AN6X2-H1141
Ident-No.	1615005
Rated operating distance Sn	10 mm
Mounting condition	flush
Assured sensing range	(0,81 x Sn) mm
Repeatability	2 %
Temperature drift	± 10 %
Hysteresis	3… 15 %
Ambient temperature	0…+ 60 °C
Operating voltage	10… 30VDC
Residual ripple	10 % U_{ss}
DC rated operational current	200 mA
No-load current I_0	15 mA
Residual current	0.1 mA
Rated insulation voltage	0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I_e	1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, npn
Insulation class	
Switching frequency	2 kHz
Housing	threaded barrel, M30 x 1.5
Dimensions	77 mm
Housing material	metal, AISI 304
Material active face	plastic, Duroplast
Tightening torque of housing nut	75 Nm
Connection	connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Operating voltage display	LED green
Display switch state	LED yellow

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target.
Inductive sensors with selective performance of the NF series detect non-ferrous metals only.

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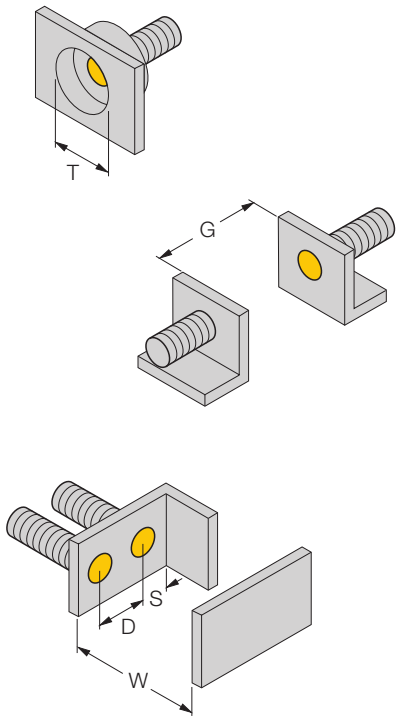
Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1,5 x B
Distance G	6 x Sn

Diameter of the active area B	Ø 30 mm



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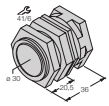
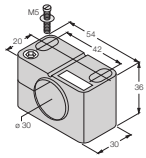
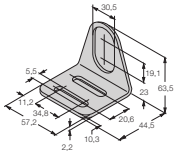
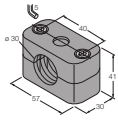
Accessories

Type code	Ident-No.	Short text	Dimension drawing
QM-30	6945103	quick-mount fixing clamp with dead-stop; material: chrome-plated brass male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets.	
BST-30B	6947216	fixing clamp with dead-stop; material: PA6	
MW-30	6945005	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	fixing clamp; material: polypropylene	

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