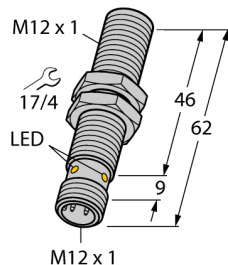


Inductive sensor with selective targeting BI3NF-EM12HE-AP6X2-H1141

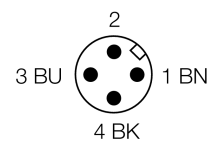
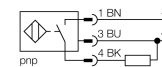
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- Threaded barrel, M12 x 1
- Stainless steel, 1.4301
- Duroplast front cap, temperature and impact resistant
- Detects non-ferromagnetic metals only
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 connector

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target.

Inductive sensors of the NF series with selective performance detect non-ferrous metals only.

Type code	BI3NF-EM12HE-AP6X2-H1141
Ident no.	1615001
Rated operating distance Sn	3 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	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 ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	□
Switching frequency	3 kHz
Design	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Metal, V2A (1.4301)
Material active face	Plastic, Duroplast
Max. tightening torque housing nut	10 Nm
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Operating voltage	LED green
Switching state	• yellow

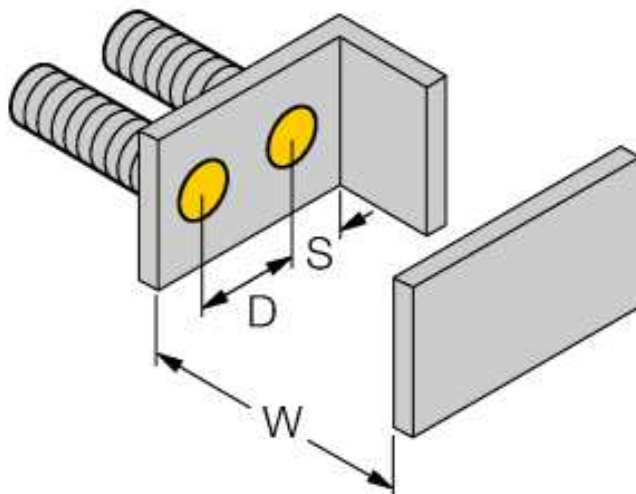
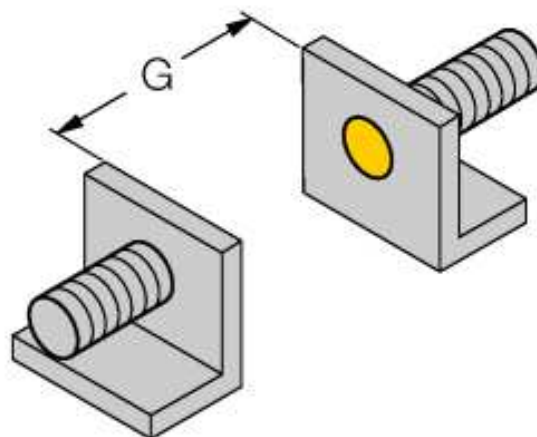
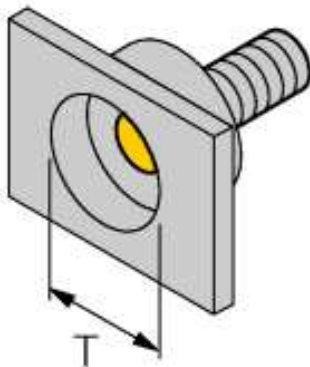
**Inductive sensor
with selective targeting
BI3NF-EM12HE-AP6X2-H1141**

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Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$

Diameter of the active area B	$\varnothing 12 \text{ mm}$
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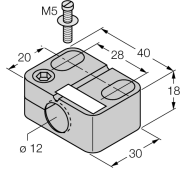
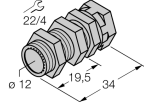
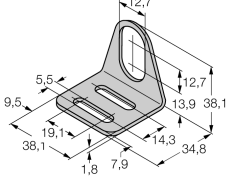


**Inductive sensor
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Accessories

Type code	Ident no.	Description	Dimension drawing
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	