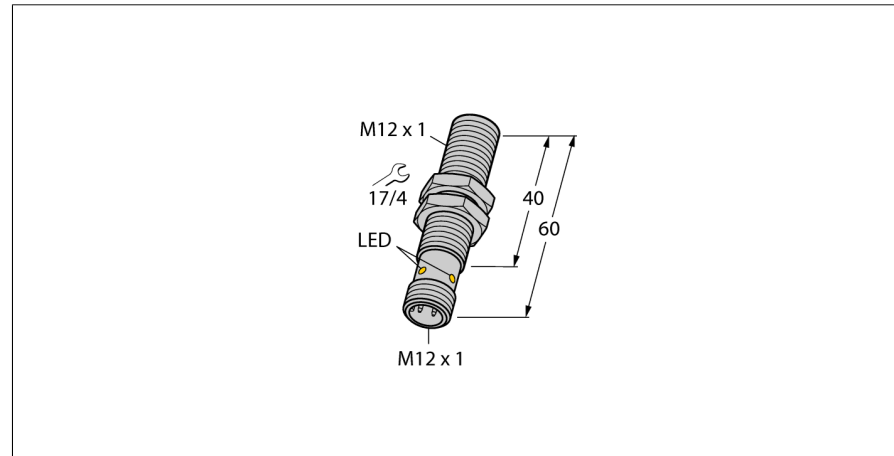
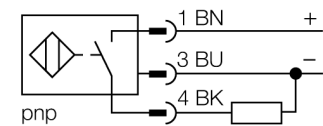


**Inductive sensor
with selective targeting
BI2,5FE-EM12FE-AP6X-H1141**



- Threaded barrel, M12x1
- Stainless steel
- Detects only ferromagnetic metals
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Male M12 x 1

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 FE series with selective features can only detect ferrous metals.

Type code	BI2,5FE-EM12FE-AP6X-H1141
Ident no.	1615011
Rated operating distance Sn	2.5 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0; Cu=0; stainless steel = 0.5; Ms = 0
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 2.5 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	0.1 kHz
Design	threaded barrel, M12 x 1
Dimensions	60 mm
Housing material	stainless steel, V2A (1.4301)
Material active area	Stainless steel
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
Switching state	LED yellow

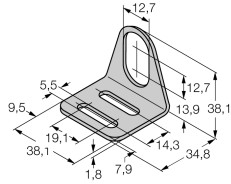
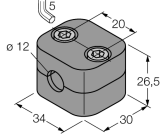
**Inductive sensor
with selective targeting
BI2,5FE-EM12FE-AP6X-H1141**

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
<hr/>	
Diameter of the active area B	Ø 12 mm



**Inductive sensor
with selective targeting
BI2,5FE-EM12FE-AP6X-H1141**

Accessories

Type code	Ident no.	Description	Dimension drawing
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	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKCV4T-2/TEL	6626900		