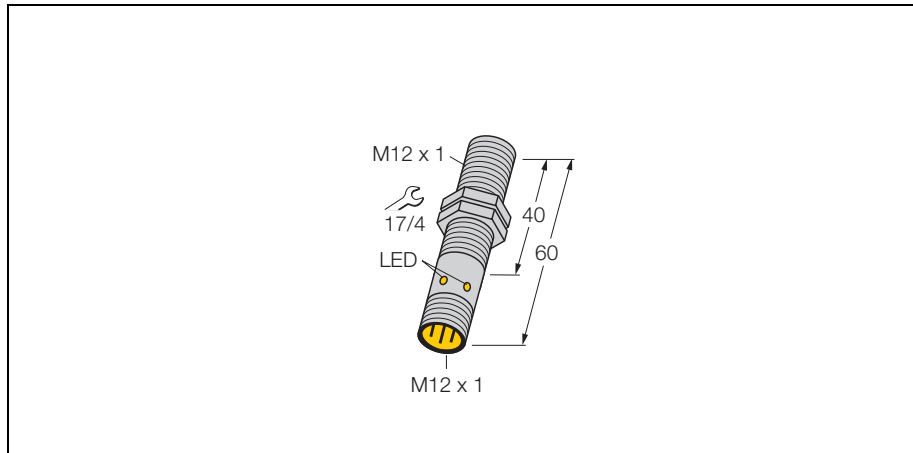
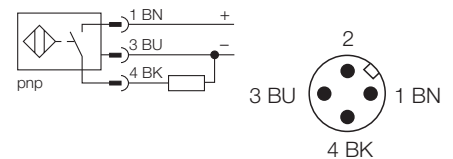


Inductive sensor with selective performance Bi2,5FE-EM12FE-AP6X-H1141



- threaded barrel, M12x1
- stainless steel
- detects ferromagnetic metals only
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

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.

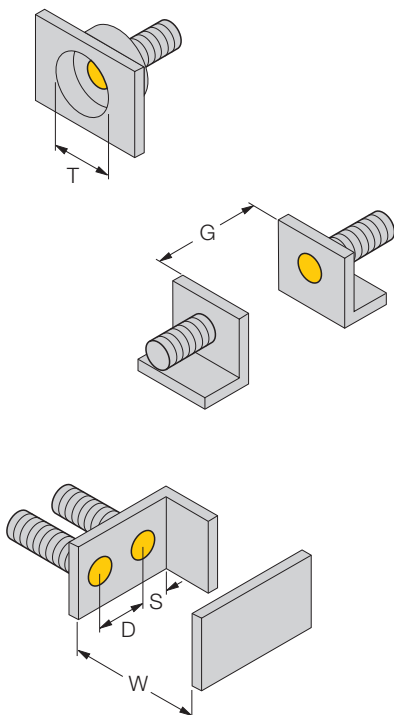
Inductive sensors of the FE series with selective features can only detect ferrous metals.

Type	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, V2A = 0,5, Ms = 0, Cu = 0, Al = 0
Temperature drift	≤ ± 10 %
Hysteresis	3... 15 %
Repeatability	≤ 2 %
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 _e	≤ 2.5V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 0.1 kHz
Housing	threaded barrel, M12 x 1
Dimensions	60 x 12 mm
Housing material	stainless steel
Material active face	stainless steel
Tightening torque of housing nut	10 Nm
Connection	Connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	LED yellow

Inductive sensor with selective performance Bi2,5FE-EM12FE-AP6X-H1141

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

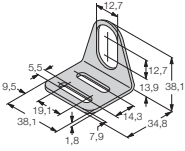
Diameter of the active area B	Ø 12 mm
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**Inductive sensor
with selective performance
Bi2,5FE-EM12FE-AP6X-H1141**



Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-12	6945003	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	fixing clamp; material: polypropylene	