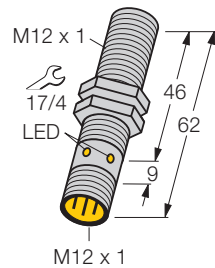
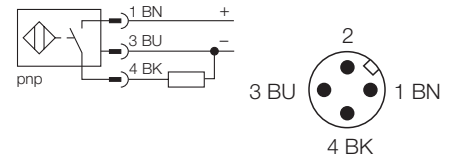


Inductive sensor with selective performance Bi2FE-EM12HE-AP6X2-H1141



- threaded barrel, M12 x 1
- stainless steel, 1.4301
- front cap made of Duroplast, especially temperature and impact resistant
- detects ferromagnetic metals only
- 3-wire DC, 10...30 VDC
- normally open pnp output
- connector, M12 x 1

Wiring diagram



Function principles

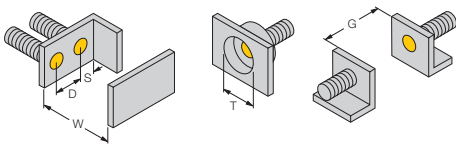
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. This field is generated by ferrite-less 3-coil system. Inductive sensors with selective features are only capable of detecting ferrous metals.

Type	Bi2FE-EM12HE-AP6X2-H1141
Ident-No.	1640230
Rated operating distance S_n	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	0 ...+ 60 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	$\leq 10 \% U_{pp}$
Rated operational current (DC) I_e	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Max. OFF-state current	$\leq 0,1 \text{ mA}$
Max. switching frequency	$\leq 3 \text{ kHz}$
Rated insulation voltage	$\leq 0,5 \text{ kV}$
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	$\leq 1,8 \text{ V}$
Wire breakage / reverse polarity protection	yes / complete
Protection class	IP67
Housing style	threaded barrel; M12 x 1
Dimensions	62 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, Duroplast
Max. fixing torque of coupling nut	10 Nm
Wiring	connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Supply voltage indication	LED green
Switching status indication	LED yellow

**Inductive sensor
with selective performance
Bi2FE-EM12HE-AP6X2-H1141**

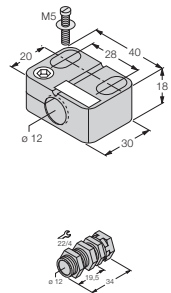
Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn

Diameter of active face B	Ø 12 mm
----------------------------------	---------



Inductive sensor with selective performance Bi2FE-EM12HE-AP6X2-H1141

Accessories

Typ	Ident-No.	Description	Dimension drawing
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	
QM-12	6945101	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M16 x 1	