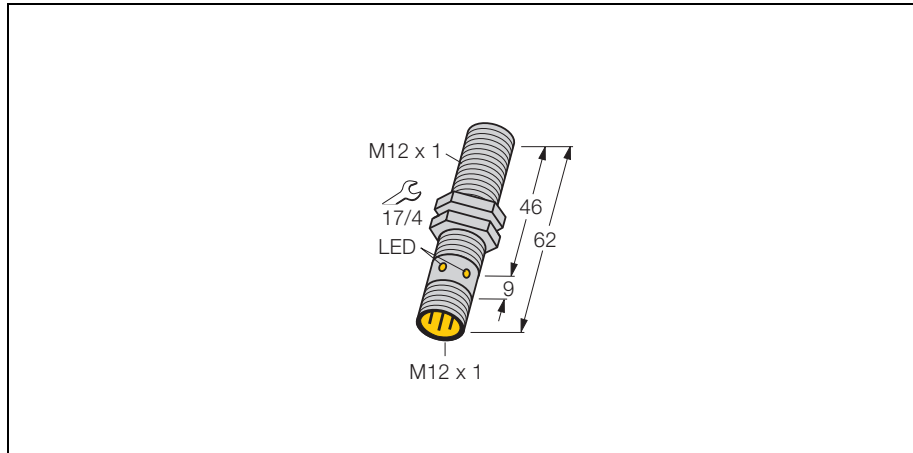
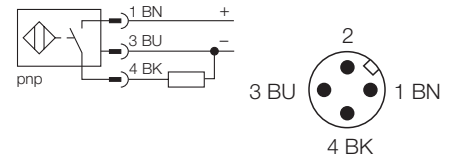


## Inductive sensor with selective performance Bi2FE-EM12HE-AP6X2-H1141



- 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.

<b>Type</b>	Bi2FE-EM12HE-AP6X2-H1141
Ident-No.	1640230
<b>Rated operating distance <math>S_n</math></b>	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	0 ...+ 60 °C
<b>Rated operational voltage (DC) <math>U_B</math></b>	10... 30 VDC
Max. ripple	≤ 10 % $U_{pp}$
Rated operational current (DC) $I_e$	≤ 200 mA
No-load current $I_0$	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 3 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at $I_e$	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Protection class	☐
<b>Housing style</b>	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
<b>Supply voltage indication</b>	LED green
Switching status indication	LED yellow

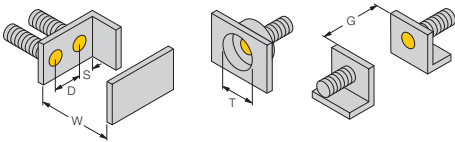
## Inductive sensor with selective performance Bi2FE-EM12HE-AP6X2-H1141

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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

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**Diameter of active face B**       $\varnothing$  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	