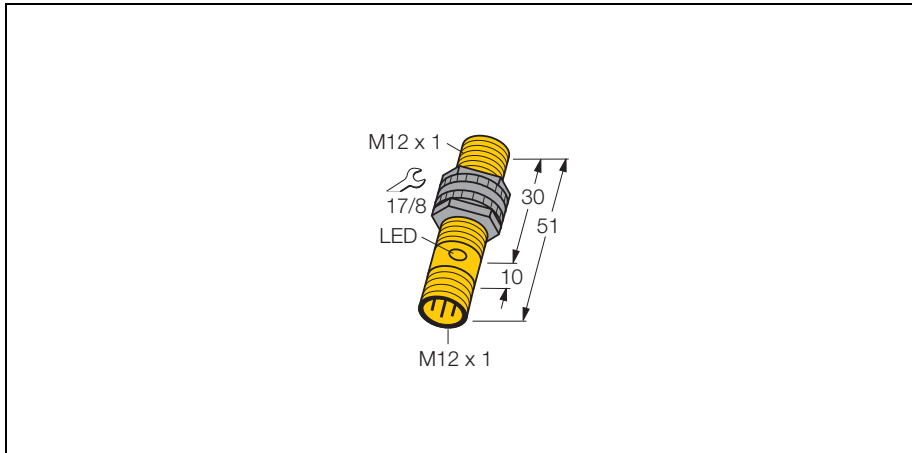


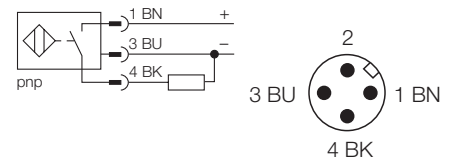
Inductive sensor

Bi2-S12-AP6X-H1141



- threaded barrel, M12 x 1
- plastic, PA12-GF30
- 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. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

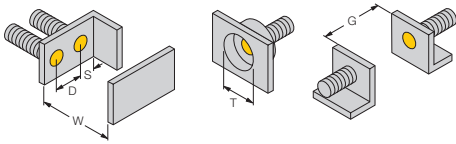
Type	Bi2-S12-AP6X-H1141
Ident-No.	46520
Rated operating distance S_n	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	-25 ... + 70 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	$\leq 10 \%$ U_{pp}
Rated operational current (DC) I_e	≤ 200 mA
No-load current I_0	≤ 15 mA
Max. OFF-state current	$\leq 0,1$ mA
Max. switching frequency	≤ 2 kHz
Rated insulation voltage	$\leq 0,5$ kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	$\leq 1,8$ V
Wire breakage / reverse polarity protection	yes / complete
Housing style	threaded barrel; M12 x 1
Dimensions	51 mm
Housing material	plastic, PA12-GF30
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	1 Nm
Wiring	connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED yellow

Inductive sensor

Bi2-S12-AP6X-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 \varnothing 12 mm



Inductive sensor

Bi2-S12-AP6X-H1141

Accessories

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