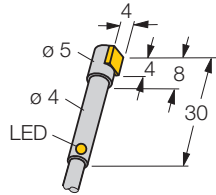


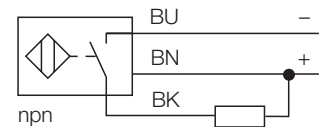
Inductive sensor

Bi1-HS540-AN6X



- smooth barrel, 4mm diameter
- side active face
- stainless steel 1.4301
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

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	Bi1-HS540-AN6X
Ident-No.	4604101
Rated operating distance S_n	1 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	$\leq 100 \text{ mA}$
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, NPN
Short-circuit protection	yes, cyclic
Max. voltage drop at I_e	$\leq 1,8 \text{ V}$
Wire breakage / reverse polarity protection	yes / complete
Housing style	smooth barrel; 4 mm
Dimensions	30 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PA12-GF30
Wiring	cable
Cable	$\varnothing 3$, LifYY-11Y, PUR, 2 m
Cable cross section	3 x 0,14 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED yellow

Inductive sensor

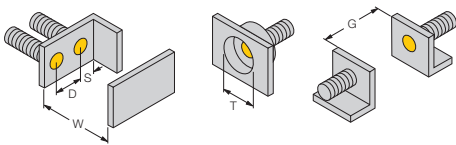
Bi1-HS540-AN6X

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

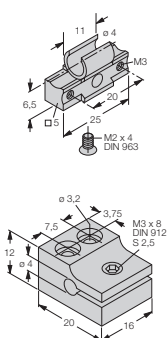
Ø 4 mm



Inductive sensor

Bi1-HS540-AN6X

Accessories

Typ	Ident-No.	Description	Dimension drawing
BS540	69475	fixing clamp; material mounting block: anodized aluminium; clamp sleeve: steel	
MBS40	69477	fixing clamp; material mounting block: anodized aluminium	