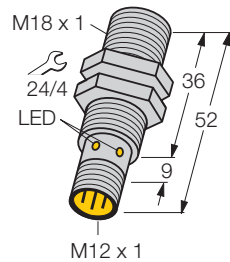
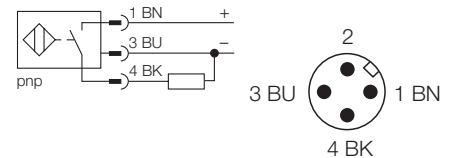


Inductive sensor with extended switching distance Bi8-M18-AP6X-H1141



- threaded barrel, M18 x 1
- chrome-plated brass
- extended switching distance
- 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 conventional inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi8-M18-AP6X-H1141
Ident-No.	46150
Rated operating distance S_n	8 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	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Max. OFF-state current	$\leq 0,1 \text{ mA}$
Max. switching frequency	$\leq 0,5 \text{ kHz}$
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	□
Housing style	threaded barrel; M18 x 1
Dimensions	52 mm
Housing material	metal, CuZn, chrome-plated
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	25 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

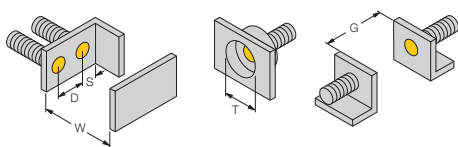
Inductive sensor with extended switching distance Bi8-M18-AP6X-H1141

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

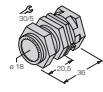
Diameter of active face B

Ø 18 mm



Inductive sensor with extended switching distance Bi8-M18-AP6X-H1141

Accessories

Typ	Ident-No.	Description	Dimension drawing
QM-18	6945102	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M24 x 1,5.	
BST-18B	6947214	fixing clamp with dead-stop; material: PA6	