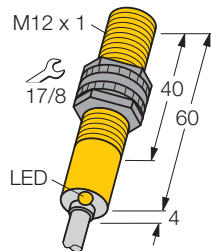
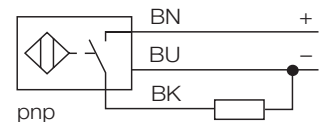


Inductive sensor with extended temperature range Bi2-S12-AP6X/S100



- threaded barrel, M12 x 1
- plastic, PA12-GF30
- for temperatures up to 100°C
- 3-wire DC, 10...30 VDC
- normally open pnp output
- cable connection

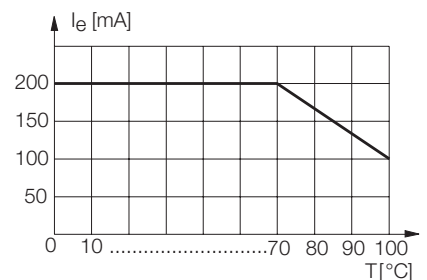
Wiring diagram



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. Special inductive sensors versions can be used at temperatures of -40°C up to +160°C

Derating curve

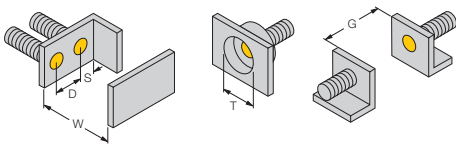


Type	Bi2-S12-AP6X/S100
Ident-No.	4653023
Rated operating distance Sn	2 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≥ +70 °C
Operating temperature	-25 ...+ 100 °C
Rated operational voltage (DC) UB	10... 30 VDC
Max. ripple	≤ 10 % Upp
Rated operational current (DC) Ie	≤ 200 mA
	see derating curve
No-load current I0	≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 2 kHz
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, normally open, PNP
Short-circuit protection	yes, cyclic
Max. voltage drop at Ie	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Housing style	threaded barrel; M12 x 1
Dimensions	64 mm
Housing material	plastic, PA12-GF30
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	1 Nm
Wiring	cable
Cable	Ø 5,2, LiYY-T105, PVC, 2 m
Cable cross section	3 x 0,5 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 with extended temperature range Bi2-S12-AP6X/S100

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 extended temperature range Bi2-S12-AP6X/S100

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	