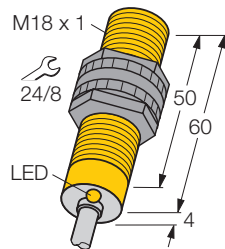
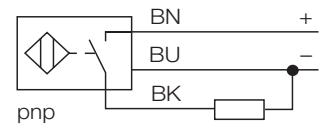


Inductive sensor with extended temperature range Bi5-S18-AP6X/S100



- threaded barrel, M18 x 1
- plastic, PA12-GF30
- for temperatures up to 100°C
- 3-wire DC, 10...30 VDC
- normally open pnp output
- cable connection

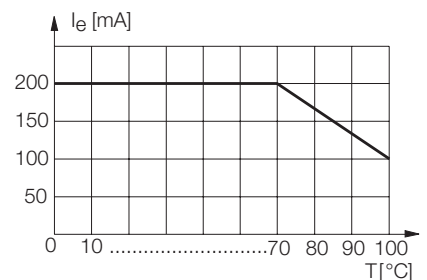
Wiring diagram



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

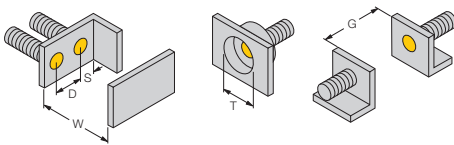
Derating curve



Type	Bi5-S18-AP6X/S100
Ident-No.	4656022
Rated operating distance S_n	5 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ ± 20 %, ≥ +70 °C -25 ...+ 100 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U _{pp}
Rated operational current (DC) I _e	≤ 200 mA
No-load current I ₀	see derating curve ≤ 15 mA
Max. OFF-state current	≤ 0,1 mA
Max. switching frequency	≤ 1 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
Housing style	threaded barrel; M18 x 1
Dimensions	64 mm
Housing material	plastic, PA12-GF30
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	2 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

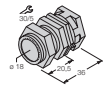
Inductive sensor with extended temperature range Bi5-S18-AP6X/S100

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 18 mm



Inductive sensor with extended temperature range Bi5-S18-AP6X/S100

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	