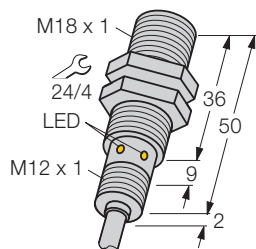
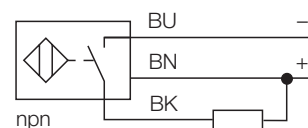


Inductive sensor for harsh environmental conditions Bi7-EM18WD-AN6X



- threaded barrel, M18 x 1
- stainless steel, 1.4301
- degree of protection IP68 - IP69K
- front cap made of PVDF
- resistant to cleaning agents
- resistant to cooling lubricants, cutting and grinding oils
- Viton O-ring seal
- suited for applications in the food industry
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

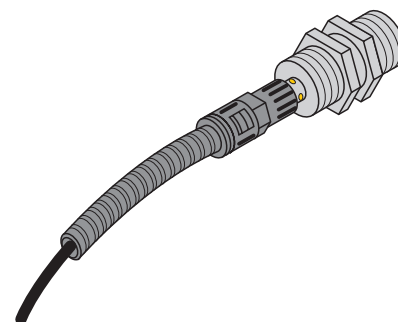
Wiring diagram



Function principles

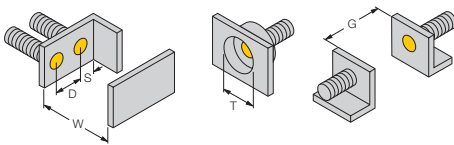
TURCK offers fully impermeable sensors with resistance to cleaning agents, cooling lubricants and cutting and grinding oils for application in the food industry and machine engineering. TURCK's inductive sensors for extremely hostile industrial environments not only meet, but even exceed the requirements of protection degree IP68 and IP69. These robust sensors are securely protected by means of a PVDF front cap, a special Viton seal and a stainless steel housing.

Type	Bi7-EM18WD-AN6X
Ident-No.	4614533
Rated operating distance S_n	7 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	-25 ... + 85 °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	$\leq 1 \text{ kHz}$
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	threaded barrel; M18 x 1
Dimensions	56 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PVDF
Rated pressure on frontcap	$\leq 15 \text{ bar}$
Max. fixing torque of coupling nut	30 Nm
Wiring	cable
Cable	$\varnothing 5,2$, LifYY, PVC, 2 m
Cable cross section	3 x 0,34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68 - IP69K
Switching status indication	LED yellow



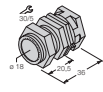
Inductive sensor for harsh environmental conditions Bi7-EM18WD-AN6X

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 18 mm



Inductive sensor for harsh environmental conditions Bi7-EM18WD-AN6X

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	