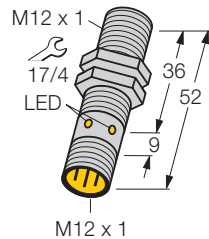
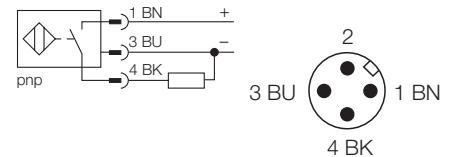


Inductive sensor for harsh environmental conditions Bi3-EM12WD-AP6X-H1141



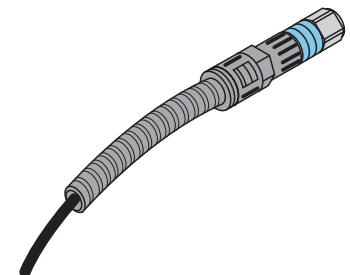
- threaded barrel, M12 x 1
- stainless steel, 1.4301
- degree of protection IP68 - IP69K
- front cap made of PVDF
- resistant to cleaning agents
- resistant to cooling lubricants, cutting and grinding oils
- Viton O-ring seal
- suited for applications in the food industry
- 3-wire DC, 10...30 VDC
- normally open pnp output
- connector, M12 x 1

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.

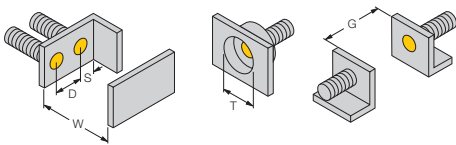


Type	Bi3-EM12WD-AP6X-H1141
Ident-No.	1634331
Rated operating distance Sn	3 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	-25 ... + 85 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U _{pp}
Rated operational current (DC) I _e	≤ 200 mA
No-load current I ₀	≤ 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 I _e	≤ 1,8 V
Wire breakage / reverse polarity protection	yes / complete
Housing style	threaded barrel; M12 x 1
Dimensions	52 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PVDF
Rated pressure on frontcap	≤ 20 bar
Max. fixing torque of coupling nut	10 Nm
Wiring	connector, M12 x 1, Fixcon compatible
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
Bi3-EM12WD-AP6X-H1141**

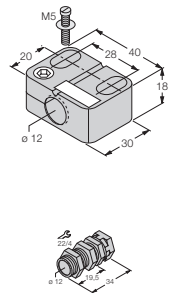
Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn

Diameter of active face B	Ø 12 mm
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Inductive sensor for harsh environmental conditions Bi3-EM12WD-AP6X-H1141

Accessories

Typ	Ident-No.	Description	Dimension drawing
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	
QM-12	6945101	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M16 x 1	