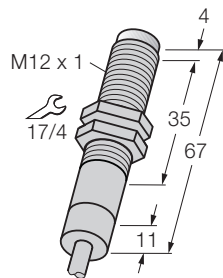
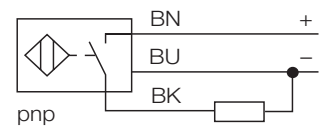


Inductive sensor for harsh environmental conditions up to 120°C Ni4-EM12D-AP6/S120



- threaded barrel, M12 x 1
- stainless steel, 1.4571
- degree of protection IP68 - IP69K
- for temperatures up to 120°C
- front cap made of PTFE
- climate-proof
- resistant to cooling lubricants, cutting and grinding oils
- suited for applications in the food industry
- 3-wire DC, 10...30 VDC
- normally open pnp output
- cable connection

Wiring diagram

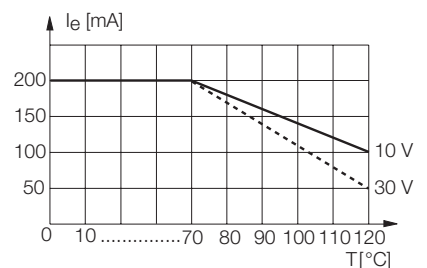


Function principles

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.

Special inductive sensors versions can be used at temperatures of -60°C up to +160°C

Derating curve

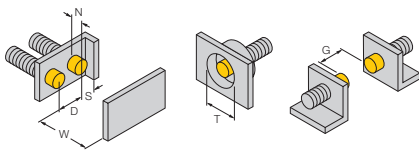


Type	Ni4-EM12D-AP6/S120
Ident-No.	1633110
Rated operating distance Sn	4 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ ± 20 %, ≥ +70 °C -25 ...+ 120 °C
Rated operational voltage (DC) UB	10... 30 VDC
Max. 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	≤ 0,1 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	67 mm
Housing material	metal, A4 1.4571 (AISI 316Ti)
Active face	plastic, PTFE
Rated pressure on frontcap	≤ 10 bar
Max. fixing torque of coupling nut	10 Nm
Wiring	cable
Cable	Ø 3,8, PTFE, PTFE, 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

**Inductive sensor
for harsh environmental conditions up to 120°C
Ni4-EM12D-AP6/S120**

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

Diameter of active face B	Ø 12 mm
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Inductive sensor for harsh environmental conditions up to 120°C Ni4-EM12D-AP6/S120

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	