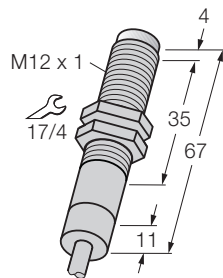
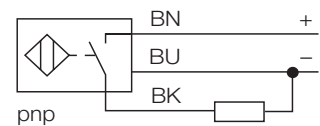


Inductive sensor for harsh environmental conditions up to -60 °C Ni4-EM12WD-AP6/S929



- threaded barrel, M12 x 1
- stainless steel, 1.4571
- degree of protection IP68 - IP69K
- for temperatures up to -60°C
- front cap made of PTFE
- resistant to cleaning agents
- 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

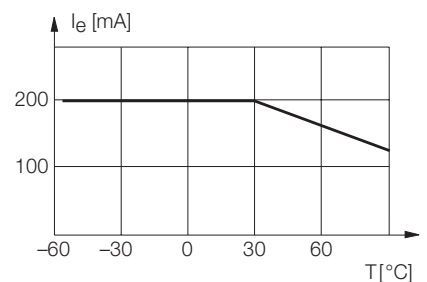


Function principles

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

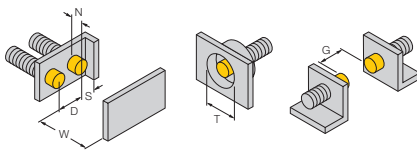


Type	Ni4-EM12WD-AP6/S929
Ident-No.	1633111
Rated operating distance S_n	4 mm
Mounting mode	non-flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	≤ 2 %
Temperature drift	≤ ± 10 %
Operating temperature	≤ 20 %, ≤ -25 °C -60 ...+ 60 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Max. ripple	≤ 10 % U _{pp}
Rated operational current (DC) I _e	≤ 200 mA
	see derating curve
No-load current I ₀	≤ 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; M12 x 1
Dimensions	67 mm
Housing material	metal, A4 1.4571 (AISI 316Ti)
Active face	plastic, PTFE
Rated pressure on frontcap	≤ 20 bar
Max. fixing torque of coupling nut	10 Nm
Wiring	cable
Cable	Ø 5,2, FEP, FEP, 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 -60 °C
Ni4-EM12WD-AP6/S929**

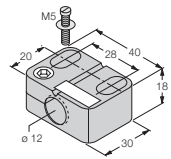
Mounting instructions	minimum gap
Gap D	3 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn
Gap N	2 x Sn

Diameter of active face B	Ø 12 mm
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Inductive sensor for harsh environmental conditions up to -60 °C Ni4-EM12WD-AP6/S929

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	