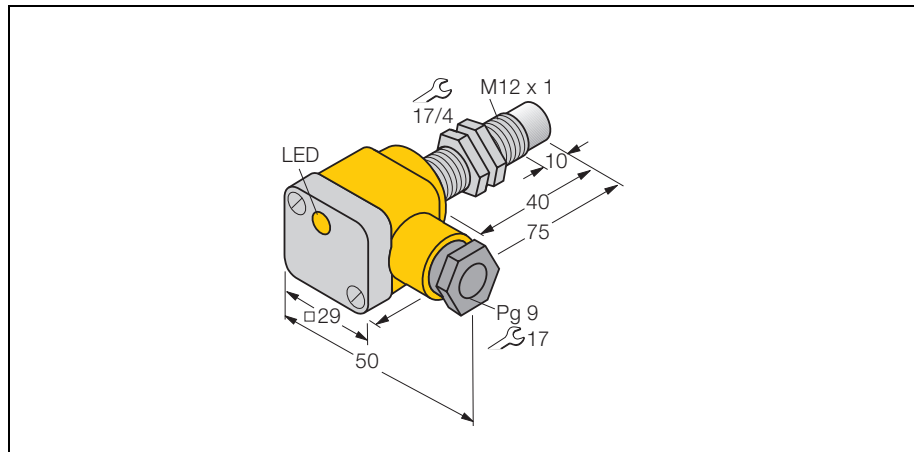
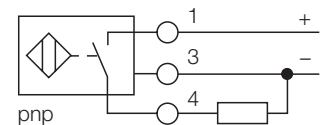


Inductive sensor for harsh environmental conditions Ni5-EM12WDSK-AP6X



- 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
- terminal chamber

Wiring diagram



Function principles

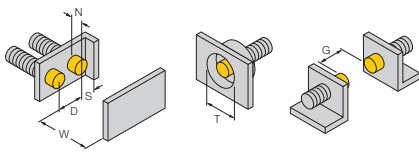
TURCK offers fully impermeable sensors with resistance to cleaning agents, cooling lubricants and cutting and grinding oils for application in the food industry and machine engineering. TURCK's inductive sensors for extremely hostile industrial environments not only meet, but even exceed the requirements 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	Ni5-EM12WDSK-AP6X
Ident-No.	4653415
Rated operating distance S_n	5 mm
Mounting mode	non-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	≤ 1,5 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	75 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	terminal chamber
Clamping ability	≤ 2,5 mm ²
External diameter cable	4,5... 8 mm
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68 - IP69K
Switching status indication	LED yellow
Included with sensor	cable gland, 2x plastic seals

Inductive sensor for harsh environmental conditions Ni5-EM12WDSK-AP6X

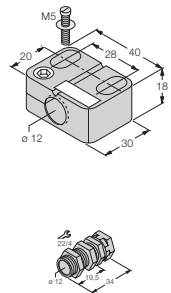
Mounting instructions	minimum gap
Gap D	3 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn
Gap N	2 x Sn

Diameter of active face B	Ø 12 mm
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Inductive sensor for harsh environmental conditions Ni5-EM12WDSK-AP6X

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	