

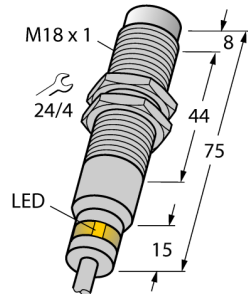
Inductive sensor

For harsh environments and temperatures up to -60 °C

NI7-EM18WD-AP6X/S929

TURCK
works

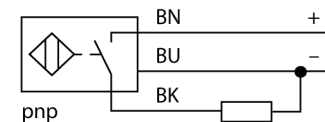
Industrial
Automation



- Threaded barrel, M18 x 1
- Stainless steel, 1.4571
- Protection classes IP68/IP69K
- For temperatures up to -60 °C
- PTFE front cap
- Resistant to cleaning agents
- Resistance to cooling lubricants, cutting and grinding oils
- For the food industry
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Type designation	NI7-EM18WD-AP6X/S929
Ident-No.	4632001
Rated switching distance Sn	7 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0,81 \times S_n) \text{ mm}$
Correction factors	$St37 = 1; Al = 0.3; \text{stainless steel} = 0.7; Ms = 0.4$
Repeat accuracy	$\leq 2 \% \text{ of full scale}$
Temperature drift	$\leq \pm 10 \%$
	$\leq 20 \%, \leq -25 ^\circ\text{C}$
Hysteresis	3...15 %
Ambient temperature	-60...+60 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \% U_{in}$
DC rated operational current	$\leq 200 \text{ mA}$
Rated operational current	See derating curve
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at I_L	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
Design	Threaded barrel, M18 x 1
Dimensions	75 mm
Housing material	Stainless steel, V4A (1.4571)
Active area material	Plastic, PTFE
End cap	Plastic, PTFE
Admissible pressure on front cap	$\leq 15 \text{ bar}$
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	5.2mm, FEP, FEP, 2
Cable cross section	$3 \times 0.34 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68/IP69K
Switching state	LED, Red

Wiring Diagram

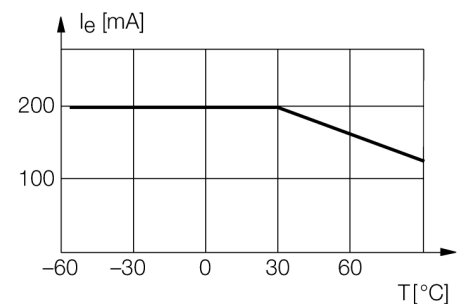


Functional principle

TURCK offers leak-proof sensors for the food industry and machine engineering that are resistant to cleaning agents, cooling lubricants, cutting and grinding oils. They are made for rough environmental conditions and not only meet but even exceed the requirements of the protection classes IP68 and IP69.

Special versions are available for ambient temperatures between -60°C and +250°C.

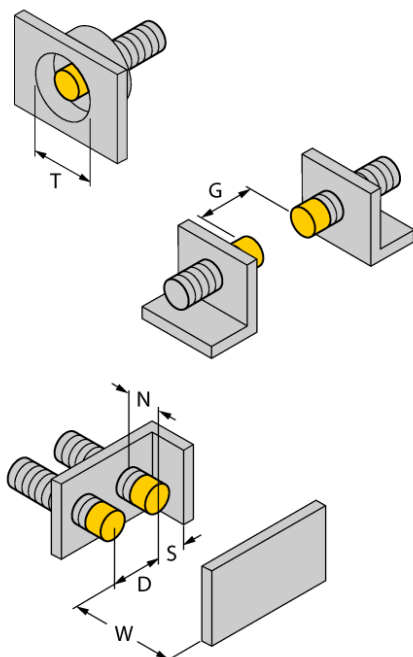
Derating Curve



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Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn

Diameter active area B	Ø 18 mm
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Accessories

Type code	Ident-No.	Description	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	