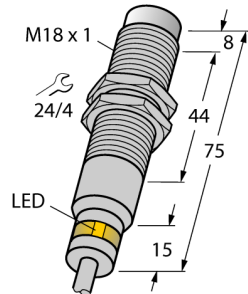


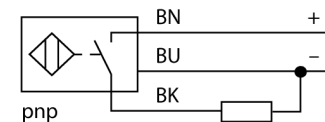
**Inductive sensor**  
**for harsh environmental conditions and temperatures down to -60 °C**  
**NI7-EM18WD-AP6X/S929**



- 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
- Resistant to cooling lubricants, cutting and grinding oils
- For the food industry
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

<b>Type code</b>	NI7-EM18WD-AP6X/S929
Ident no.	4632001
<b>Rated operating distance Sn</b>	7 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ 20 %, ≤ -25 °C
Hysteresis	3...15 %
Ambient temperature	-60...+60 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>in</sub>
DC rated operational current	≤ 200 mA
Rated operational current	see derating curve
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
<b>Design</b>	threaded barrel, M18 x 1
Dimensions	75 mm
Housing material	stainless steel, V4A (1.4571)
Material active area	Plastic, PTFE
End cap	Plastic, PTFE
Admissible pressure on front cap	≤ 15 bar
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	5.2 mm, FEP, FEP, 2 m
Cable cross section	3 x 0.34 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 / IP69K
<b>Switching state</b>	LED red

**Wiring diagram**

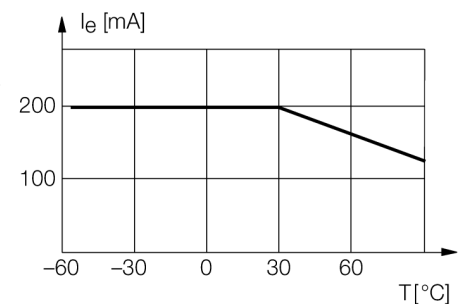


**Functional principle**

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**



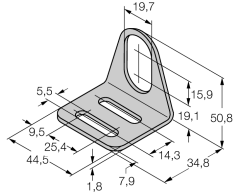
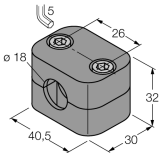
**Inductive sensor  
for harsh environmental conditions and temperatures down to -60 °C  
NI7-EM18WD-AP6X/S929**

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
<hr/>	
Diameter of the active area B	Ø 18 mm



**Inductive sensor  
for harsh environmental conditions and temperatures down to -60 °C  
NI7-EM18WD-AP6X/S929**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a stainless steel mounting bracket (MW-18) for threaded barrel devices. The drawing shows a 3D perspective view with the following dimensions: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (height of the main body), 34.8 (width of the main body), 14.3 (width of the mounting hole), 7.9 (width of the mounting hole), 1.8 (thickness of the main body), 44.5 (total width), 25.4 (width of the mounting hole), 9.5 (width of the mounting hole), and 5.5 (width of the top flange).</p>
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket (BSS-18) for smooth and threaded barrel devices. The drawing shows a 3D perspective view with the following dimensions: 26 (width of the top flange), 32 (height of the top flange), 30 (width of the main body), 40.5 (total width), and 18 (diameter of the mounting hole).</p>