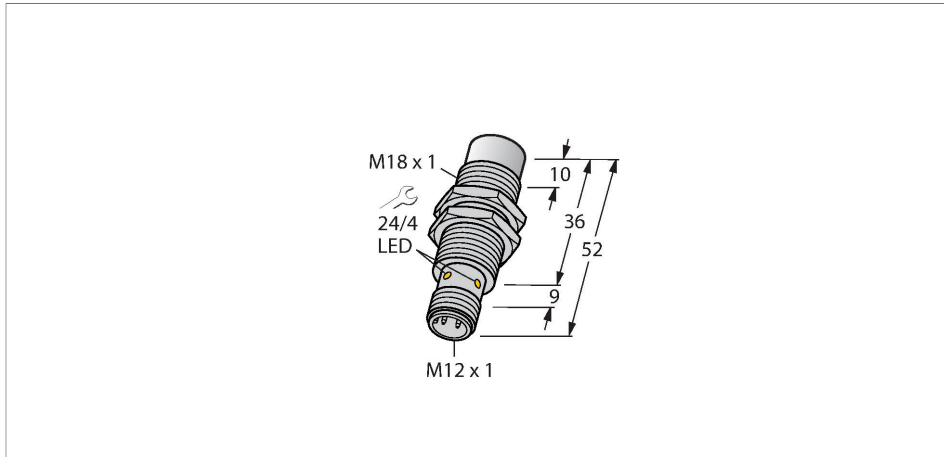


NI15U-EM18WD-AP6X-H1141

Inductive Sensor – For the Food Industry



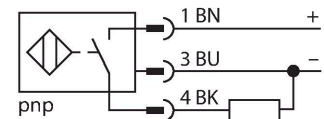
Features

- M18 × 1 threaded barrel
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- For temperatures of -40 °C...+100 °C
- High protection class IP69K for harsh environments
- Special double-lip seal
- Protection against all common acidic and alkaline cleaning agents
- Laser engraved label, permanently legible
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Technical data

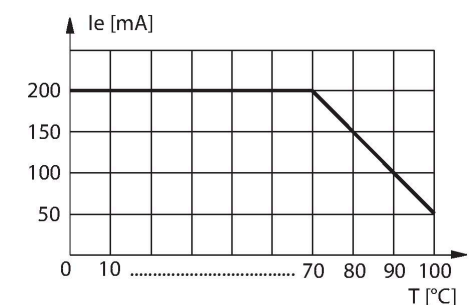
Type	NI15U-EM18WD-AP6X-H1141
Ident. no.	1634818
Rated switching distance	15 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 20\%$, $\leq -25\text{ °C}$, $\geq +70\text{ °C}$
Hysteresis	3...15 %
Ambient temperature	-40...+100 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_s$
DC rated operational current	$\leq 200\text{ mA}$
No-load current	$\leq 20\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	$\leq 1.8\text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Insulation class	□
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 × 1
Dimensions	52 mm

Wiring diagram



Functional principle

The inductive sensors for the food industry are absolutely tight and resistant to cleaning agents and disinfectants. The requirements of the protection classes IP68 and IP69K are well exceeded by our uprox®+ sensors. The sensors are entirely protected by the LCP front cap and the stainless steel housing.



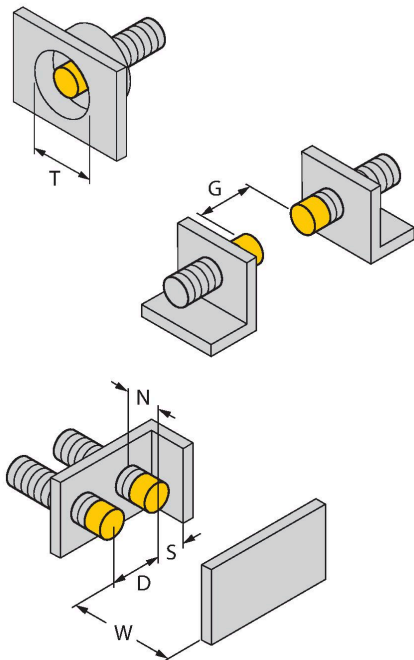
NI15U-EM18WD-AP6X-H1141 | 05/27/2020 11-36 | technical changes reserved

Technical data

Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 15 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Connector, M12 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 / IP69K
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

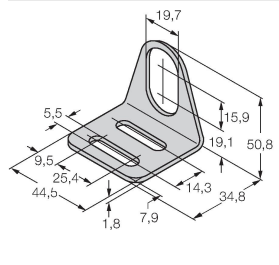
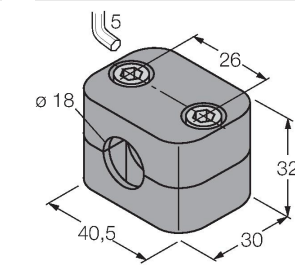


Distance D	72 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area	Ø 18 mm
B	

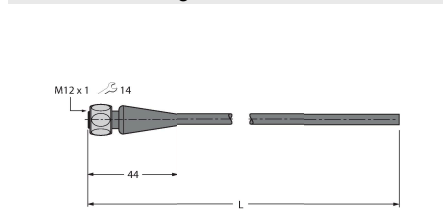
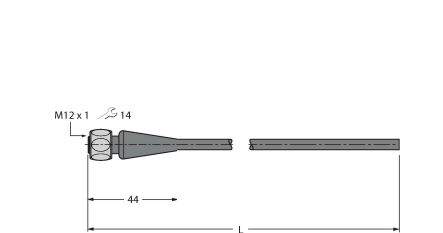
All non-flush mountable *uproX*[®]+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 70 mm must be observed.

Accessories

MW18	6945004	BSS-18	6901320
 <p>Dimension drawing of the MW18 mounting bracket for threaded barrel sensors. The drawing shows a perspective view of a U-shaped bracket with a central slot. Dimensions include: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (height of the central slot), 14.3 (width of the central slot), 34.8 (width of the bottom flange), 7.9 (height of the bottom flange), 1.8 (thickness of the bottom flange), 44.5 (width of the base), 25.4 (width of the central slot opening), 9.5 (height of the base), and 5.5 (height of the top flange).</p>	<p>Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)</p>	 <p>Dimension drawing of the BSS-18 mounting clamp for smooth and threaded barrel sensors. The drawing shows a rectangular clamp with a central slot and two circular mounting holes. Dimensions include: 26 (width of the top flange), 32 (height), 30 (width of the bottom flange), 40.5 (width of the base), and a hole diameter of $\varnothing 18$. A small dimension of 5 is also indicated near the top hole.</p>	<p>Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene</p>

Wiring accessories

Dimension drawing	Type	Ident. no.	
 <p>Dimension drawing of the RKH4-2/TFE connection cable. It shows an M12 female connector with a length of 44 and a total length L.</p>	<p>RKH4-2/TFE</p>	<p>6935482</p>	<p>Connection cable, M12 female, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray temperature range -25...+80 °C; other cable lengths and designs available, see www.turck.com</p>
 <p>Dimension drawing of the RKH4-2/TFG connection cable. It shows an M12 female connector with a length of 44 and a total length L.</p>	<p>RKH4-2/TFG</p>	<p>6934384</p>	<p>Connection cable, M12 female, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray temperature range -40...+105 °C; other cable lengths and designs available, see www.turck.com</p>