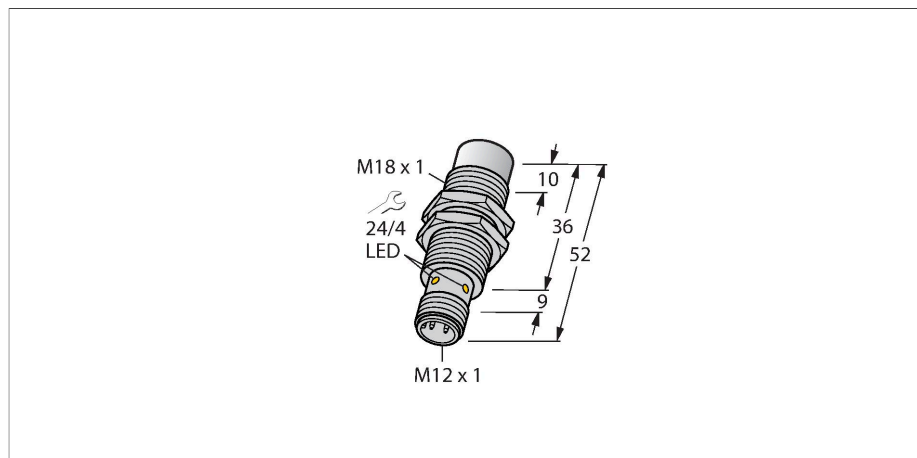


# NI15U-EM18WD-AP6X-H1141

## Inductive sensor – For the food industry



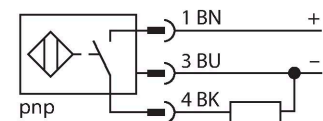
### Technical data

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	$\leq 10\% U_{ss}$
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
<b>Design</b>	<b>Threaded barrel, M18 × 1</b>
Dimensions	52 mm
Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, LCP
Connector housing	plastic, PP

### Features

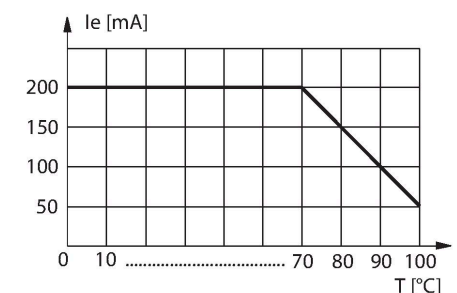
- M18 × 1 threaded barrel
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- Temperatures -40 °C ... +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid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

### 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.

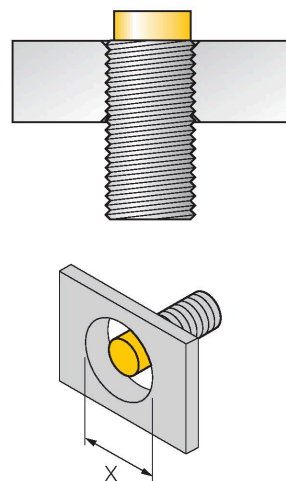
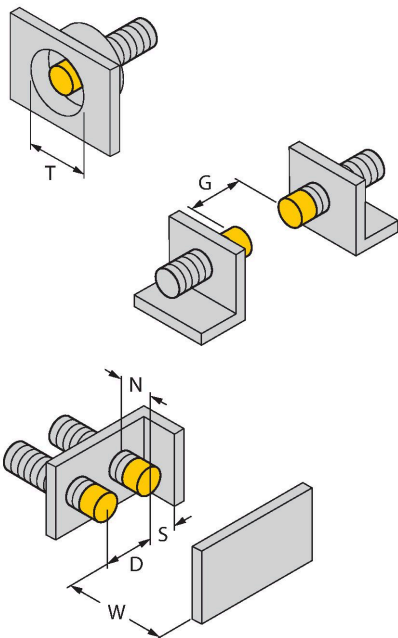


## Technical data

Admissible pressure on front cap	≤ 15 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Connectors, 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



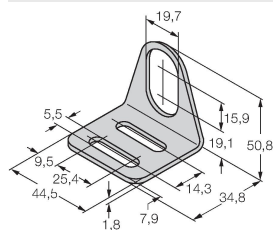
Distance D	72 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	Ø 18 mm

All non-flush mountable *uprox*<sup>®</sup>+ 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

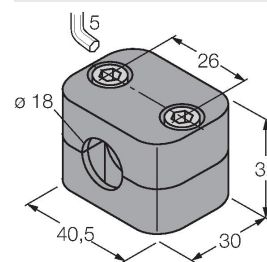
6945004



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

### BSS-18

6901320



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

## Accessories

Dimension drawing	Type	Ident. no.	
 <p>The drawing shows a side view of the RKH4-2/TFE cable. It features an M12 female connector with a 14-pin configuration. A dimension line indicates a length of 44 units from the start of the connector to the beginning of the main cable body. The total length of the cable is denoted as 'L'.</p>	RKH4-2/TFE	6935482	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 <a href="http://www.turck.com">www.turck.com</a>
 <p>The drawing shows a side view of the RKH4-2/TFG cable. It features an M12 female connector with a 14-pin configuration. A dimension line indicates a length of 44 units from the start of the connector to the beginning of the main cable body. The total length of the cable is denoted as 'L'.</p>	RKH4-2/TFG	6934384	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 <a href="http://www.turck.com">www.turck.com</a>