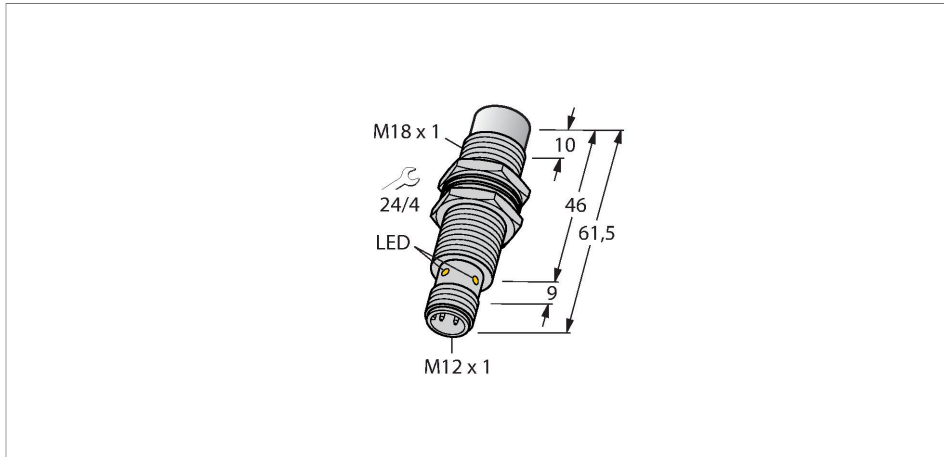


# NI15U-EM18MWD-VP6X-H1141

## Inductive Sensor – For the Food Industry



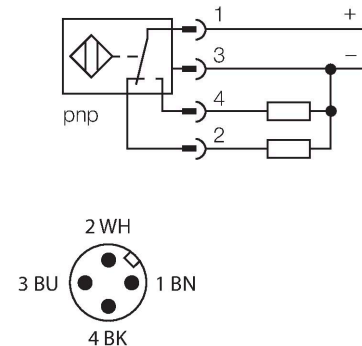
### Features

- Threaded barrel, M18 x 1
- 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 4-wire, 10...30 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

### Technical data

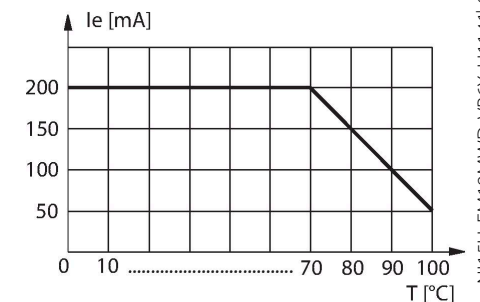
Type	NI15U-EM18MWD-VP6X-H1141
Ident. no.	1634979
Rated switching distance	15 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 20\%, \leq -25\text{ °C}, \geq +70\text{ °C}$
Hysteresis	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	4-wire, Complementary contact, PNP
Insulation class	□
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 x 1
Dimensions	61.5 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.



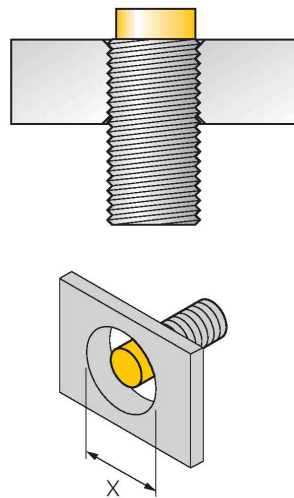
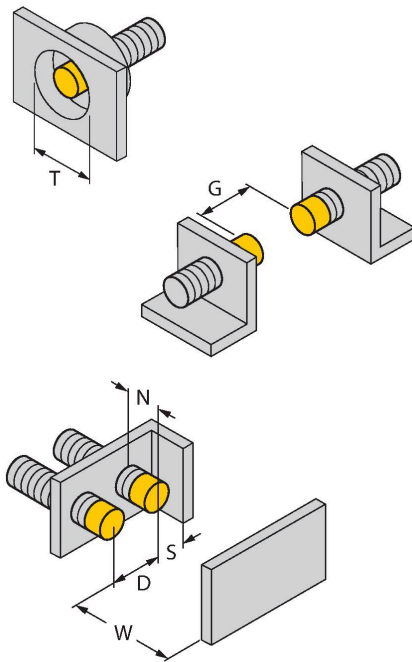
NI15U-EM18MWD-VP6X-H1141 | 05/27/2020 12-49 | technical changes reserved

## 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 B	Ø 18 mm

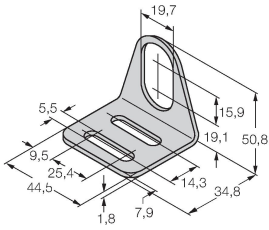
All non-flush mountable *uprox*<sup>®</sup>+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

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

## Accessories

MW18

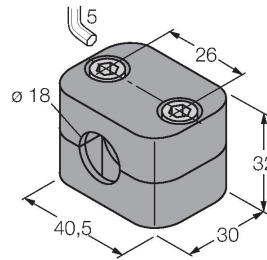
6945004



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

## Wiring accessories

Dimension drawing

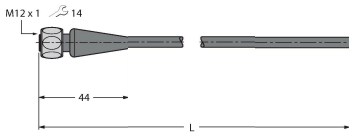
Type

Ident. no.

RKH4.4-2/TFE

6934473

Connection cable, M12 female, straight, 4-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](http://www.turck.com)



RKH4.4-2/TFG

6933086

Connection cable, M12 female, straight, 4-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](http://www.turck.com)

