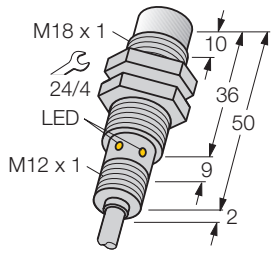
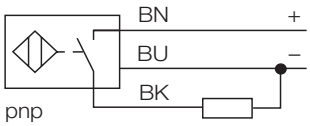
Inductive sensor for the food industry Ni15U-EM18WD-AP6X



Type	Ni15U-EM18WD-AP6X
Ident-No.	1634817
Rated operating distance Sn	15 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Hysteresis	3… 15 %
Ambient temperature	-40…+ 100 °C
Operating voltage	10… 30VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I_e	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	⧈
Switching frequency	≤1 kHz
Housing	threaded barrel, M18 x 1
Dimensions	56 mm
Housing material	metal, AISI 316L
Material active face	plastic, LCP-GF30
End cap	plastic, PP, transparent
Admissible pressure on front cap	≤ 15 bar
Tightening torque of housing nut	25 Nm
Connection	cable
Cable quality	Ø 5.2, white, D12YSL9Y-OB, PP, 2 m
Cable cross section:	3 x 0.34mm^2
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68 / IP69K
Display switch state	LED yellow

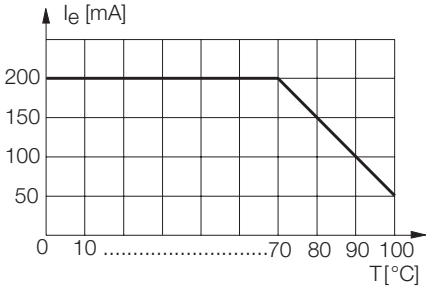
- **Threaded barrel, M18 x 1**
- **stainless steel, 1.4404**
- **Front cap made of liquid crystal polymer Vectra C130**
- **Factor 1 for all metals**
- **Magnetic field immunity**
- **Temperature range -40°C bis +100°C**
- **High degree of protection IP69K for extreme environmental conditions**
- **Special double-lip seal**
- **Protection against all common acid and alkaline cleaning agents**
- **Laser engraved type label, permanetly legible**
- **3-wire DC, 10…30 VDC**
- **normally open, pnp output**
- **cable connection**

Wiring diagram



Functional principle

The inductive sensors for the food industry are fully sealed and resistant to cleaning agents and disinfectants. The requirements of protection degree IP68 and IP69K are well exceeded by our uprox+ sensors. The sensors are entirely protected and robust because they feature a LCP front cap and a stainless steel housing.



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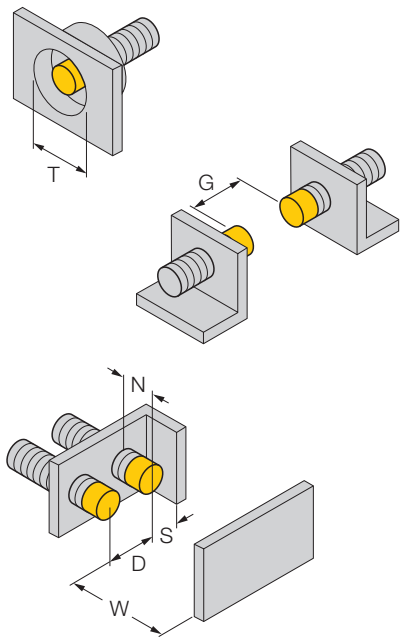
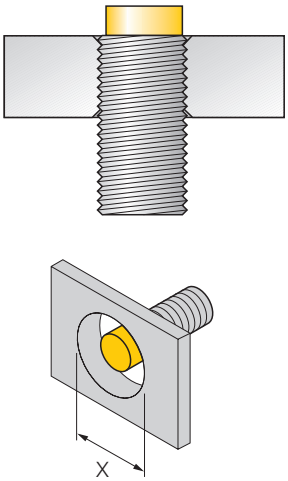
Mounting instructions	minimum distances
Distance D	72 mm
Distance W	45 mm
Distance T	54 mm
Distance S	27 mm
Distance G	90 mm
Distance N	20 mm
Diameter of the active area B	Ø 18 mm





All non-flush mountable uprox+ threaded barrel switches allow embedded mounting up to the upper edge of the thread. Thus safe operation with a maximum reduction of the switching distance of 20 % is guaranteed.

When installing in an aperture plate a clearance of X = 70 mm must be observed.

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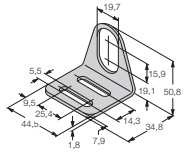
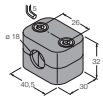
Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-18	6945004	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	fixing clamp; material: polypropylene	

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