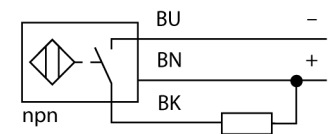


- Threaded barrel, M18 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- Temperatures -40 °C ... +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid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

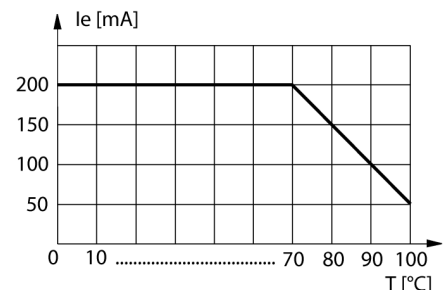
Wiring Diagram



Functional principle

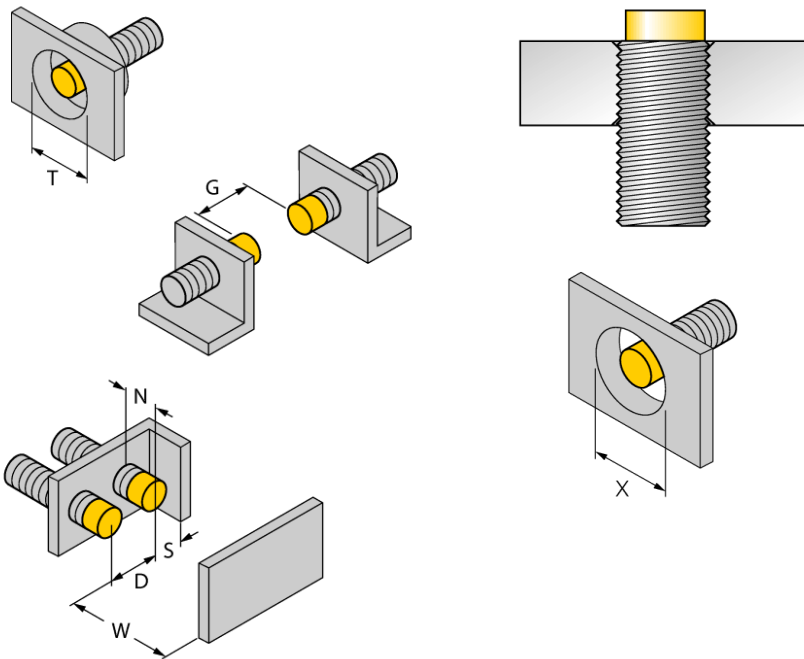
The inductive sensors for the food industry are absolutely tight and resistant to cleaning agents and disinfectants. The requirements of the protection classes IP68 and IP69K are well exceeded by our uprox+ sensors. The sensors are entirely protected by the LCP front cap and the stainless steel housing.

Derating Curve



Type designation	NI15U-EM18WD-AN6X
Ident no.	1634836
Rated switching distance Sn	15 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Ambient temperature	3...15 %
	-40...+100 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, NPN
Reverse polarity protection	Complete
Protection class	☐
Switching frequency	1.5 kHz
Design	Threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, LCP
End cap	Plastic, PP, transparent
Admissible pressure on front cap	≤ 15 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	5.2 mm, White, D12YSL9Y-OB, PP, 2m halogen-free
Cable cross section	3 x 0.34 mm ²
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

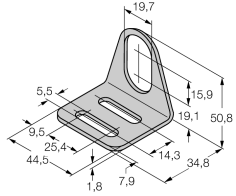
Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
<hr/>	
Diameter active area B	Ø 18 mm



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

Type code	Ident no.	Description	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	