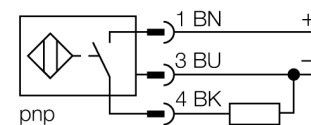


- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- Temperatures -40 °C ... +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid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

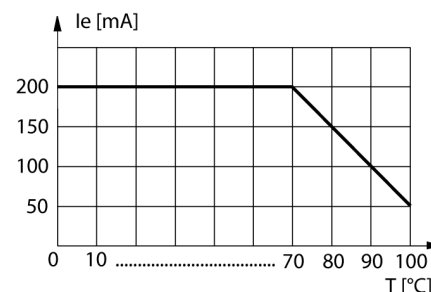
#### Wiring diagram



#### 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<sup>®</sup>+ sensors. The sensors are entirely protected by the LCP front cap and the stainless steel housing.

#### Derating curve



<b>Type code</b>	NI10U-EM12WD-AP6X-H1141
<b>Ident no.</b>	1634814

<b>Rated switching distance Sn</b>	10 mm
Mounting conditions	non-flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-40...+100 °C

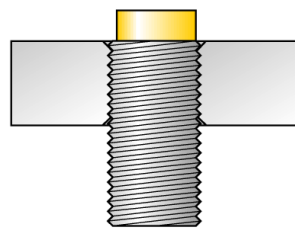
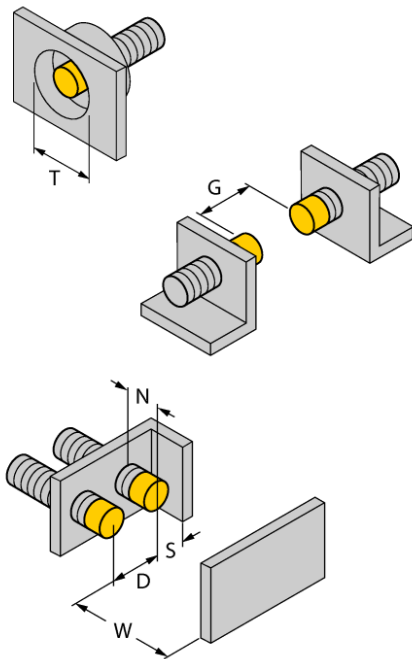
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protective insulation	□
Switching frequency	2 kHz

<b>Construction</b>	threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	stainless steel, V4A (1.4404)
Material active area	plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP68 / IP69K
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C

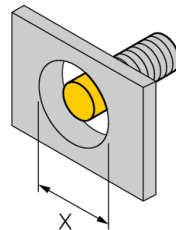
<b>Switching state</b>	LED yellow
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Distance D	48 mm
Distance W	30 mm
Distance T	48 mm
Distance S	18 mm
Distance G	60 mm
Distance N	16 mm

**Diameter of the active area B** Ø 12 mm

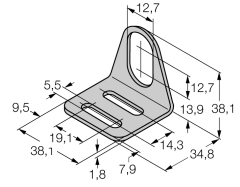
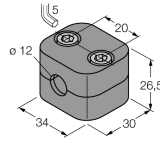


All recessed mountable *uprox<sup>®</sup>+* threaded barrel sensors can be embedded to the upper edge of the thread. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.



When installed in an aperture plate a distance of X = 50 mm must be observed.

## Accessories

Type code	Ident no.	Description	Design
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

## Wiring accessories

Type code	Ident no.	Description	Design
RKCV4T-2/TEL	6626900		