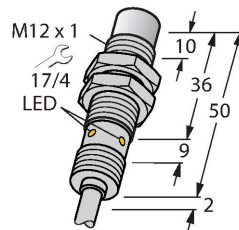


NI10U-EM12WD-AN6X

Inductive sensor – For the food industry



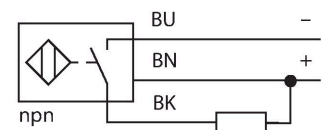
Features

- 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, NPN output
- Cable connection

Technical data

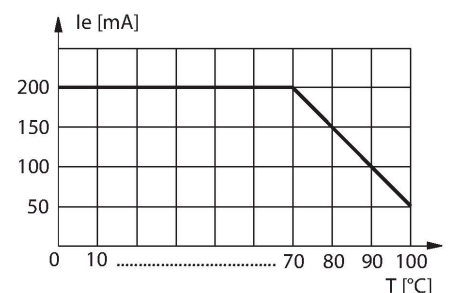
Type	NI10U-EM12WD-AN6X
Ident. no.	1634838
Rated switching distance	10 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0,81 \times S_n) \text{ mm}$
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \leq -25 \text{ °C}, \geq +70 \text{ °C}$
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	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
Protection class	□
Switching frequency	2 kHz
Design	Threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, PVDF
End cap	Plastic, EPTR

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	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, White, D12YSL9Y-OB, PP, 2 m
	halogen-free
Core 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

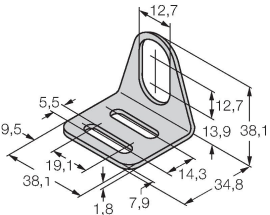
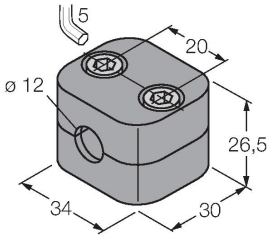
Mounting instructions

Mounting instructions/Description

Distance D	3 x B
Distance T	3 x B
Distance N	2 x Sn
Diameter active area B	Ø 12 mm

All recessed mountable *uprox*®+ 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

MW12	6945003	BSS-12	6901321
 Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)		 Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	