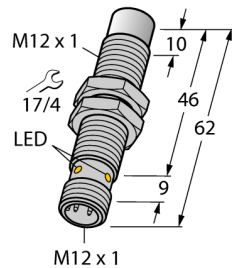


Inductive Sensor

For the food industry

NI10U-EM12EWD-VP44X-H1141



- 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
- 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...55 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

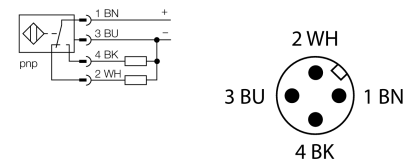
Type	NI10U-EM12EWD-VP44X-H1141
ID	1634896

Remark to product	Product discontinued. Please use the alternative product 100000634 with an operating voltage of 10...30 VDC.
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General data	
Rated switching distance S_n	10 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 %

Electrical data	
Operating voltage	10...55 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 200\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at I_L	$\leq 1.8\text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Insulation class	□
Switching frequency	1 kHz

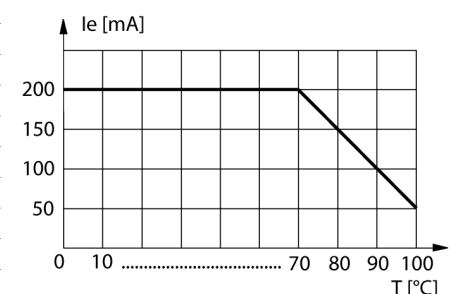
Wiring Diagram



Functional principle

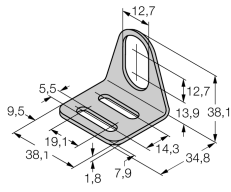
The inductive sensors for the food industry are absolutely tight and resistant to cleaning agents and disinfectants. The requirements of the protection classes IP68 and IP69K are well exceeded by our uprox®+ sensors. The sensors are entirely protected by the LCP front cap and the stainless steel housing.

Derating Curve



Mechanical data	
Design	Threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Stainless steel, 1.4404 (AISI 316L)
Active area material	Plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 20 bar
Max. tightening torque of housing nut	10 Nm
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-40...+100 °C
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

Accessories

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