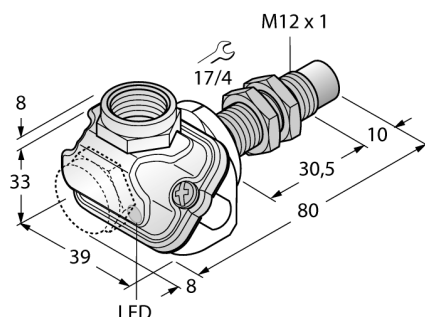
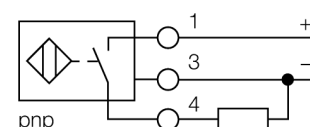




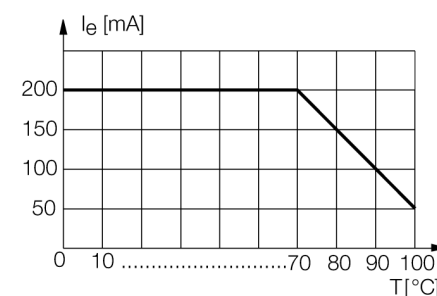
- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer Vectra
- Factor 1 for all metals
- Magnetic field immune
- For temperatures of - 40 °C to +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- For the food industry
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Terminal chamber

Wiring diagram



Functional principle

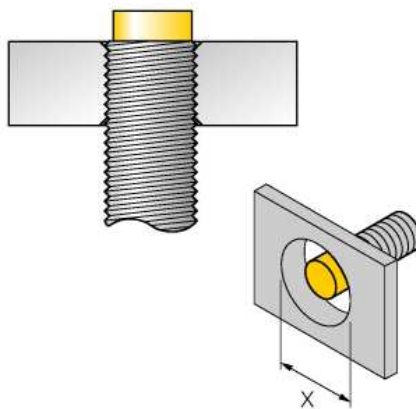
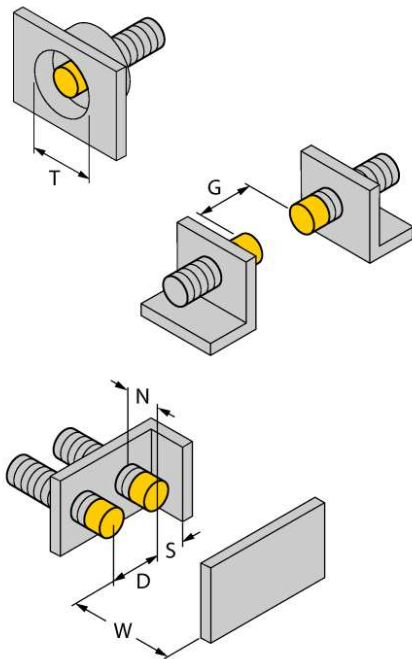
Turck offers the perfect solution for dairies, breweries, for the manufacture of bakery products and frozen food, or for packaging and filling applications in the food industry. The inductive sensors for the food industry are absolutely watertight and resistant to cleaning agents and disinfectants. The requirements of the protection classes IP68 and IP69K are well exceeded by our uprox®+ sensors. The sensors are well protected by an LCP front cap and a stainless steel housing.



Type code	NI10U-EM12WDTC-AP6X
Ident no.	1634761
Rated operating distance Sn	10 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Ambient temperature	3...15 %
	-40...+100 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	IP68 / IP69K
Switching frequency	2 kHz
Design	threaded barrel, M12 x 1
Dimensions	80 mm
Housing material	Metal, V4A (1.4404)
Terminal chamber cover material	plastic, Ultem
Terminal chamber housing material	plastic, LCP-GF30
Material active face	Plastic, LCP
Admissible pressure on front cap	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Connection	Terminal chamber, Removable cage clamp terminals suited for M16 x 1.5 cable glands
Clamping ability	≤ 1.5 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	• yellow

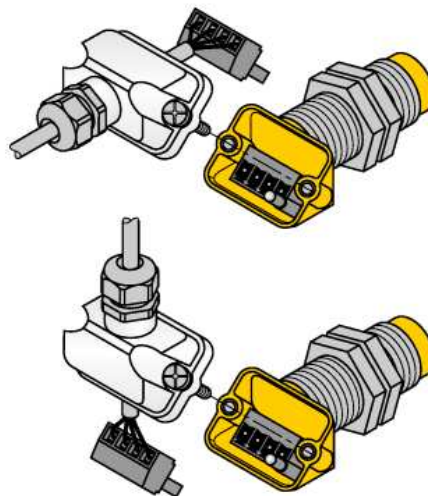
Distance D	48 mm
Distance W	30 mm
Distance T	36 mm
Distance S	18 mm
Distance G	60 mm
Distance N	16 mm

Diameter of the active area B Ø 12 mm



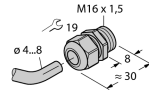
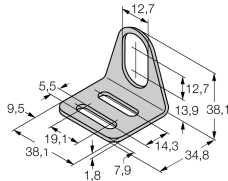
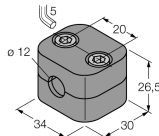
All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

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



The innovative terminal chamber concept enables simple and comfortable connection of the sensor. Straight as well as angled cable outlets are available and the removable terminal strip guarantees easy wiring.

Accessories

Type code	Ident no.	Description	Dimension drawing
M16X1,5 PVDF CABLE GLAND	1634759	Cable glands M16 x 1.5, material PVDF	 Technical drawing of an M16 x 1.5 cable gland. Dimensions shown: outer diameter 19, inner diameter 16, thread length 8, total length 30, and a small hole with diameter 4...8.
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 Technical drawing of a mounting bracket for threaded barrel devices. Dimensions shown: 12.7, 5.5, 9.5, 19.1, 38.1, 1.8, 7.9, 14.3, 34.8, 13.9, 38.1, and 12.7.
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 Technical drawing of a mounting bracket for smooth and threaded barrel devices. Dimensions shown: 5, 12, 20, 26.5, 34, and 30.