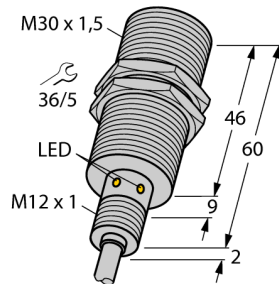


Inductive Sensor For the Food Industry BI15U-EM30WD-VP6X/S90 20M



- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- 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
- Suitable for applications in the food industry
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

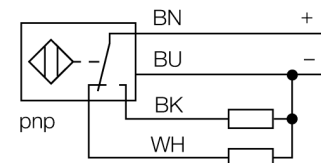
Type	BI15U-EM30WD-VP6X/S90 20M
ID	100000633

General data	
Rated switching distance S_n	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %

Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 200 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I_L	≤ 1.8 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}
Switching frequency	0.75 kHz

Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	66 mm
Housing material	Stainless steel, 1.4404 (AISI 316L)
Active area material	Plastic, LCP
End cap	Plastic, PP, transparent
Admissible pressure on front cap	≤ 10 bar
Max. tightening torque of housing nut	75 Nm
Electrical connection	Cable
Cable quality	$\varnothing 5.2$ mm, LifYY-11Y, PUR, 20 m
Core cross-section	4 x 0.34 mm ²

Wiring Diagram

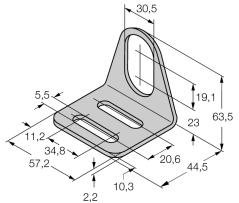
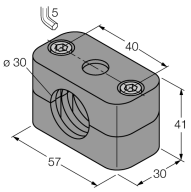
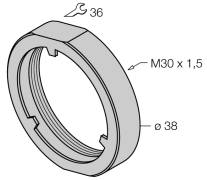


Functional principle

uprox®+ sensors from TURCK are the perfect solution for dairies, breweries, industrial bakeries, frozen food, packaging and filling applications. They are absolutely tight and resistant to cleaning agents and disinfectants and well exceed the requirements of the protection classes IP68 and IP69K thanks to the LCP front cap and the stainless steel housing.

Environmental conditions	
Ambient temperature	-30...+85 °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-30	6945005	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a mounting bracket for threaded barrel sensors. The drawing shows a perspective view of a U-shaped bracket with a central slot. Dimensions are provided in millimeters: 30.5 (width of the top flange), 19.1 (height of the top flange), 63.5 (total height), 23 (height of the central slot), 44.5 (width of the bottom flange), 10.3 (width of the central slot), 2.2 (thickness of the bottom flange), 57.2 (total width), 34.6 (width of the central slot), 11.2 (width of the top flange), and 5.5 (width of the top flange).</p>
BSS-30	6901319	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 <p>Technical drawing of a mounting clamp for smooth and threaded barrel sensors. The drawing shows a perspective view of a rectangular clamp with a central slot. Dimensions are provided in millimeters: 40 (width), 41 (height), 30 (width of the bottom flange), 57 (total width), and 5 (height of the top flange). The central slot has a diameter of 30 mm.</p>
PN-M30	6905308	Protective nut for M30 x 1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	 <p>Technical drawing of a protective nut for M30 x 1 threaded barrel devices. The drawing shows a perspective view of a ring-shaped nut with a central slot. Dimensions are provided in millimeters: 36 (width), 38 (outer diameter), and M30 x 1,5 (thread specification).</p>