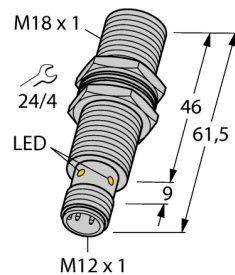


Inductive Sensor

For the Food Industry

BI8U-EM18MWD-VP44X-H1141



- Threaded barrel, M18 x 1
- 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...55 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

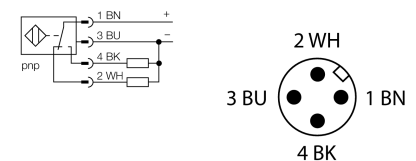
Type	BI8U-EM18MWD-VP44X-H1141
ID	1634897

Remark to product	Product discontinued. Please use the alternative product 100000635 with an operating voltage of 10...30 VDC.
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General data	
Rated switching distance S_n	8 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...55 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}
Insulation class	□
Switching frequency	1.5 kHz

Wiring Diagram

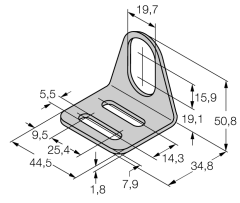
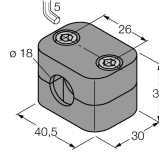
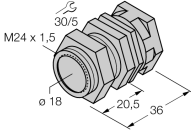


Functional principle

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.

Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	61.5 mm
Housing material	Stainless steel, 1.4404 (AISI 316L)
Active area material	Plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 15 bar
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, M12 × 1
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-18	6945004	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	