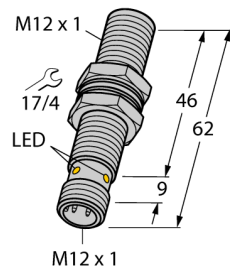


Inductive Sensor For the Food Industry BI4U-EM12EWD-VP44X-H1141



- 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

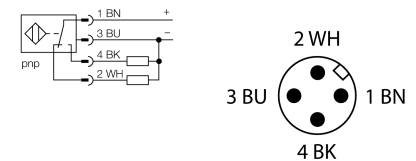
Type	BI4U-EM12EWD-VP44X-H1141
ID	1634905

Remark to product	Product discontinued. Please use the alternative product 1635012 with an operating voltage of 10...30 VDC.
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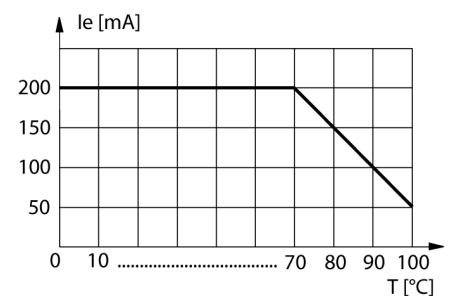
General data	
Rated switching distance S_n	4 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 20\%$, $\leq -25\text{ °C}$, $\geq +70\text{ °C}$
Hysteresis	3...15 %

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	□

Wiring Diagram

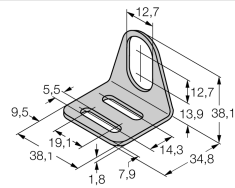
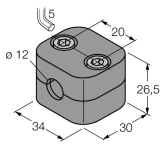


Derating Curve



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	
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	