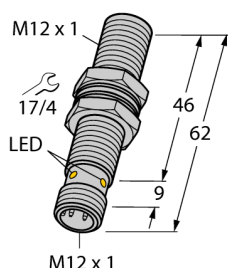


Inductive sensor

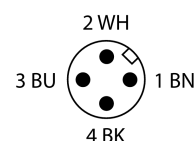
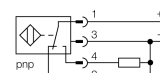
For the food industry

BI4U-EM12EWD-VP6X-H1141

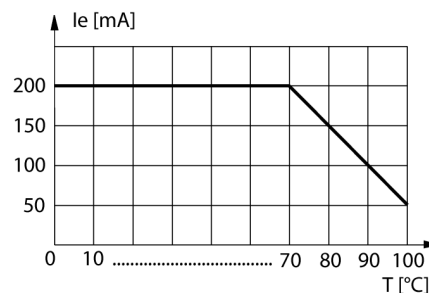


- Threaded barrel, M12 x 1
- Stainless steel, 1.4404
- Front cap made of liquid crystal polymer
- Factor 1 for all metals
- Resistant to magnetic fields
- Temperatures -40 °C ... +100 °C
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- Laser engraved label, permanently legible
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

Wiring Diagram



Derating Curve



Type designation	BI4U-EM12EWD-VP6X-H1141
Ident-No.	1635012
Rated switching distance Sn	4 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n) \text{ mm}$
Repeat accuracy	$\leq 2 \% \text{ of full scale}$
Temperature drift	$\leq \pm 10 \%$
Hysteresis	$\leq \pm 20 \%, \leq -25 \text{ °C}, \geq +70 \text{ °C}$
Ambient temperature	3...15 % -40...+100 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \% U_{ss}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current I_o	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Insulation class	□
Switching frequency	2 kHz
Design	Threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, LCP
Connector housing	plastic, PP
Admissible pressure on front cap	$\leq 20 \text{ bar}$
Max. tightening torque housing nut	10 Nm
Electrical connection	Connector, M12 x 1
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
Packaging unit	1
Switching state	LED, Yellow

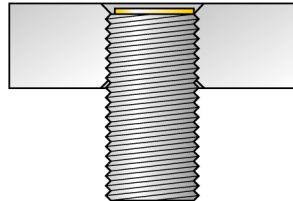
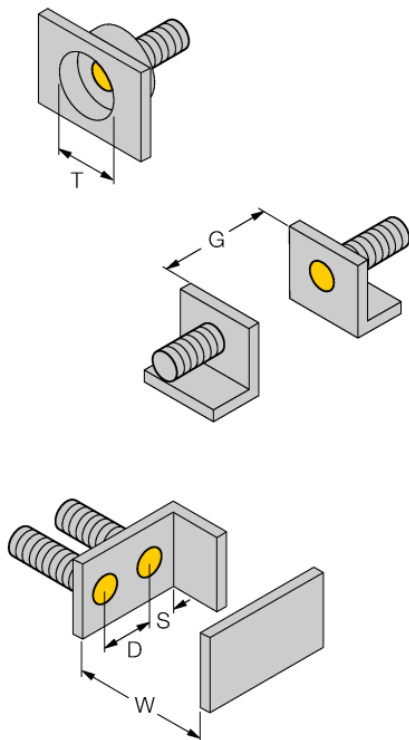
Inductive sensor

For the food industry

BI4U-EM12EWD-VP6X-H1141

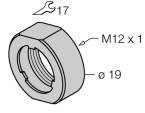
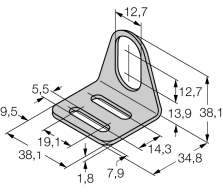
Distance D	24 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter active area B	Ø 12 mm
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All flush mountable *uprox*®+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

Type code	Ident-No.	Description	
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	