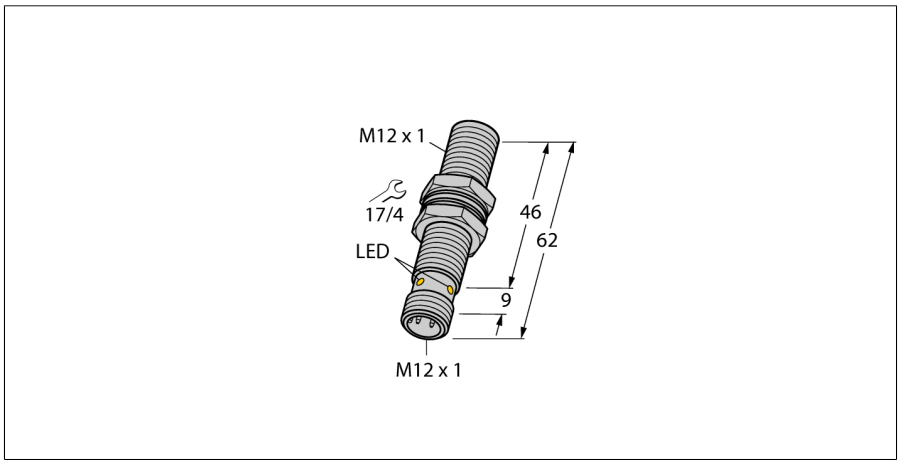
Inductive sensor
For the food industry
BI4U-EM12EWD-VP44X-H1141

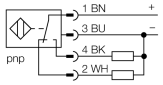
Industrial Automation

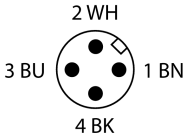


- **Threaded barrel, M12 x 1**
- **Stainless steel, 1.4404**
- **Front cap made of liquid crystal polymer**
- **Factor 1 for all metals**
- **Resistant to magnetic fields**
- **Temperatures -40 °C … +100 °C**
- **High protection class IP69K, for harsh environments**
- **Special double-lip seal**
- **Protection against all common acid and alkaline cleaning agents**
- **Laser engraved label, permanently legible**
- **DC 4-wire, 10…55 VDC**
- **Changeover contact, PNP output**
- **M12 x 1 male connector**

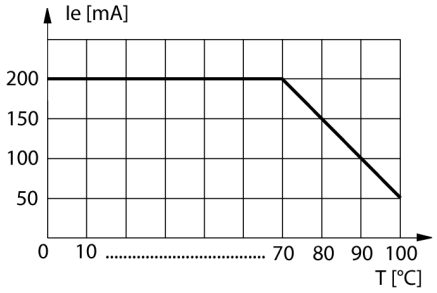
Type designation	BI4U-EM12EWD-VP44X-H1141
Ident-No.	1634905
Rated switching distance Sn	4 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≤ -25 °C , ≥ +70 °C
Hysteresis	3…15 %
Ambient temperature	-40…+100 °C
Operating voltage	10…55 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Protection class	⧈
Switching frequency	2 kHz
Design	Threaded barrel,M12 × 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	≤ 20 bar
Max. tightening torque housing nut	10 Nm
Electrical connection	Connector, M12 × 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
Switching state	LED,Yellow

Wiring Diagram





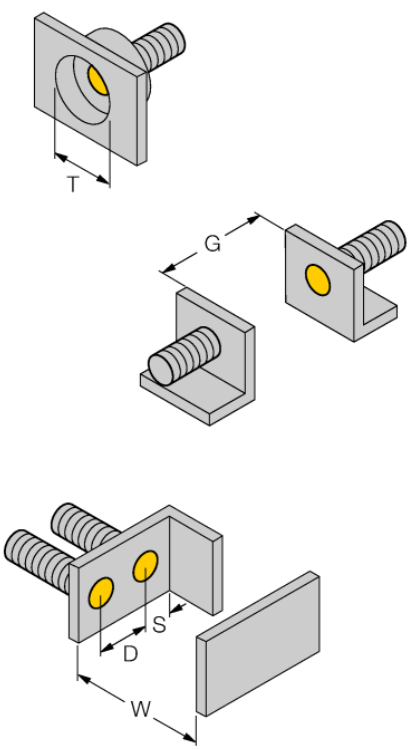
Derating Curve

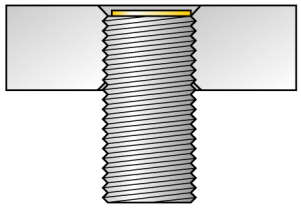


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Inductive sensor
For the food industry
BI4U-EM12EWD-VP44X-H1141

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

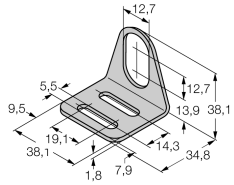
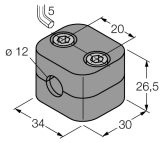
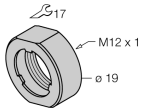




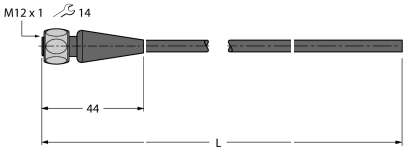
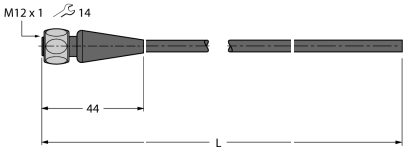
All flush mountable *uprox*®+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

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Accessories

Type code	Ident-No.	Description	
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	
PN-M12	6905309	Impact protection nut for M12x1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	

Wiring accessories

Type code	Ident-No.	Description	
RKH4.4-2/TFE	6934473	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, sheath material: PVC, grey; temperature range: -25…+80 °C (in resting state), 0…+80 °C (in motion); other cable lengths and types available, see www.turck.com	
RKH4.4-2/TFG	6933086	Connection cable, M12 connector, female, straight, 4-pin, cable length: 2 m, sheath material: TPE, grey; temperature range: -40…+105 °C (in resting state), -25…+105 °C (in motion); other cable lengths and types available, see www.turck.com	

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