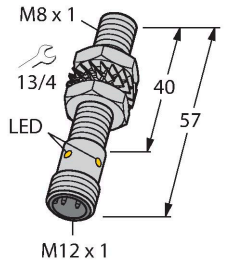
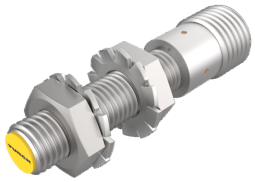
BI1.5-EG08WD-AP6X-H1341
Inductive Sensor – For Harsh Environments





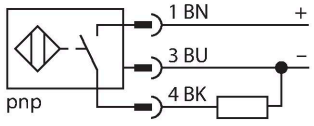
Technical data

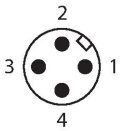
Type	BI1.5-EG08WD-AP6X-H1341
ID	4602210
General data	
Rated switching distance	1.5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 150 mA
No-load current	≤ 15 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 break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	57 mm
Housing material	Stainless steel, 1.4427 SO

Features

- M8 × 1 threaded barrel
- Stainless steel, 1.4404
- Protection class IP68/IP69K
- PVDF front cap
- Resistant to cleaning agents
- Resistance to cooling lubricants, cutting and grinding oils
- Viton O-ring seal
- Suitable for applications in the food industry
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram





Functional principle

TURCK offers leak-proof sensors for the food industry and machine engineering that are resistant to cleaning agents, cooling lubricants, cutting and grinding oils. They are made for rough environmental conditions and not only meet but even exceed the requirements of the protection classes IP68 and IP69. These rugged sensors are protected by a PVDF front cap, a special Viton seal and a stainless steel housing.

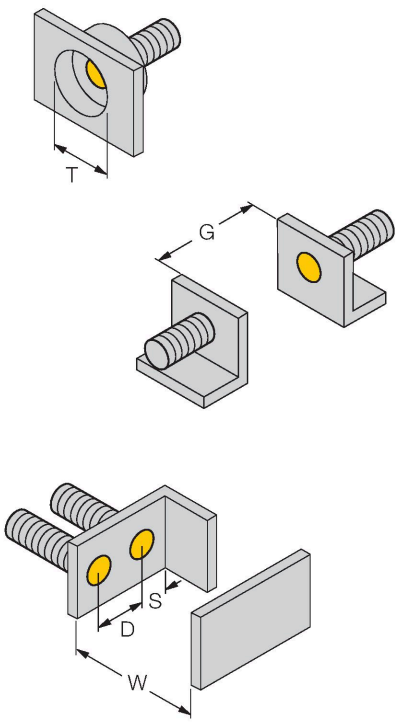
BI1.5-EG08WD-AP6X-H1341| 21-02-2025 15-03 | Technical modifications reserved

Technical data

Active area material	Plastic, PVDF
Admissible pressure on front cap	≤ 22 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25…+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 IP69K
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

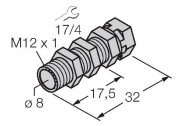
Mounting instructions/Description

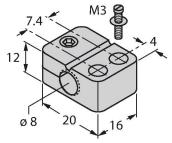


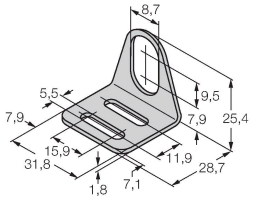
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

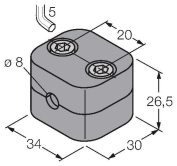
BI1.5-EG08WD-AP6X-H1341| 21-02-2025 15-03 | Technical modifications reserved

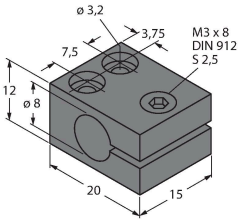
Accessories

QM-08	6945100
	Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

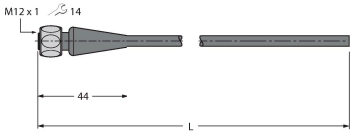
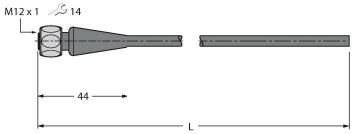
BST-08B	6947210
	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW08	6945008
	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08	6901322
	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80	69479
	Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum

Accessories

Dimension drawing	Type	ID	
	RKH4-2/TFE	6935482	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray; temperature range: -25…+80 °C
	RKH4-2/TFG	6934384	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40…+105 °C

BI1.5-EG08WD-AP6X-H1341| 21-02-2025 15-03 | Technical modifications reserved