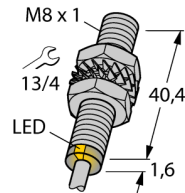


# Inductive sensor BI2-EG08-VP6X

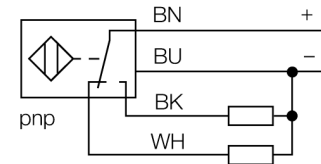
**TURCK**  
*works*

Industrial  
Automation



- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- 4-wire DC, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

<b>Type code</b>	BI2-EG08-VP6X
Ident-No.	1604610
Ident-No (TUSA)	S1604610
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>in</sub>
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>N</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	2 kHz
<b>Design</b>	threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	stainless steel, 1.4427 SO
Material active face	Plastic, PA
End cap	Plastic, PA12-GF30
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	3 mm, grey, Lif9Y-11Y, PUR, 2 m
Cable cross section	4 x 0.14 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Switching state</b>	LED yellow

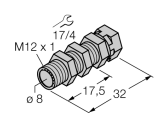
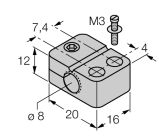
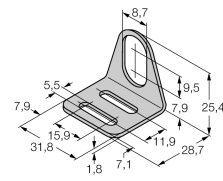
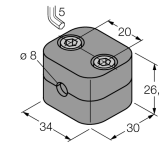
**Inductive sensor  
BI2-EG08-VP6X**

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 of the active area B                       $\varnothing$  8 mm



Accessories

Type code	Ident-No.	Description	Dimension drawing
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.	 <p>Technical drawing of a quick-mount bracket with dimensions: M12 x 1, 17.4, 17.5, 32, and <math>\phi 8</math>.</p>
BST-08B	6947210	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	 <p>Technical drawing of a fixing clamp with dimensions: 7.4, M3, 12, 16, 20, and <math>\phi 8</math>.</p>
MW-08	6945008	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a mounting bracket with dimensions: 8.7, 5.5, 7.9, 15.9, 31.8, 1.8, 7.1, 11.9, 28.7, 7.9, 9.5, 25.4, and 20.</p>
BSS-08	6901322	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a mounting bracket with dimensions: 15, 20, 26.5, 30, 34, and <math>\phi 8</math>.</p>