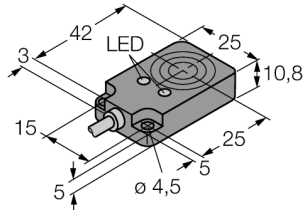


# Inductive sensor Bi8-Q10-VP6X2

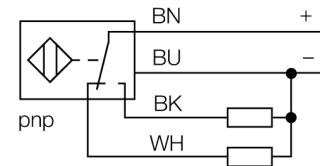
**TURCK**  
*works*

Industrial  
Automation



- Rectangular, height 10.8 mm
- Active face on top
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

<b>Type</b>	Bi8-Q10-VP6X2
Ident-No.	4616401
<b>Rated operating distance Sn</b>	8 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Rated insulation voltage	$\leq 0.5$ kV
Short-circuit protection	yes/ cyclic
Voltage drop at $I_L$	$\leq 1.8$ V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	1 kHz
<b>Design</b>	rectangular, Q10
Dimensions	42x 25x 10.8 mm
Housing material	Plastic, PBT-GF30-V0
Connection	cable
Cable quality	5.2 mm, LiYY, PVC, 2 m
Cable cross section	4 x 0.25 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283years acc. to SN 29500 (Ed. 99) 40 °C
<b>Operating voltage</b>	LED green
Switching state	LED yellow

# Inductive sensor Bi8-Q10-VP6X2

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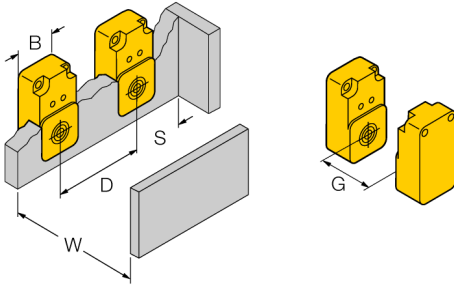
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Mounting instructions	minimum distances
Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

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**Width of the active face B** 25 mm

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# Inductive sensor Bi8-Q10-VP6X2



## Accessories

Type code	Ident-No.		Dimension drawing
MW-Q08/Q10	6945007	Mounting bracket; material VA 1.4301	A technical drawing of a mounting bracket. It shows a perspective view of a rectangular plate with a vertical flange on one side. The drawing includes several dimension lines: a vertical dimension of 44 mm for the main body, a horizontal dimension of 23,5 mm for the top edge of the flange, a horizontal dimension of 6 mm for the flange's thickness, a diameter of 4,3 mm for a hole in the flange, a horizontal dimension of 35 mm for the main body's width, a horizontal dimension of 22 mm for the distance between two holes, a horizontal dimension of 43,5 mm for the total width including the flange, a horizontal dimension of 1,5 mm for the distance from the bottom edge to the first hole, and a vertical dimension of 12,5 mm for the distance from the bottom edge to the top of the flange.