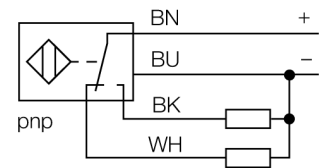


**Inductive sensor
with extended switching distance
BI7-Q08-VP6X2**

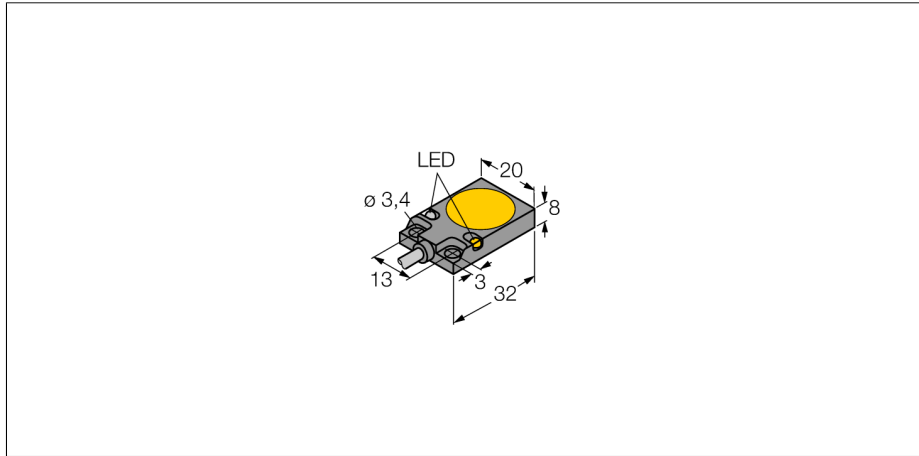
- Rectangular, height 8 mm
- Active face on top
- Metal, die-cast zinc
- Large detection range
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

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.



Type code	BI7-Q08-VP6X2
Ident no.	1600900
Rated operating distance Sn	7 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
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	1 kHz
Design	rectangular, Q08
Dimensions	32x 20x 8 mm
Housing material	Metal, GD-Zn
Connection	cable
Cable quality	4 mm, LiFY-11Y, PUR, 2 m
Cable cross section	4 x 0.25 mm ²
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
Operating voltage	LED green
Switching state	● yellow

**Inductive sensor
with extended switching distance
BI7-Q08-VP6X2**

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width of the active face B	20 mm
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