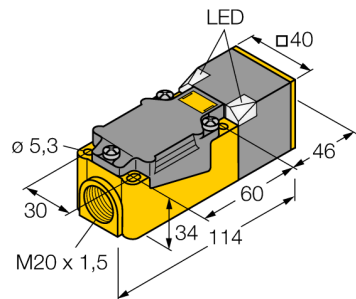


Inductive sensor with extended temperature range BI15-CP40-VP4X2/S97

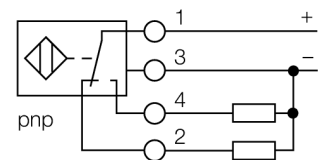
TURCK

Industrial
Automation



- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- For temperatures up to -40 °C
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

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.

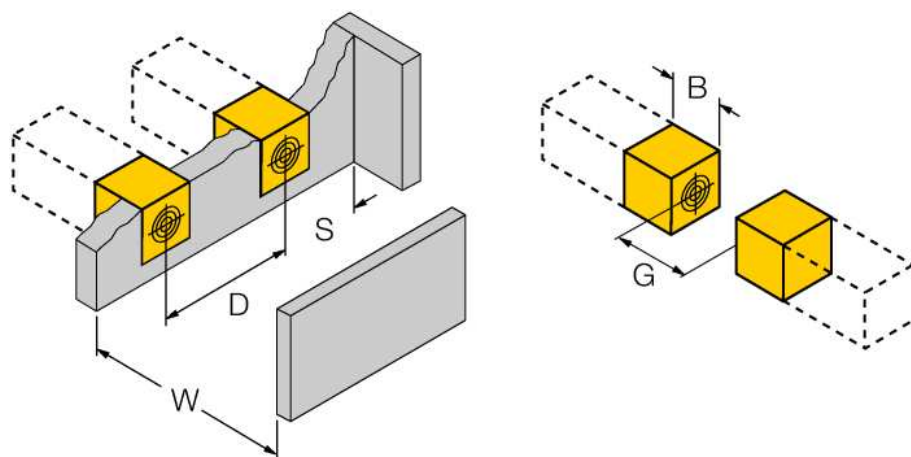
Special versions are available for ambient temperatures between -60°C and +250°C.

Type code	BI15-CP40-VP4X2/S97
Ident no.	15058
Rated operating distance Sn	15 mm
Mounting condition	flush
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C
Ambient temperature	3...15 %
	-40...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, PNP
Switching frequency	0.15 kHz
Design	rectangular, CP40
Dimensions	114x 40x 40 mm
Housing material	Plastic, PBT, black
Connection	Terminal chamber
Clamping ability	≤ 2.5 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	2 x LEDs green
Switching state	●● yellow

Inductive sensor with extended temperature range BI15-CP40-VP4X2/S97

Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance S	$1 \times B$
Distance G	$6 \times S_n$

Width of the active face B	40 mm
----------------------------	-------

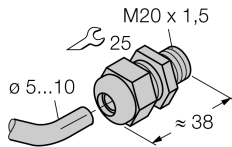
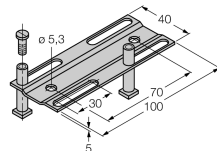


**Inductive sensor
with extended temperature range
BI15-CP40-VP4X2/S97**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
STRM M20X1,5 BLACK	6965902	Cable glands M20 x 1.5	
Adjusting bar JS 025/037	69429	Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301	
BSS-CP40	6901318	Mounting bracket for rectangular devices; material: Polypropylene	