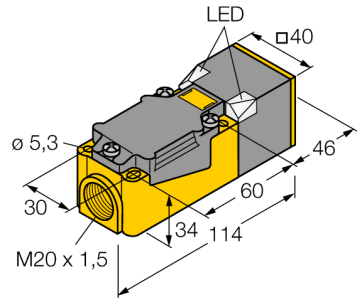
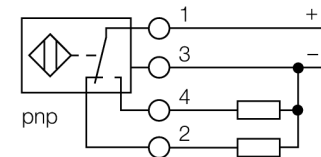


**Inductive sensor
with extended temperature range
BI15-CP40-VP4X2/S100**



- 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 +100 °C
- 4-wire DC, 10...65 VDC
- Changeover contact, PNP output
- Terminal chamber

Wiring diagram

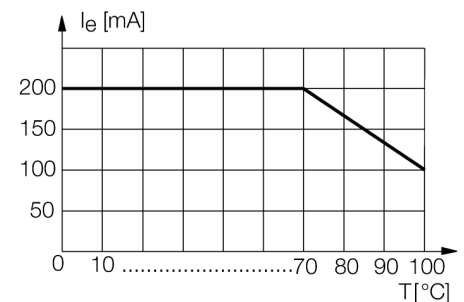


Functional principle

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.

derating curve



Type code	BI15-CP40-VP4X2/S100
Ident no.	15045
Rated operating distance Sn	15 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
Temperature drift	10 %
Hysteresis	≤ ± 20 %, ≥ +70 °C
Ambient temperature	-25...+100 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 200 mA
Rated operational current	see derating curve
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Voltage drop at I _e	≤ 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	114 x 40 x 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
Power-on indication	2 x LEDs green
Switching state	LED yellow

**Inductive sensor
with extended temperature range
BI15-CP40-VP4X2/S100**

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
<hr/>	
Width of the active face B	40 mm



**Inductive sensor
with extended temperature range
BI15-CP40-VP4X2/S100**

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	