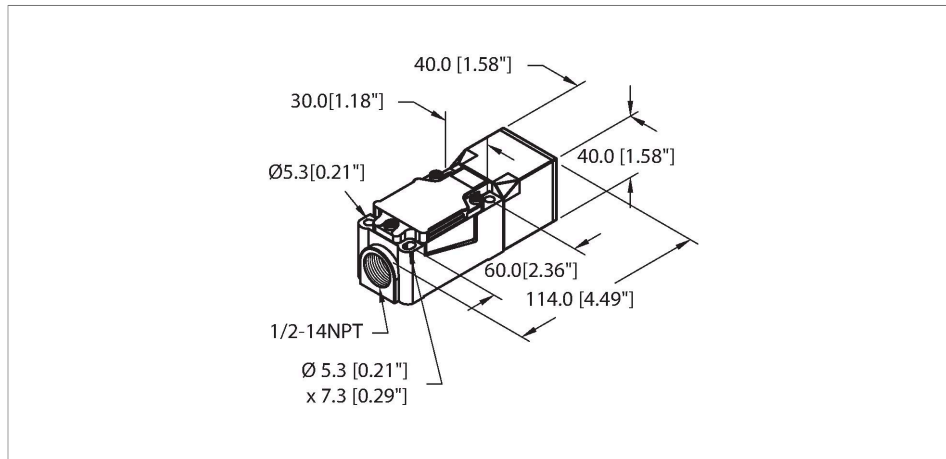


# BI15-CP40-VP4X2/S100-S10

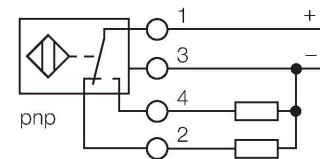
## Inductive Sensor – With Increased Temperature Range



### Features

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

### Wiring diagram

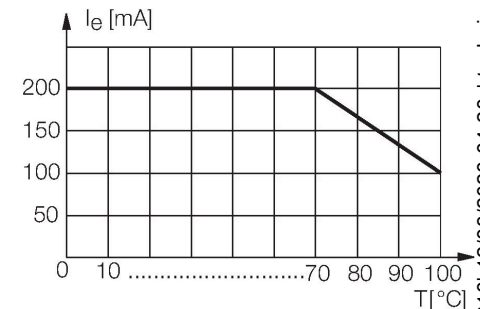


### Technical data

Type	BI15-CP40-VP4X2/S100-S10
Ident. no.	15019
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2$ % of full scale
Temperature drift	$\leq \pm 10$ % $\leq \pm 20$ %, $\geq +70$ °C
Hysteresis	3...15 %
Ambient temperature	-25...+100 °C
Operating voltage	10...65 VDC
Residual ripple	$\leq 10$ % $U_{ss}$
DC rated operational current	$\leq 200$ mA
Rated operational current	See derating curve
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_e$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP

### 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.

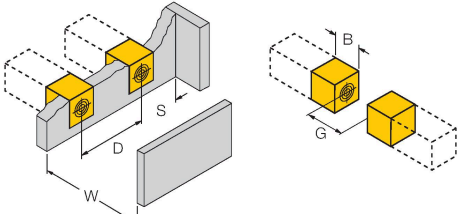


BI15-CP40-VP4X2/S100-S10 | 12/03/2020 04-20 | technical changes reserved

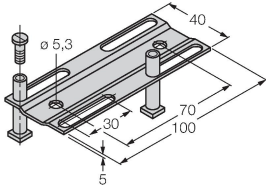
## Technical data

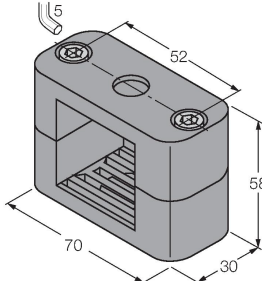
Switching frequency	0.15 kHz
<b>Design</b>	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
<b>Power-on indication</b>	2 × LEDs, Green
Switching state	2 × LEDs, Yellow

## Mounting instructions

Mounting instructions/Description		
	Distance D	2 x B
	Distance W	3 x Sn
	Distance S	1 x B
	Distance G	6 x Sn
	Width active area B	40 mm

## Accessories

Adjusting bar JS 025/037	69429
	
Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301	

BSS-CP40	6901318
	
Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene	