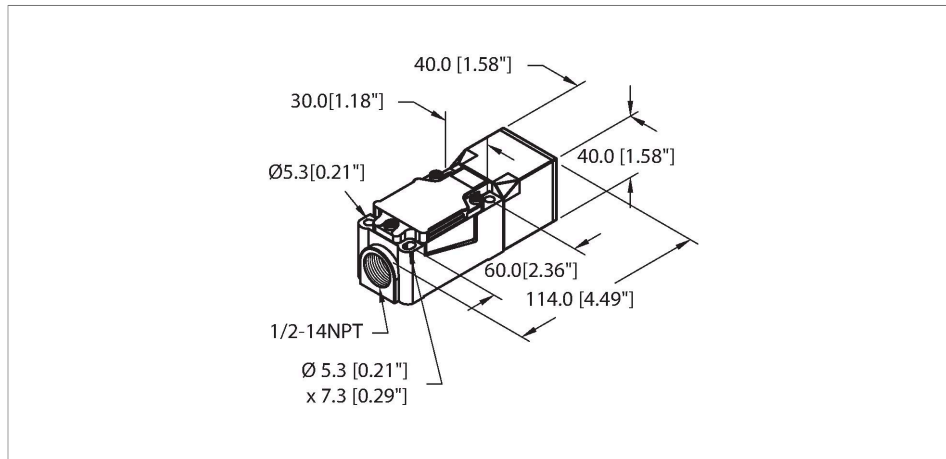


# BI15-CP40-FZ3X2/S10-S97

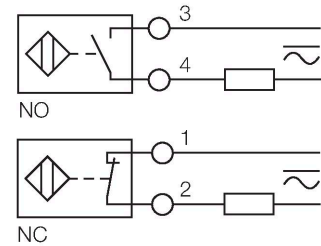
## Inductive Sensor – With Increased Temperature Range



### Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Temperatures up to -40 °C
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

### Wiring diagram

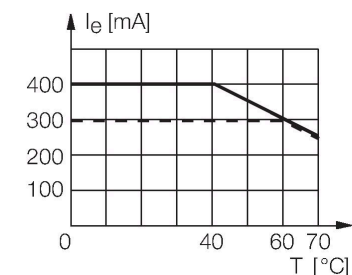


### Technical data

Type	BI15-CP40-FZ3X2/S10-S97
Ident. no.	1341010
Special version	S10-S97 corresponds to: Mounting base with 1/2-14NPT thread Temperature range up to -40°C
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	$\leq \pm 10$ % $\leq \pm 20$ %, $\leq -25$ °C
Hysteresis	3...15 %
Ambient temperature	-40...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10...300 VDC
DC rated operational current	$\leq 300$ mA
Frequency	$\geq 50$ ... $\leq 60$ Hz
Residual current	$\leq 1.7$ mA
Isolation test voltage	$\leq 1.5$ kV
Surge current	$\leq 8$ A ( $\leq 10$ ms max. 5 Hz)
Voltage drop at $I_e$	$\leq 6$ V
Output function	2-wire, Connection programmable
Smallest operating current	$\geq 3$ mA

### 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.



## Technical data

Switching frequency	0.02 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>	LED, Green
Switching state	LED, Red

## 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	