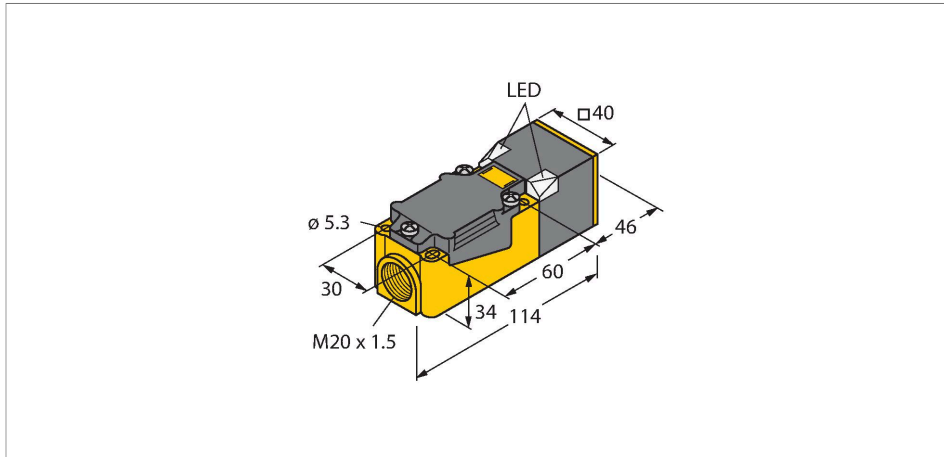


# BI15-CP40-LIU

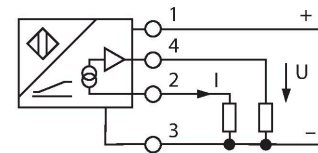
## Inductive Sensor – With Analog Output



### Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-VO
- High-luminance corner LEDs
- Optimum view of operating voltage and switching state from any position
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Terminal chamber

### Wiring diagram

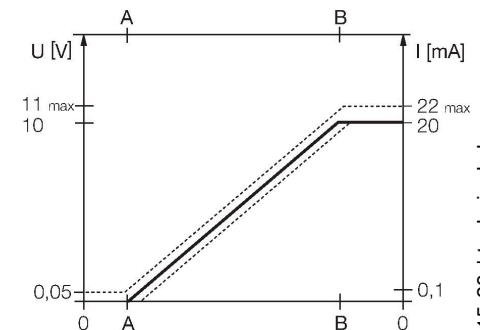


### Technical data

Type	BI15-CP40-LIU
ID	15356
<b>General data</b>	
Measuring range	4...11 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
Repeatability	$\leq 1 \%$ of measuring range  A - B
	0.5 %, after warm-up 0.5 h
Reproducibility	$\leq 70 \mu\text{m}$
	$\leq 35 \mu\text{m}$ , after a warm-up time of 0.5 h
Linearity deviation	$\leq 3 \%$
Temperature drift	$\leq \pm 0.06 \%$ /K
<b>Electrical data</b>	
Operating voltage	15...30 VDC
Residual ripple	$\leq 10 \%$ $U_{ss}$
No-load current	8 mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	4-wire, Analog output
Voltage output	0...10 V
Current output	0...20 mA

### Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.

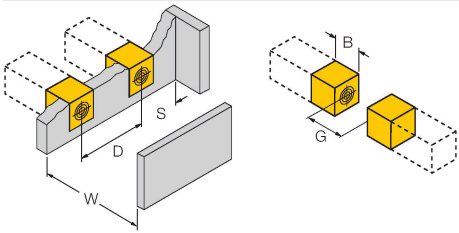


BI15-CP40-LIU | 11/07/2023 15-23 | technical changes reserved

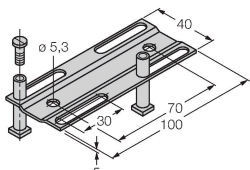
## Technical data

Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$
Load resistance current output	$\leq 0.4 \text{ k}\Omega$
Measuring sequence frequency	110 Hz
<b>Mechanical data</b>	
Design	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	$\leq 2.5 \text{ mm}^2$
<b>Environmental conditions</b>	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C

## Mounting instructions

Mounting instructions/Description		
	Distance D	80 mm
	Distance W	33 mm
	Distance S	40 mm
	Distance G	66 mm
	Width active area B	40 mm

## Accessories

JS025/037	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	
