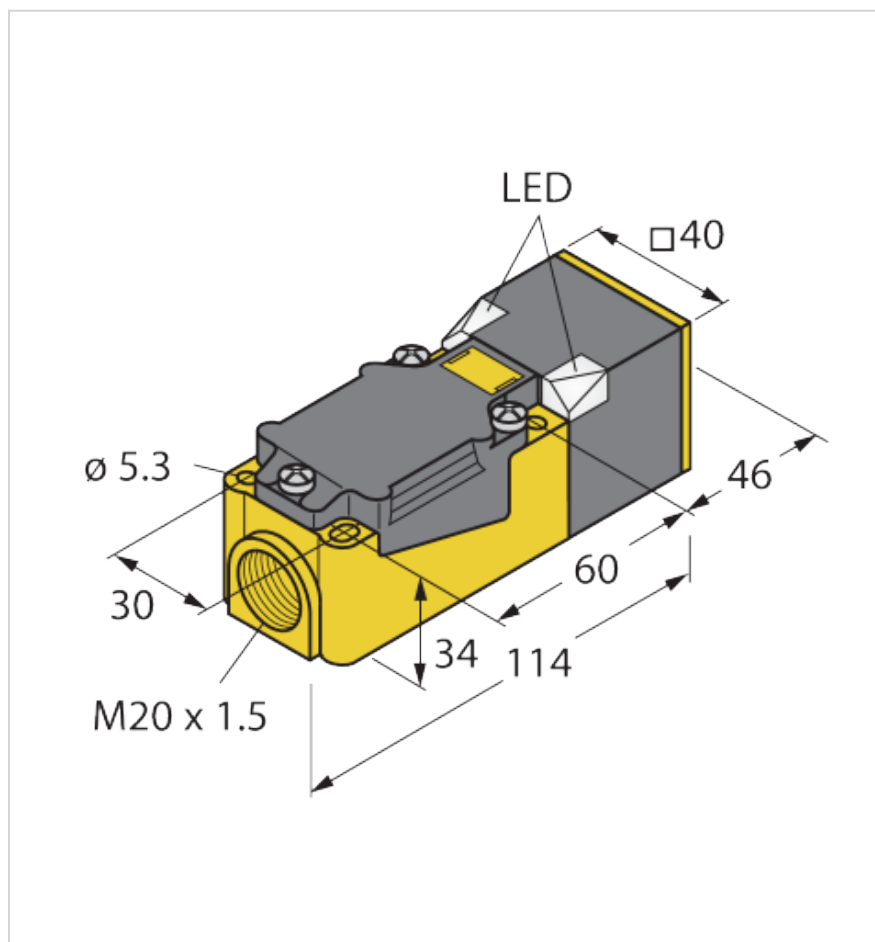


BI15-CP40-LIU

Inductive Sensor With Analog Output



Type designation	BI15-CP40-LIU
Ident-No.	15356

Technical data

General data	
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Detection area/measuring range	
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Measuring range	4...11 mm
Power supply	
Operating voltage U_B	15...30 VDC

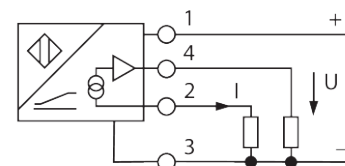
Features

- 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
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Terminal chamber

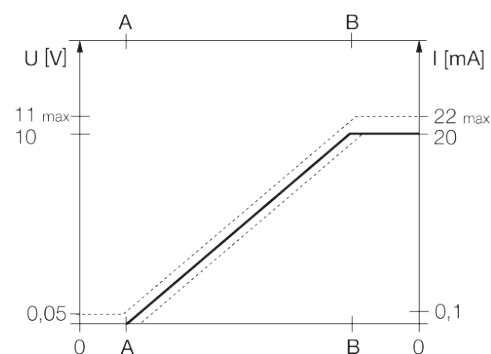
Technical data

Electrical data	
No-load current	8 mA
Output function	4-wire, Analog output
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Isolation test voltage	$\leq 0,5 \text{ kV}$
Measuring sequence frequency	110 Hz
Residual ripple	$\leq 10 \% U_{SS}$
Outputs	
Current output	0...20 mA
Voltage output	0...10 V
Load resistance current output	$\leq 0,4 \text{ k}\Omega$
Load resistance voltage output	$\geq 4,7 \text{ k}\Omega$
Accuracy/deviation	
Linearity deviation	3 %
Repeatability	$\leq 1 \% \text{ of measuring range } A - B $ 0.5 %, after warm-up 0.5 h
Reproducibility	$\leq 70 \mu\text{m}$ $\leq 35 \mu\text{m}$, nach 0,5 h Aufwärmzeit
Temperature drift	$\leq \pm 0,06 \%/\text{K}$
Mechanical data	
Design	Rectangular, CP40
Construction type designation	CP40
Dimensions	114 mm x 40 mm x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PBT-GF30-V0, yellow
Electrical connection	Terminal chamber
Clamping ability	$\leq 2,5 \text{ mm}^2$
Pressure resistant	no
Mounting conditions	Flush
Ambient conditions	
Ambient temperature	-25...+70 °C
Pollution degree	3
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Protection class	IP67
Tests/approvals	

Wiring Diagram



Measuring Range



Functional principle

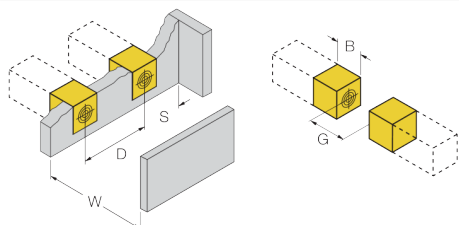
Inductive sensors with analog output from Turck accomplish simple control tasks. They provide a distance-proportional current, voltage or frequency signal. The output signal is linear to the distance of the target over the entire sensing range.

Technical data

MTTF

751 Years acc. to SN 29500 (Ed. 99)
40 °C

Assembly instructions



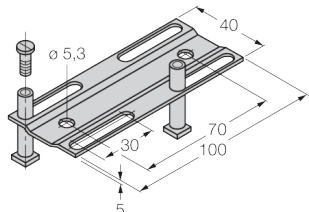
Distance D: 80 mm
Distance W: 33 mm
Distance S: 40 mm
Distance G: 66 mm
Width active area B: 40 mm

Mounting accessories

JS025/037

69429

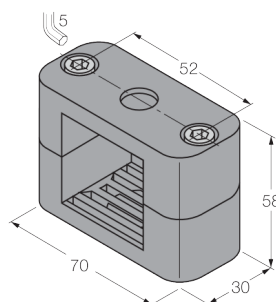
Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301



BSS-CP40

6901318

Mounting bracket for rectangular housings 40 x 40 mm; material: Polypropylene; ambient temperature -30°C ... +90 °C°



Functional accessories

IM43-13-SR

7540041

Trip amplifier; 1-channel; input 0/4...20 mA or 0/2...10 V; power supply for 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal operating voltage 20...250 VUC; additional trip amplifiers available in our "Interface Technology" catalog

