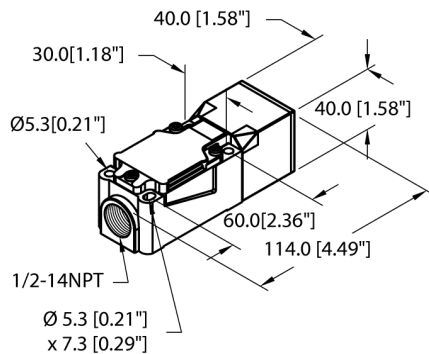
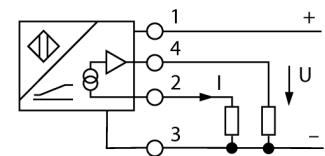


Inductive Sensor With analog output BI15-CP40-LIU/S10



- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Thread, 1/2-14 NPT
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- Terminal chamber

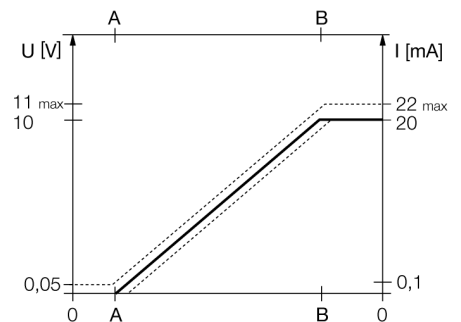
Wiring Diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Measuring Range

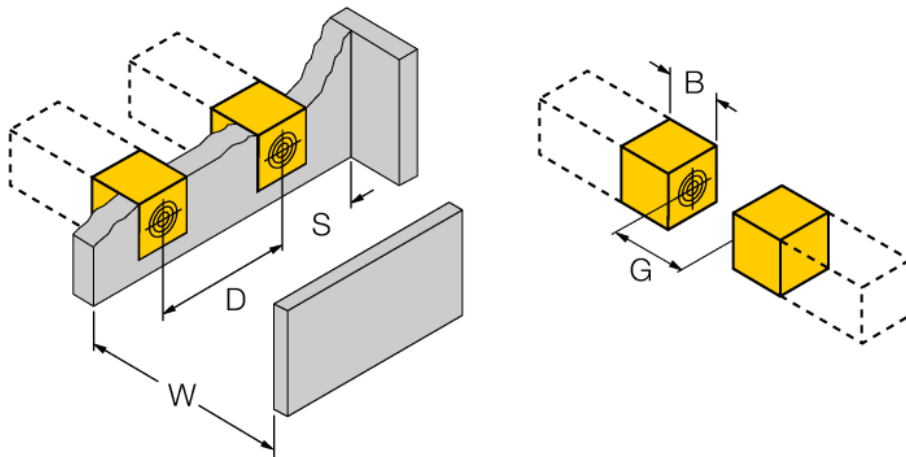


Type designation	BI15-CP40-LIU/S10
Ident-No.	15357
Special version	S10 = Mounting base with 1/2-14NPT thread
Measuring range	4...11 mm mm
Rated switching distance S_n	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
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	$\leq \pm 10\%$
Temperature drift	$\leq \pm 0.06\% / \text{K}$
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
No-load current I_0	$\leq 8\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no/ Complete
Output function	4-wire, Analog output
Voltage output	0...10V
Current output	0...20 mA
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
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	$\leq 2.5\text{ mm}^2$
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
Packaging unit	1

Inductive Sensor **With analog output** **BI15-CP40-LIU/S10**

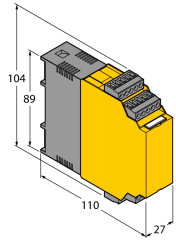
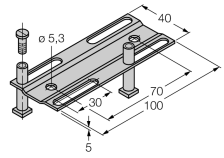
Distance D	80 mm
Distance W	33 mm
Distance S	40 mm
Distance G	66 mm

Width active area B	40 mm
----------------------------	-------



Inductive Sensor With analog output BI15-CP40-LIU/S10

Accessories

Type code	Ident-No.	Description	
IM43-13-SR	7540041	Trip amplifier; 1-channel; input 0/4...20 mA or 0/2...10 V; supply of 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 voltage supply 20...250 VUC; further Limit value indicators are described in our "Interface Technology" catalog.	
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	