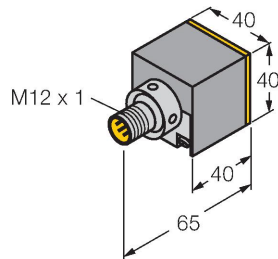


BI15-CK40-LIU-H1141 W/BS 2.1

Inductive Sensor – With Analog Output



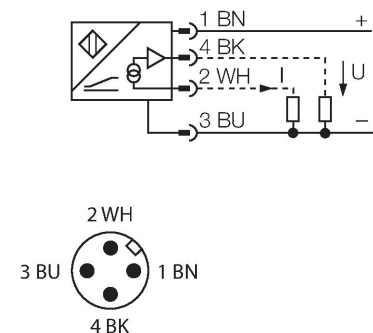
Technical data

Type	BI15-CK40-LIU-H1141 W/BS 2.1
ID	1537890
General data	
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	$\leq \pm 0.06 \%/K$
Electrical data	
Operating voltage U_B	15...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
No-load current	$\leq 8 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Output function	4-wire, Analog output
Voltage output	0...10 V
Current output	0...20 mA

Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 male connector

Wiring diagram

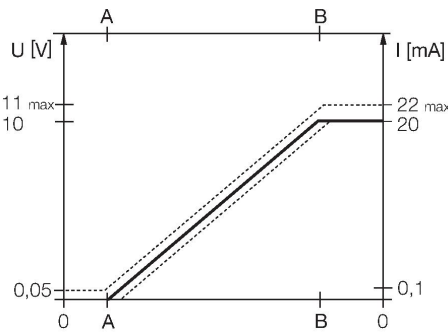


Functional principle

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.

Technical data

Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Measuring sequence frequency	110 Hz
Mechanical data	
Design	Rectangular, CK40
Dimensions	65 x 40 x 40 mm
	variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connector, M12 × 1
Environmental conditions	
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
Included in delivery	BS2.1-CK40



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

BSS-CP40

6901318

Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene

