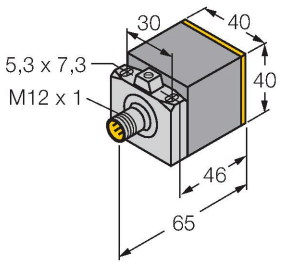
# BI15-CK40-LIU-H1141
# Inductive Sensor – With Analog Output



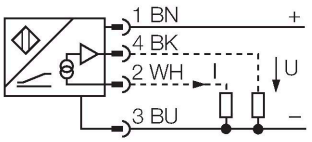

## Technical data

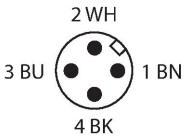
| Type | BI15-CK40-LIU-H1141 |
|---|---|
| Ident. no. | 1537800 |
| Measuring range | 4…11 mm |
| Mounting conditions | Flush |
| Secured operating distance | ≤ (0.81 × Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | ≤ 1 % of measuring range \|A - B\| |
| | 0.5 %, after warm-up 0.5 h |
| Reproducibility | ≤ 70 µm |
| | ≤ 35 µm, after a warm-up time of 0.5 h |
| Linearity deviation | ≤ 3 % |
| Temperature drift | ≤ ± 0.06 % / K |
| Ambient temperature | -25…+70 °C |
| Operating voltage | 15…30 VDC |
| Residual ripple | ≤ 10 % $U_{ss}$ |
| No-load current | ≤ 8 mA |
| Isolation test voltage | ≤ 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 |
| Load resistance voltage output | ≥ 4.7 kΩ |

## 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

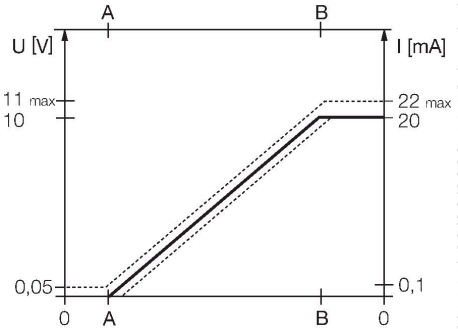
## Wiring diagram




## 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.



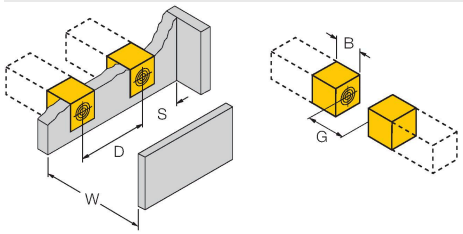

BI15-CK40-LIU-H1141| 09/09/2020 14-52 | technical changes reserved

## Technical data

| | |
|---|---|
| Load resistance, current output | ≤ 0.4 kΩ |
| Measuring sequence frequency | 110 Hz |
| **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 |
| 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 | BS1-CK40 |

## Mounting instructions

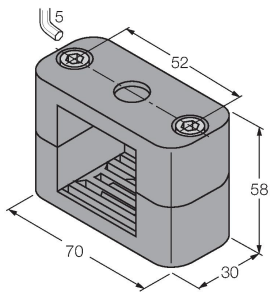
Mounting instructions/Description




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

## Accessories

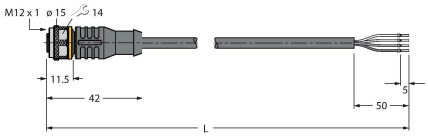
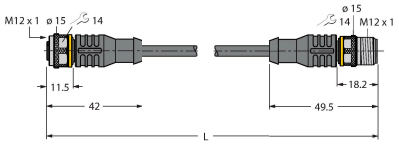
| BSS-CP40 | 6901318 |
|---|---|




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

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## Wiring accessories

| Dimension drawing | Type | Ident. no. | |
|---|---|---|---|
|  | RKC4.4T-2/TEL | 6625013 | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |
|  | RKC4.301T-0.15-RSC4.334T/TXL | 6631382 | Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology |

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