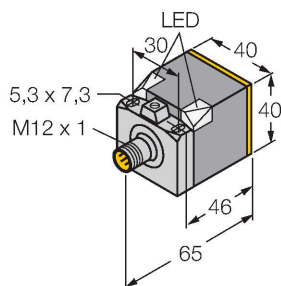


# BI15U-CK40-AD4X-H1144

## Inductive Sensor

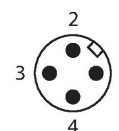
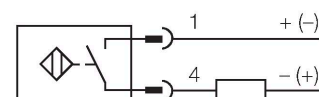


### Technical data

|  |   |
|--|---|
| Type                                   | BI15U-CK40-AD4X-H1144   |
| ID                                     | 4280032   |
| <b>General data</b>                    |   |
| Rated switching distance               | 15 mm   |
| Mounting conditions                    | Flush   |
| Secured operating distance             | $\leq (0.81 \times S_n)$ mm                                   |
| Repeat accuracy                        | $\leq 2\%$ of full scale                                      |
| Temperature drift                      | $\leq \pm 10\%$   |
|  | $\leq \pm 15\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis                             | 3...20 %  |
| <b>Electrical data</b>                 |   |
| Operating voltage $U_b$                | 10...65 VDC   |
| Ripple $U_{ss}$                        | $\leq 10\%$ $U_{Bmax}$  |
| DC rated operating current $I_e$       | $\leq 100$ mA   |
| Residual current                       | $\leq 0.8$ mA   |
| Isolation test voltage                 | 0.5 kV  |
| Short-circuit protection               | yes/Cyclic  |
| Voltage drop at $I_e$                  | $\leq 5$ V  |
| Wire break/reverse polarity protection | Complete  |
| Output function                        | 2-wire, NO contact, 2-wire                                    |
| DC field stability                     | 300 mT  |
| AC field stability                     | 300 mT <sub>ss</sub>  |
| Smallest operating current             | $\geq 3$ mA   |
| Switching frequency                    | 0.01 kHz  |
| <b>Mechanical data</b>                 |   |
| Design                                 | Rectangular, CK40   |
| Dimensions                             | 65 x 40 x 40 mm   |

### Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector



### Functional principle

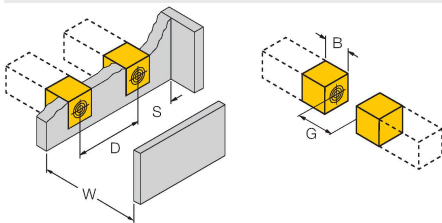
Inductive sensors are designed for wear-free and contactless detection of metal objects. proxx+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

## Technical data

|                                 |   |
|---------------------------------|---|
|                                 | 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                                  |
| <b>Environmental conditions</b> |   |
| Ambient temperature             | -25...+70 °C  |
| Vibration resistance            | 55 Hz (1 mm)  |
| Shock resistance                | 30 g (11 ms)  |
| Protection class                | IP68  |
| MTTF                            | 874 years acc. to SN 29500 (Ed. 99) 40 °C           |
| Switching state                 | 2 × LEDs, Yellow                                    |
| Included in delivery            | BS1-CK40  |

## Mounting instructions

### Mounting instructions/Description



|                     |       |
|---------------------|-------|
| Distance D          | 80 mm |
| Distance W          | 45 mm |
| Distance S          | 1 x B |
| Distance G          | 90 mm |
| Width active area B | 40 mm |

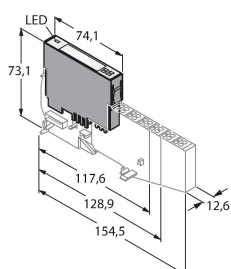
Since the aprox+ 2-wire DC sensors work at a low operating voltage of 8 VDC (with limited load current of 50 mA), the use of isolating switching amplifiers is possible.

The sensors can be operated with the Turck remote I/O fieldbus system BL20. The use of a BL20-4DI-NAMUR slice, allows wire-break or short-circuit to be detected immediately.

## Accessories

### BL20-4DI-NAMUR

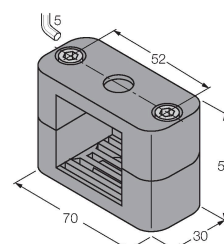
6827212



4 digital inputs acc. to EN 60947-5-6  
For NAMUR sensors, de-energized contacts or aprox@+ 2-wire DC sensors.

### BSS-CP40

6901318



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

## Accessories

| Dimension drawing | Type        | ID      |   |
|-------------------|-------------|---------|---|
|                   | RKC4T-2/TEL | 6625010 | Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |

