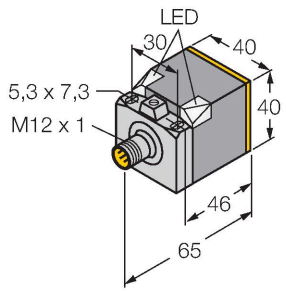
# BI15-CK40-AP6X2-H1141
# Inductive Sensor



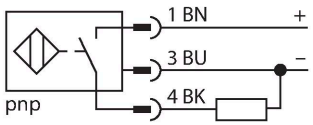

## Technical data

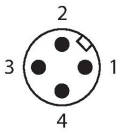
| | |
|---|---|
| Type | BI15-CK40-AP6X2-H1141 |
| Ident. no. | 16250 |
| Rated switching distance | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | ≤ (0.81 × Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3…15 % |
| Ambient temperature | -25…+70 °C |
| Operating voltage | 10…30 VDC |
| Residual ripple | ≤ 10 % $U_{ss}$ |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at $I_e$ | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, PNP |
| Switching frequency | 0.15 kHz |
| 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
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- M12 x 1 male connector

## 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.

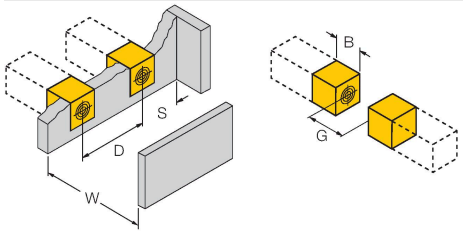
BI15-CK40-AP6X2-H1141| 09/09/2020 15-07 | technical changes reserved

## 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 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication | 2 × LEDs, Green |
| Switching state | 2 × LEDs, Yellow |
| Included in delivery | BS1-CK40 |

## Mounting instructions

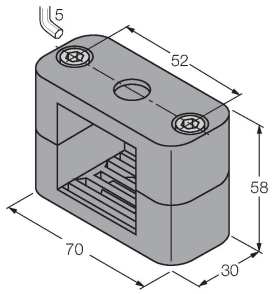
Mounting instructions/Description




| | |
|---|---|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance S | 1 x B |
| Distance G | 6 x Sn |
| Width active area B | 40 mm |

## Accessories

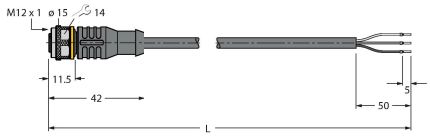
| BSS-CP40 | 6901318 |
|---|---|




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

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## Wiring accessories

| Dimension drawing | Type | Ident. no. | |
|---|---|---|---|
|  | RKC4T-2/TEL | 6625010 | Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |

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