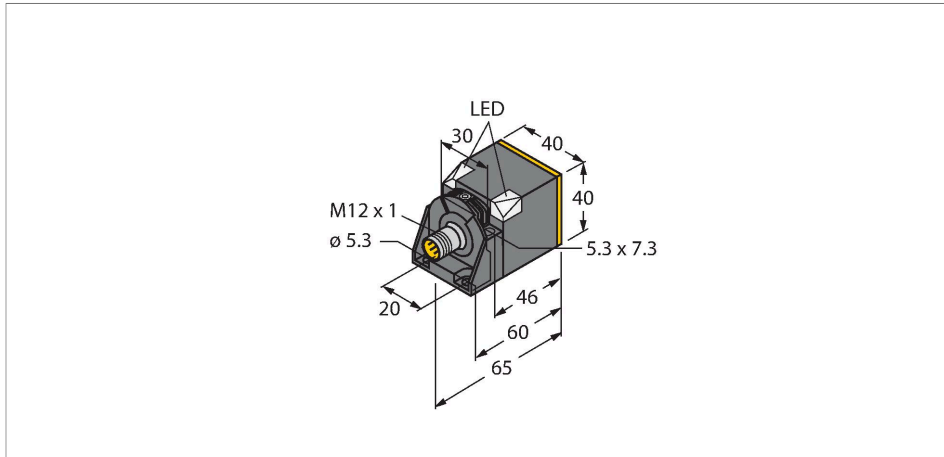


# BI30U-CK40-AP6X2-H1141

## Inductive Sensor



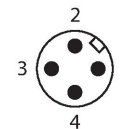
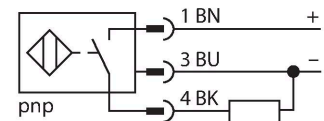
### Features

- 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
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large coverage
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

### Technical data

Type	BI30U-CK40-AP6X2-H1141
Ident. no.	1625829
Rated switching distance	30 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-10...+60 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Insulation class	□
Switching frequency	0.25 kHz
<b>Design</b>	Rectangular, CK40
Dimensions	65 x 40 x 40 mm

### Wiring diagram



### Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ 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
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
Power-on indication	2 × LEDs, Green
Switching state	2 × LEDs, Yellow
Included in delivery	Fixing clamp BS4-CK40

## Mounting instructions


Mounting instructions/Description	
<p>The diagrams illustrate the sensor's dimensions and its installation. The first diagram shows the sensor with dimensions D (80 mm), S (40 mm), and W (90 mm). The second diagram shows the active area B (40 mm) and the mounting hole diameter G (180 mm). The third diagram shows the sensor mounted in a square aperture plate.</p>	Distance D 80 mm
	Distance W 90 mm
	Distance S 40 mm
	Distance G 180 mm
	Width active area B 40 mm

When installing the sensor in an aperture plate (sheet metal, e.g., a step plate) the sensor must be fully embedded in metal for reliable detection of the target.

## Accessories

BSS-CP40	6901318
<p>The diagram shows the BSS-CP40 mounting clamp with dimensions: length 52 mm, height 58 mm, width 70 mm, and depth 30 mm. A small detail shows a 5 mm hole.</p>	<p>Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene</p>

## 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 <a href="http://www.turck.com">www.turck.com</a>