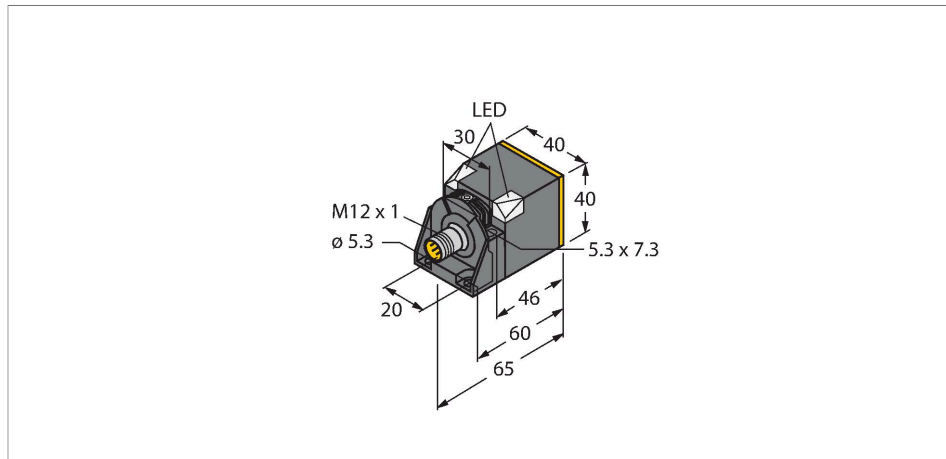


BI30U-CK40-AN6X2-H1141

Inductive Sensor



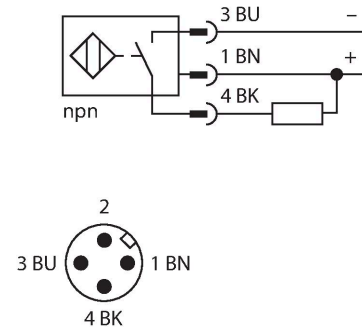
Features

- 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, NPN output
- M12 x 1 male connector

Technical data

Type	BI30U-CK40-AN6X2-H1141
Ident. no.	1625820
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	≤ 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, NPN
Insulation class	□
Switching frequency	0.25 kHz
Design	Rectangular, CK40
Dimensions	65 x 40 x 40 mm

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*[®]+ sensors have distinct advantages over conventional sensors. They excel in largest 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 x 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 x LEDs, Green
Switching state	2 x LEDs, Yellow
Included in delivery	Fixing clamp BS4-CK40

Mounting instructions

Mounting instructions/Description											
	<table border="1"> <tr> <td>Distance D</td> <td>80 mm</td> </tr> <tr> <td>Distance W</td> <td>90 mm</td> </tr> <tr> <td>Distance S</td> <td>40 mm</td> </tr> <tr> <td>Distance G</td> <td>180 mm</td> </tr> <tr> <td>Width active area B</td> <td>40 mm</td> </tr> </table>	Distance D	80 mm	Distance W	90 mm	Distance S	40 mm	Distance G	180 mm	Width active area B	40 mm
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
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Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene

Wiring accessories

Dimension drawing	Type	Ident. no.	Description
	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