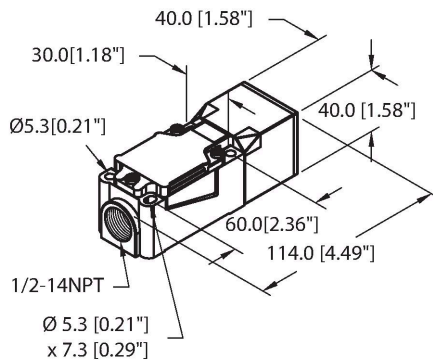


# BI30U-CP40-AP6X2/S10

## Inductive Sensor



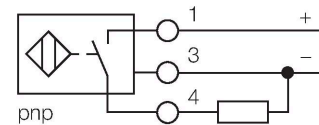
### Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum visibility of operating-voltage display and switching state in any installation 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
- Terminal chamber

### Technical data

Type	BI30U-CP40-AP6X2/S10
Ident. no.	1625825
Special version	S10 corresponds to: Mounting base with 1/2-14NPT thread
Rated switching distance	30 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Repeat accuracy	$\leq 2 \text{ \% of full scale}$
Temperature drift	$\leq \pm 10 \text{ \%}$
Hysteresis	3...15 %
Ambient temperature	-10...+60 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \text{ \% } U_{ss}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.25 kHz
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm

### Wiring diagram



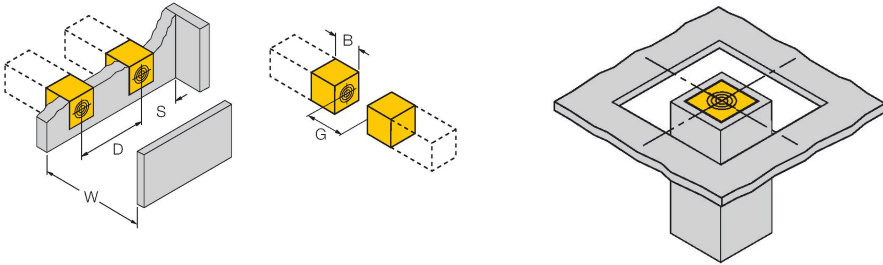
### Functional principle

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.

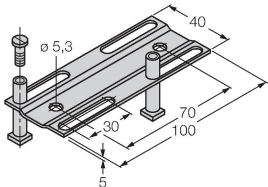
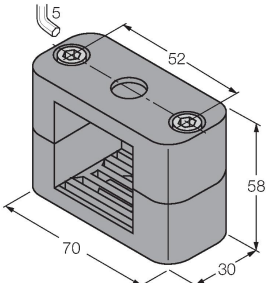
## Technical data

Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm <sup>2</sup>
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

## Mounting instructions

Mounting instructions/Description	
	Distance D 80 mm
	Distance W 90 mm
	Distance S 40 mm
	Distance G 180 mm
	Width active area B 40 mm
<p>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.</p>	

## Accessories

<p><b>Adjusting bar JS 025/037</b></p> 	<p><b>69429</b></p> <p>Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301</p>	<p><b>BSS-CP40</b></p> 	<p><b>6901318</b></p> <p>Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene</p>
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