

- 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 detection range
- High switching frequency
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Male M12 x 1

<b>Type code</b>	BI30U-CK40-AP6X2-H1141
<b>Ident no.</b>	1625829

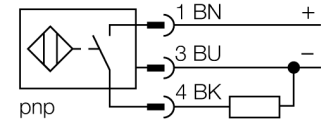
<b>Rated operating distance <math>S_n</math></b>	30 mm
<b>Mounting condition</b>	flush
<b>Assured sensing range</b>	$\leq (0,81 \times S_n)$ mm
<b>Repeatability</b>	$\leq 2\%$ of full scale
<b>Temperature drift</b>	10 %
<b>Hysteresis</b>	3...15 %
<b>Ambient temperature</b>	-10...+60 °C

<b>Operating voltage</b>	10...30VDC
<b>Residual ripple</b>	$\leq 10\%$ $U_{s\text{}}$
<b>DC rated operational current</b>	$\leq 200$ mA
<b>No-load current <math>I_0</math></b>	$\leq 15$ mA
<b>Residual current</b>	$\leq 0.1$ mA
<b>Rated insulation voltage</b>	$\leq 0.5$ kV
<b>Short-circuit protection</b>	yes/ cyclic
<b>Voltage drop at <math>I_0</math></b>	$\leq 1.8$ V
<b>Wire breakage / Reverse polarity protection</b>	yes/ complete
<b>Output function</b>	3-wire, NO contact, PNP
<b>Protection class</b>	IP68
<b>Switching frequency</b>	0.25 kHz

<b>Design</b>	rectangular, CK40
<b>Dimensions</b>	65 x 40 x 40 mm variable orientation of active face in 5 directions
<b>Housing material</b>	plastic, PBT, black
<b>Connection</b>	male, M12 x 1
<b>Vibration resistance</b>	55 Hz (1 mm)
<b>Shock resistance</b>	30 g (11 ms)
<b>Protection class</b>	IP68
<b>MTTF</b>	874 years acc. to SN 29500 (Ed. 99) 40 °C

<b>Power-on indication</b>	2 x LEDs green
<b>Switching state</b>	LED yellow
<b>Included in scope of supply</b>	Fixing clamp BS4-CK40

#### 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.

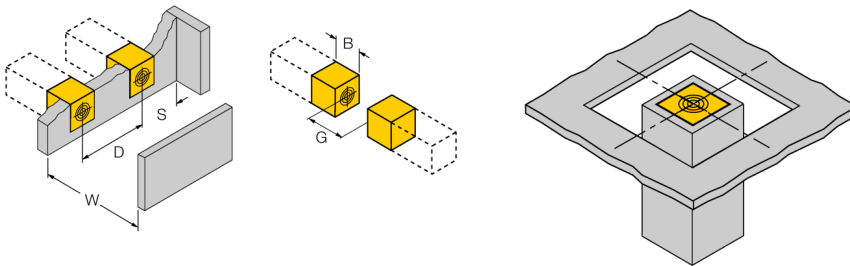
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Distance D	80 mm
Distance W	90 mm
Distance S	40 mm
Distance G	180 mm

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Width of the active face B 40 mm

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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

Type code	Ident no.	Description	Dimension drawing
BSS-CP40	6901318	Mounting bracket for rectangular devices; material: Polypropylene	

### Wiring accessories

Type code	Ident no.	Description	Dimension drawing
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>	