

- 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
- 4-wire DC, 10...65 VDC
- Changeover contact, PNP output
- Male M12 x 1

**Type code** Bi20U-CK40-VP4X2-H1141  
**Ident no.** 1627216

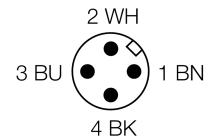
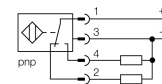
**Rated operating distance  $S_n$**  20 mm  
**Mounting condition** flush  
**Assured sensing range**  $\leq (0,81 \times S_n)$  mm  
**Repeatability**  $\leq 2\%$  of full scale  
**Temperature drift** 10 %  
**Hysteresis** 3...15 %  
**Ambient temperature** -30...+85 °C

**Operating voltage** 10...65VDC  
**Residual ripple**  $\leq 10\%$   $U_{ss}$   
**DC rated operational current**  $\leq 200$  mA  
**No-load current  $I_0$**   $\leq 15$  mA  
**Residual current**  $\leq 0,1$  mA  
**Rated insulation voltage**  $\leq 0,5$  kV  
**Short-circuit protection** yes  
**Voltage drop at  $I_0$**   $\leq 1,8$  V  
**Wire breakage / Reverse polarity protection** yes/ complete  
**Output function** 4-wire, changover contact, PNP  
**Protection class**  $\square$   
**Switching frequency** 0.25 kHz

**Design** rectangular, CK40  
**Dimensions** 65 x 40 x 40 mm  
variable orientation of active face in 5 directions  
**Housing material** plastic, PBT, black  
**Connection** male, 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** LED yellow  
**Included in scope of supply** BS1-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	60 mm
Distance S	40 mm
Distance G	120 mm

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Width of the active face B 40 mm

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### 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
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-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>	