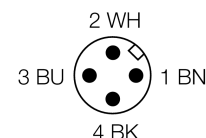
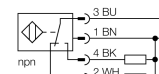


- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against pre-attenuation
- Partially embeddable
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 male connector

Wiring diagram



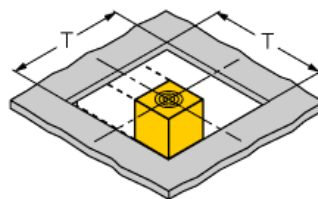
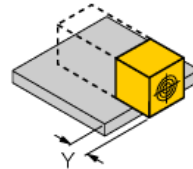
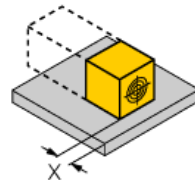
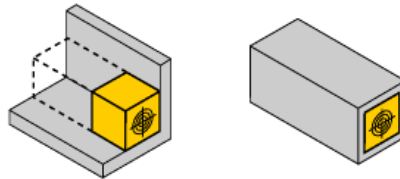
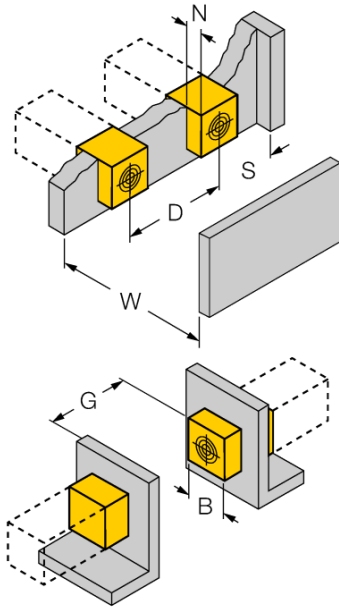
Functional principle

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.

Type code	NI50U-CK40-VN4X2-H1141
Ident no.	1625806
Rated operating distance Sn	50 mm
Mounting condition	non-flush, flush mountable
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 20\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Ambient temperature	$-30\text{...}+85\text{ °C}$
Operating voltage	10...65VDC
Residual ripple	$\leq 10\%$ U_{ss}
DC rated operational current	$\leq 200\text{ mA}$
No-load current I_0	$\leq 15\text{ mA}$
Residual current	$\leq 0,1\text{ mA}$
Rated insulation voltage	$\leq 0,5\text{ kV}$
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	$\leq 1,8\text{ V}$
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, changover contact, NPN
Protective insulation	□
Switching frequency	0.25 kHz
Construction	rectangular, CK40
Dimensions	65 x 40 x 40 mm
Housing material	plastic, PBT, black
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	2 LEDs green
Switching state	LED yellow
Included in scope of supply	Fixing clamp BS4-CK40

Distance D	240 mm
Distance W	105 mm
Distance S	60 mm
Distance G	300 mm
Distance N	30 mm

Width of the active face B	40 mm
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Flush mounting

- 1-side mounting: $S_r = 35$ mm; $D = 240$ mm
- 2-side mounting: $S_r = 25$ mm; $D = 240$ mm
- 3-side mounting: $S_r = 20$ mm; $D = 80$ mm
- 4-side mounting: $S_r = 15$ mm; $D = 60$ mm

Backside as well as recessed mounting with reduced switching distance

Recessed mounting in metal:

- $x = 10$ mm: $S_r = 20$ mm
- $x = 20$ mm: $S_r = 20$ mm
- $x = 30$ mm: $S_r = 20$ mm
- $x = 40$ mm: $S_r = 20$ mm

Protruded mounting:

- $y = 10$ mm: $S_r = 40$ mm
- $y = 20$ mm: $S_r = 50$ mm
- $y = 30$ mm: $S_r = 50$ mm
- $y = 40$ mm: $S_r = 50$ mm

Mounting in aperture plate:

$T = 150$ mm:

Sensor with twisted turning angle

On metal $S_r = 50$ mm

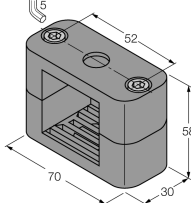
Metal-enclosed on one side $S_r = 25$ mm

Metal-enclosed on two sides $S_r = 15$ mm

Metal-enclosed on three sides $S_r = 12$ mm

The values stated relate to a 1 mm thick steel plate.

Accessories

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

Wiring accessories

Type code	Ident no.	Description	Design
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 www.turck.com	