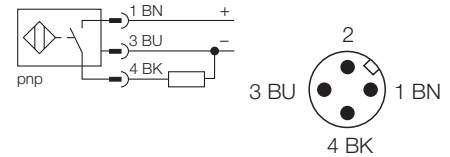


- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum visibility of operating-voltage display and switching state in any installation position
- Factor 1 for all metals
- extended switching distance
- Degree of protection IP68
- Magnetic field immune
- Predamping protection through self-compensation
- partial embedding possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

Wiring diagram



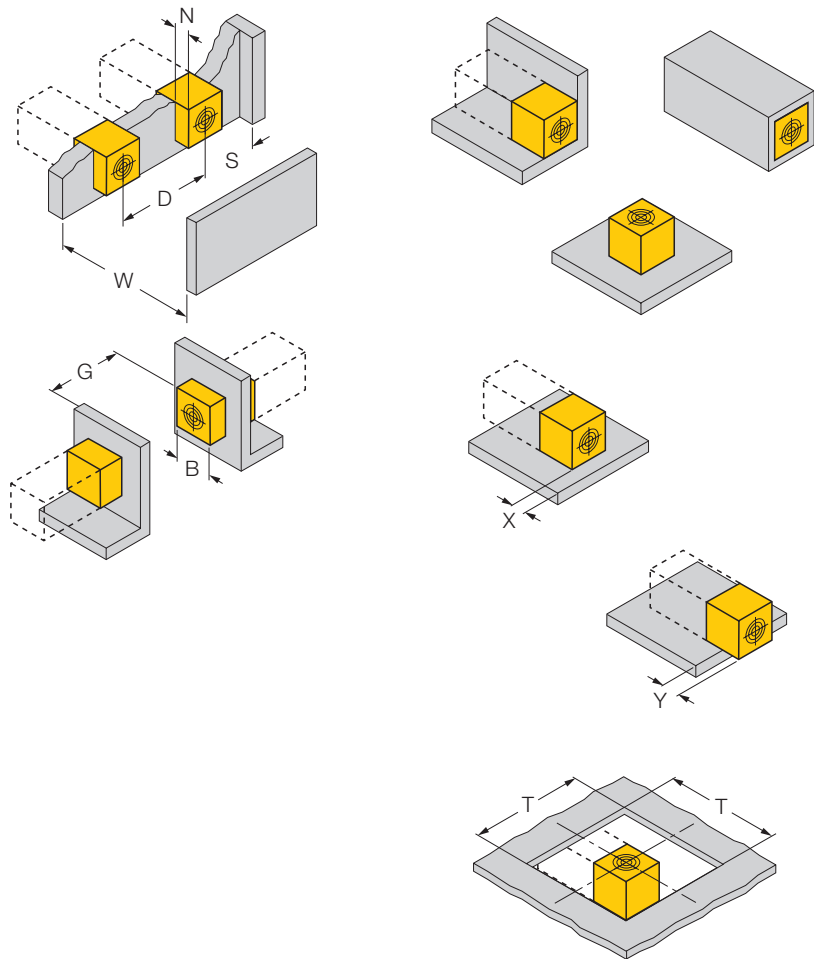
Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. uprox+ sensors have considerable advantages due to their patented multi-coil system. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardisation.

Type	Ni50U-CK40-AP6X2-H1141 W/BS4
Ident-No.	1625868
Rated operating distance Sn	50 mm
Mounting condition	non-flush, flush mounting possible
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3... 15 %
	-30...+ 85 °C
Operating voltage	10... 30VDC
Residual ripple	≤ 10 % U _{SS}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I _e	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, NO, pnp
Insulation class	□
Switching frequency	≤ 0.25kHz
Housing	rectangular, CK40
Dimensions	65 x 40 x 40 mm variable orientation of active face in 5 directions
Housing material	plastic, PBT-GF20-V0, black
Material active face	plastic, PA6-GF30-X, yellow
Connector housing	metal, CuZn, nickel-plated
Connection	Connectors, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
Operating voltage display	2 x LEDs green
Display switch state	2 x LED yellow
Included in scope of supply	BS4-CK40

Mounting instructions	minimum distances
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



Up to 4-side flush mounting possible
 1-side mounting: $S_r = 35 \text{ mm}$; $D = 240 \text{ mm}$
 mounting 2-side: $S_r = 25 \text{ mm}$; $D = 240 \text{ mm}$
 mounting 3-side: $S_r = 20 \text{ mm}$; $D = 80 \text{ mm}$
 mounting 4-side: $S_r = 15 \text{ mm}$; $D = 60 \text{ mm}$

back-mounting as well as recessed mounting
 with switching distance reduction possible

recessed sensor mounting on metal:
 $x = 10 \text{ mm}$: $S_r = 20 \text{ mm}$
 $x = 20 \text{ mm}$: $S_r = 20 \text{ mm}$
 $x = 30 \text{ mm}$: $S_r = 20 \text{ mm}$
 $x = 40 \text{ mm}$: $S_r = 20 \text{ mm}$

cantilever sensor on metal:
 $y = 10 \text{ mm}$: $S_r = 40 \text{ mm}$
 $x = 20 \text{ mm}$: $S_r = 50 \text{ mm}$
 $y = 30 \text{ mm}$: $S_r = 40 \text{ mm}$
 $x = 20 \text{ mm}$: $S_r = 50 \text{ mm}$

mounting in aperture plate:
 $T = 150 \text{ mm}$:
 sensor with twisted turning angle
 on metal base $S_r = 50 \text{ mm}$
 based on metal and one-side embedding $S_r = 25 \text{ mm}$
 based on metal and two-side embedding $S_r = 15 \text{ mm}$
 based on metal and three-side embedding $S_r = 12 \text{ mm}$

The values stated relate to 1 mm thick steel plate.

Accessories

Type code	Ident- No.	Short text	Dimension drawing
BSS-CP40	6901318	fixing clamp; material: polypropylene	