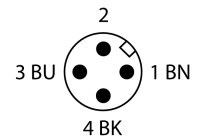
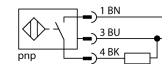


- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against pre-attenuation
- Partially embeddable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring Diagram



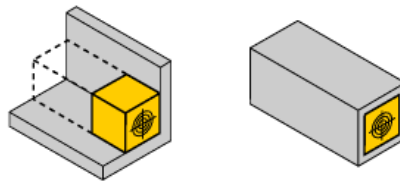
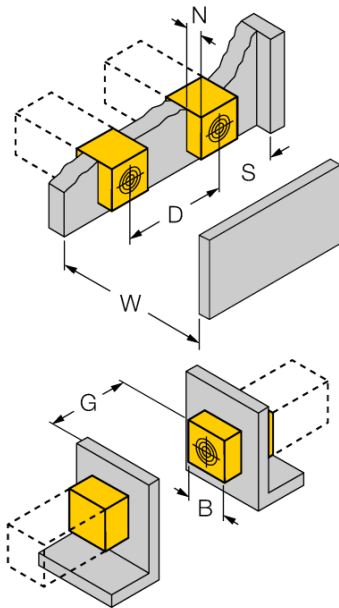
Functional principle

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 designation	NI50U-CK40-AP6X2-H1141 W/BS4
Ident-No.	1625868
Rated switching distance Sn	50 mm
Mounting conditions	Non-flush, flush
Secured operating distance	≤ (0,81 x Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Protection class	☐
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-GF20-V0, Black
Active area material	Plastic, PA12-GF30, yellow
Connector housing	metal, CuZn, nickel-plated
Electrical connection	Connector, 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
Packaging unit	1
Power-on indication	2 x LEDs,Green
Switching state	2 x LEDs,Yellow
Included in delivery	Fixing clamp BS4-CK40

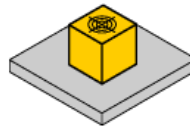
Distance D	240 mm
Distance W	105 mm
Distance S	60 mm
Distance G	300 mm
Distance N	30 mm

Width active area B 40 mm



Flush mounting

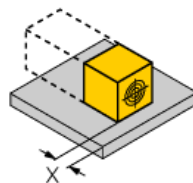
- 1-side mounting: Sr = 35 mm; D = 240 mm
- 2-side mounting: Sr = 25 mm; D = 240 mm
- 3-side mounting: Sr = 20 mm; D = 80 mm
- 4-side mounting: Sr = 15 mm; D = 60 mm



Backside as well as recessed mounting with reduced switching distance

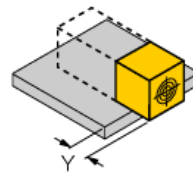
Recessed mounting in metal:

- x = 10 mm: Sr = 20 mm
- x = 20 mm: Sr = 20 mm
- x = 30 mm: Sr = 20 mm
- x = 40 mm: Sr = 20 mm



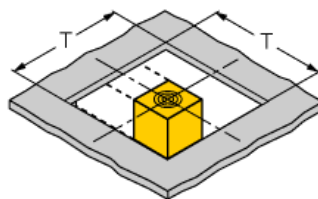
Protruded mounting:

- y = 10 mm: Sr = 40 mm
- y = 20 mm: Sr = 50 mm
- y = 30 mm: Sr = 50 mm
- y = 40 mm: Sr = 50 mm



Mounting in aperture plate:

- T = 150 mm:
- Sensor with twisted turning angle
- On metal Sr = 50 mm
- Metal-enclosed on one side Sr = 25 mm
- Metal-enclosed on two sides Sr = 15 mm
- Metal-enclosed on three sides Sr = 12 mm



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

Accessories

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