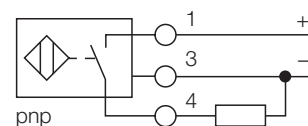


- quaderförmig, Höhe 40 mm
- aktive Fläche in 9 Richtungen positionierbar
- Kunststoff, PBT-GF30-V0
- Eck-LEDs mit hoher Leuchtkraft
- optimale Sicht auf Betriebsspannungsanzeige und Schaltzustandsanzeige in jeder Einbausituation
- factor 1 for all metals
- extended switching distance
- degree of protection IP68
- magnetic field immune
- predamping protection through self-compensation
- partial embedding possible
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- Terminal chamber

#### Wiring diagram

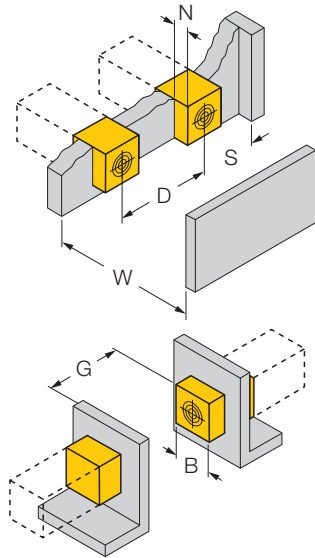


#### Functional principle

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.

<b>Type</b>	Ni50U-CP40-AP6X2
Ident-No.	1625831
<b>Rated operating distance Sn</b>	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
<b>Operating voltage</b>	10... 30VDC
Residual ripple	≤ 10 % U <sub>SS</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 0.25 kHz
<b>Housing</b>	rectangular, CP40
Dimensions	114 x 40 x 40 mm variable orientation of active face in 9 directions
Housing material	plastic, PBT-GF30-V0, black
Material active face	plastic, PA6-GF30-X, yellow
Connection	Terminal chamber
Clamping ability	≤ 2.5mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
<b>Operating voltage display</b>	2 x LEDs green
Display switch state	2 x LED yellow

Mounting instructions	minimum distances
Distance D	240 mm
Distance W	105 mm
Distance S	60 mm
Distance G	300 mm
Distance N	30 mm
<b>Width of the active face B</b>	40 mm



up to 4-side flush mounting possible

1-side flush mounting:  $S_r = 35 \text{ mm}$ ;  $D = 240 \text{ mm}$

2-side flush mounting:  $S_r = 25 \text{ mm}$ ;  $D = 240 \text{ mm}$

3-side flush mounting:  $S_r = 20 \text{ mm}$ ;  $D = 80 \text{ mm}$

4-side flush mounting:  $S_r = 17 \text{ mm}$ ;  $D = 60 \text{ mm}$

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

recessed sensor mounting in metal:

$x = 10 \text{ mm}$ :  $S_r = 20 \text{ mm}$

$x = 20 \text{ mm}$ :  $S_r = 20 \text{ mm}$

$x = 30 \text{ mm}$ :  $S_r = 20 \text{ mm}$

$x = 40 \text{ mm}$ :  $S_r = 20 \text{ mm}$

protruded sensor mounting on metal:

$x = 10 \text{ mm}$ :  $S_r = 40 \text{ mm}$

$x = 20 \text{ mm}$ :  $S_r = 50 \text{ mm}$

$x = 30 \text{ mm}$ :  $S_r = 50 \text{ mm}$

$x = 40 \text{ mm}$ :  $S_r = 50 \text{ mm}$

mounting in aperture plate:

$T = 150 \text{ mm}$ :

sensor with rotated turning angle

based on metal  $S_r = 50 \text{ mm}$

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
STRM M20X1,5 SCHWARZ	6965902	cable glands M20 x 1,5	
JS 025/037	69429	mounting rail; material: VA 1.4301	
BSS-CP40	6901318	fixing clamp; material: polypropylene	