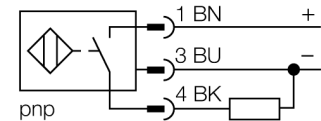


- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions without tools
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- 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

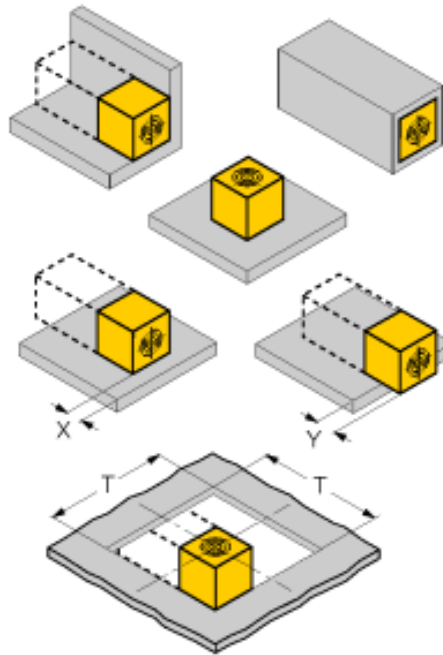
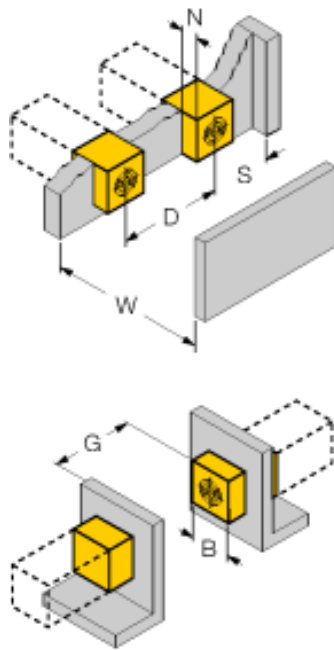
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, *uprox*®+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

The active face can be aligned in 5 directions without tools. The sensor is thus installed comfortably, simply and quickly where necessary.

Type code	NI50U-QV40-AP6X2-H1141
Ident no.	1625853
Rated switching distance S_n	50 mm
Mounting conditions	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...+85 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10\%$ 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_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protective insulation	□
Switching frequency	0.25 kHz
Construction	rectangular, QV40
Dimensions	65 x 40 x 40 mm variable orientation of active face in 5 directions
Housing material	plastic, PBT, black
Connection	flange 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
Power-on indication	2 LEDs green
Switching state	LED yellow
Included in delivery	Fixing clamp for QV40

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: 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 = 17 mm; D = 60 mm

Backside as well as recessed mounting with reduced switching distance

Recessed mounting in metal:

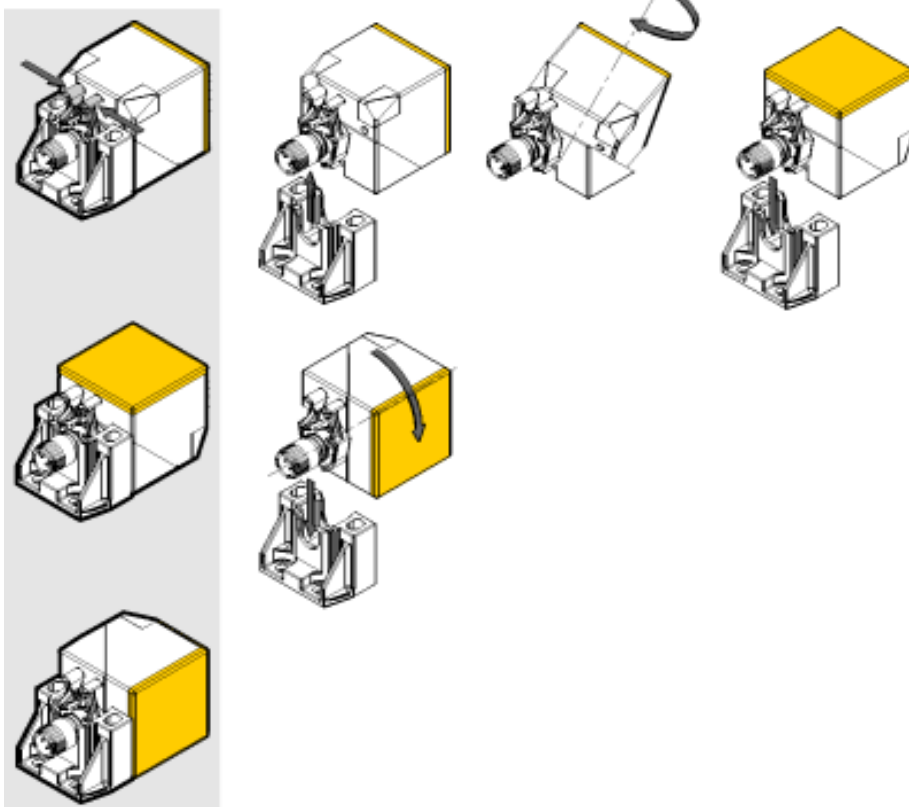
- x = 10 mm: Sr = 20 mm
- x = 20 mm: Sr = 20 mm
- x = 30 mm: Sr = 20 mm
- x = 40 mm: Sr = 20 mm

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



With a single action the active face can be positioned in 5 directions without tools.

A light squeeze of the bracket is enough to release the sensor from the fixing clamp. Afterwards, the active face can easily be twisted to change the position. Once the final position is attained, the sensor is simply inserted in the fixing clamp until the clamp snaps in. Safe and easy mounting is thus guaranteed.

Accessories

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