

| Type code <br> Ident no. | NI50U-QV40-AN6X2-H1141 <br>  |
| :--- | :--- |
| Rated operating distance Sn | 50 mm |
| Mounting condition | non-flush, flush mountable |
| Assured switching distance | $\leq(0,81 \times \mathrm{Sn}) \mathrm{mm}$ |
| Repeatability | $\leq 2 \%$ of full scale |
| Temperature drift | $\leq \pm 10 \%$ |
|  | $\leq \pm 20 \%, \leq-25^{\circ} \mathrm{C} v \geq+70^{\circ} \mathrm{C}$ |
| Hysteresis | $3 \ldots 15 \%$ |
| Ambient temperature | $-30 \ldots+85^{\circ} \mathrm{C}$ |


| Operating voltage | $10 \ldots 30 \mathrm{VDC}$ |
| :--- | :--- |

Residual ripple
DC rated operational current
No-load current I
$\leq 10 \% \mathrm{U}_{\mathrm{ss}}$
$\leq 200 \mathrm{~mA}$
Residual current
Rated insulation voltage
Short-circuit protection
Voltage drop at I
Wire breakage / Reverse polarity protection
Output function
Protective insulation
Switching frequency
Construction rectangular, QV40

Dimensions

Housing material
Connection
Vibration resistance
Shock resistance
IP Rating
MTTF

- 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, NPN 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 ${ }^{\circledR}+$ 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.

| Power-on indication | 2 LEDs green |
| :--- | :--- |
| Switching state | LED yellow |
| Included in scope of supply | Fixing clamp for QV40 |

Inductive sensor
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| 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


Flush mounting
1-side mounting: $\mathrm{Sr}=35 \mathrm{~mm} ; \mathrm{D}=240 \mathrm{~mm}$
2-side mounting: $\mathrm{Sr}=25 \mathrm{~mm} ; \mathrm{D}=240 \mathrm{~mm}$
3-side mounting: $\mathrm{Sr}=20 \mathrm{~mm} ; \mathrm{D}=80 \mathrm{~mm}$
4-side mounting: $\mathrm{Sr}=17 \mathrm{~mm} ; \mathrm{D}=60 \mathrm{~mm}$

Backside as well as recessed mounting with reduced switching distance

Recessed mounting in metal:
$x=10 \mathrm{~mm}: \mathrm{Sr}=20 \mathrm{~mm}$
$x=20 \mathrm{~mm}: \mathrm{Sr}=20 \mathrm{~mm}$
$x=30 \mathrm{~mm}: \mathrm{Sr}=20 \mathrm{~mm}$
$x=40 \mathrm{~mm}: \mathrm{Sr}=20 \mathrm{~mm}$

Protruded mounting
$\mathrm{y}=10 \mathrm{~mm}: \mathrm{Sr}=40 \mathrm{~mm}$
$y=20 \mathrm{~mm}: \mathrm{Sr}=50 \mathrm{~mm}$
$y=30 \mathrm{~mm}: \mathrm{Sr}=50 \mathrm{~mm}$
$y=40 \mathrm{~mm}: \mathrm{Sr}=50 \mathrm{~mm}$

Mounting in aperture plate: $\mathrm{T}=150 \mathrm{~mm}$ :
Sensor with twisted turning angle
On metal $\mathrm{Sr}=50 \mathrm{~mm}$
Metal-enclosed on one side $\mathrm{Sr}=25 \mathrm{~mm}$
Metal-enclosed on two sides $\mathrm{Sr}=15 \mathrm{~mm}$
Metal-enclosed on three sides $\mathrm{Sr}=12 \mathrm{~mm}$

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.


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## Accessories

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

## Wiring accessories

| Type code | Ident no. | Description | Design |
| :--- | :--- | :--- | :--- |
| RKC4T-2/TEL | 6625010 | Connection cable, female M12, straight, 3-pin, cable length: 2 <br> m, sheath material: PVC, black; cULus approval; other cable <br> lengths and qualities available, see www.turck.com |  |

