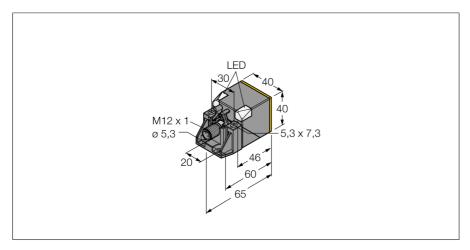


## Inductive sensor NI50U-QV40-AN6X2-H1141





| Type code | NI50U-QV40-AN6X2-H1141 |
|-----------|------------------------|
| Ident no. | 1625865                |

| Rat | ed op | erating | distance | Sn |
|-----|-------|---------|----------|----|
|     |       |         |          |    |

Mounting condition Assured switching distance Repeatability Temperature drift

Hysteresis Ambient temperature

#### Operating voltage Residual ripple DC rated operational current No-load current I.

Residual current Rated insulation voltage Short-circuit protection Voltage drop at I.

Wire breakage / Reverse polarity protection Output function

Protective insulation

Switching frequency

## Construction

Dimensions

Housing material Connection Vibration resistance

Shock resistance IP Rating MTTF

Power-on indication Switching state Included in scope of supply

non-flush, flush mountable

≤ (0,81 x Sn) mm  $\leq$  2 % of full scale ≤ ± 10 %

 $\leq$  ± 20 %,  $\leq$  -25 °C v  $\geq$  +70 °C

3...15 % -30...+85 °C

10...30VDC < 10 % U...

≤ 200 mA < 15 mA  $\leq 0.1 \text{ mA}$  $\leq 0.5 \; kV$ yes/ cyclic

≤ 1.8 V yes/ complete

3-wire, NO contact, NPN

0.25 kHz

rectangular, QV40 65 x 40 x 40 mm

variable orientation of active face in 5 directions

plastic, PBT, black male, M12 x 1 55 Hz (1 mm) 30 q (11 ms) IP68

874 years acc. to SN 29500 (Ed. 99) 40 °C

2 LEDs green LED yellow

Fixing clamp for QV40

- 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®+ 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.



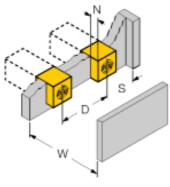
# Inductive sensor NI50U-QV40-AN6X2-H1141

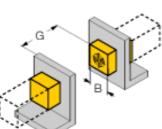


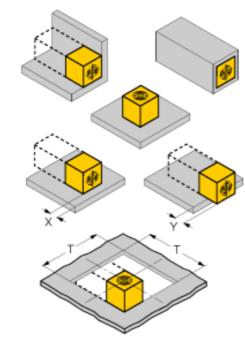
| Distance D | 240 mm     |  |
|------------|------------|--|
| Distance D | 240 111111 |  |
| Distance W | 105 mm     |  |
| Distance S | 60 mm      |  |
| Distance G | 300 mm     |  |
| Distance N | 30 mm      |  |
|            |            |  |

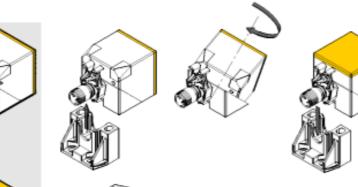
#### Width of the active face B

40 mm









### Flush mounting

1-side mounting: 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:

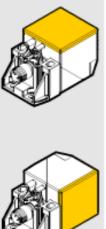
y = 10 mm: Sr = 40 mm y = 20 mm: Sr = 50 mm y = 30 mm: Sr = 50 mm y = 40 mm: Sr = 50 mm

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 | 52     |

# Wiring accessories

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