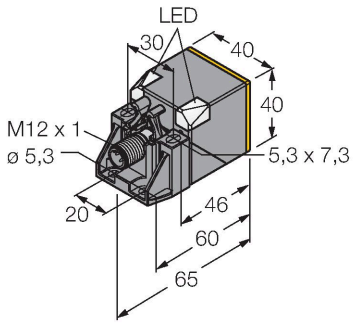
NI40UE-QV40-VP6X2-H1141
Inductive Sensor – With Extended Switching Distance



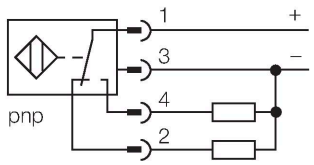
Features

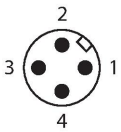
- Rectangular, height 40 mm
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- DC 4-wire, 10…30 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

Technical data

Type	NI40UE-QV40-VP6X2-H1141
ID	100018883
General data	
Rated switching distance	40 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, PNP
DC field stability	300 mT
AC field stability	300 mT_{ss}
Insulation class	⧈

Wiring diagram





Functional principle

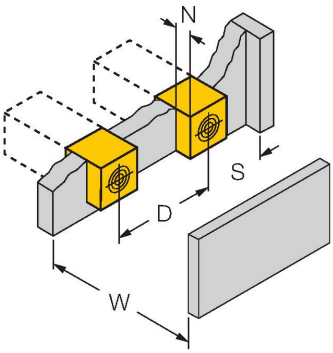
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

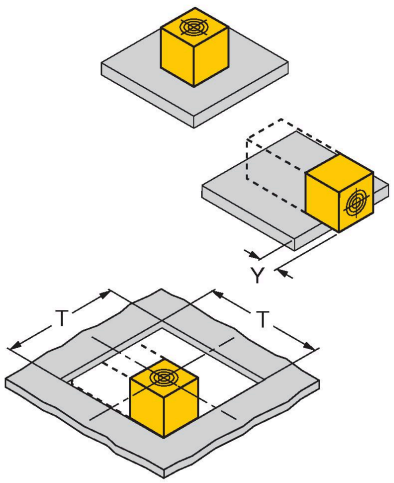
Technical data

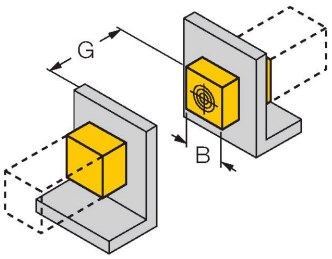
Switching frequency	0.25 kHz
Mechanical data	
Design	Rectangular, QV40
Dimensions	65 x 40 x 40 mm
	variable orientation of active face in 5 directions
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-30…+85 °C
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	2 × LEDs, Yellow
Included in delivery	Fixing clamp for QV40

Mounting instructions

Mounting instructions/Description







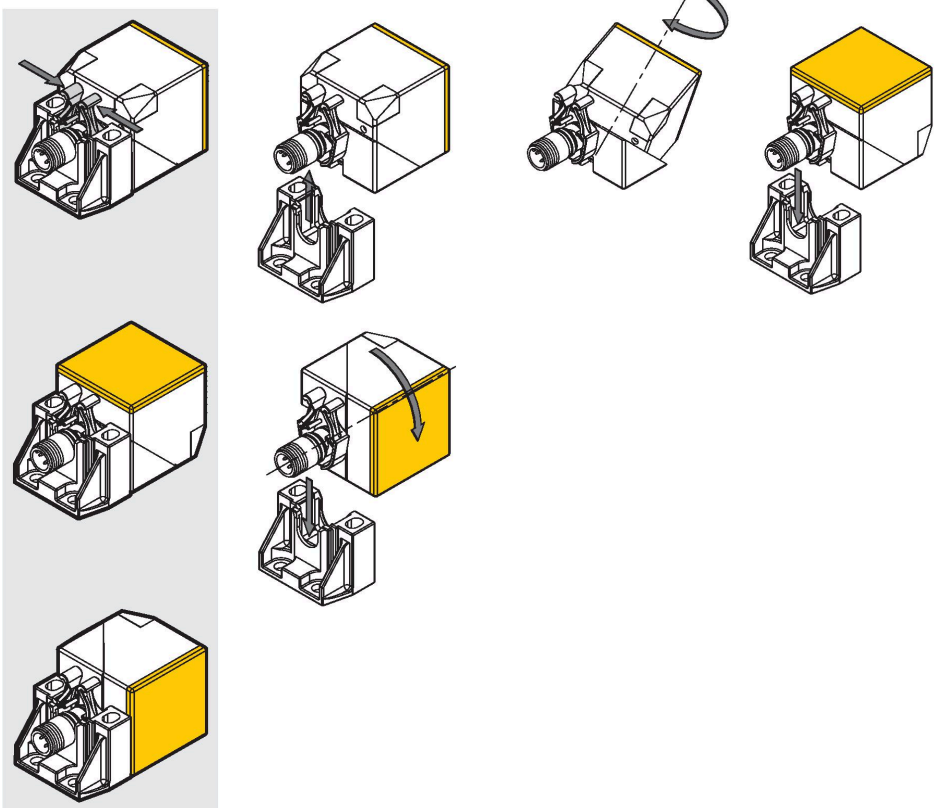
Distance D	240 mm
Distance W	120 mm
Distance T	100 mm
Distance S	60 mm
Distance G	240 mm
Distance N	40 mm
Width active area B	40 mm

Protruded mounting:
y = 20 mm: Sr = 40 mm
y = 30 mm: Sr = 40 mm
y = 40 mm: Sr = 40 mm

Mounting position in aperture plate: T = 100 mm:
Twisted mounting position
On metal Sr = 40 mm

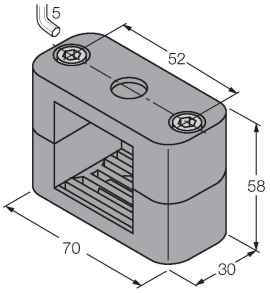
The active face of the sensor can be aligned in 5 directions without tools and using only one hand.

Squeeze the bracket to release the sensor from the mounting bracket. Now, align the sensor with the active face pointing in the desired direction.
Then, snap the sensor back into the bracket. The sensor is now securely locked in position.



Accessories

BSS-CP40	6901318



Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene