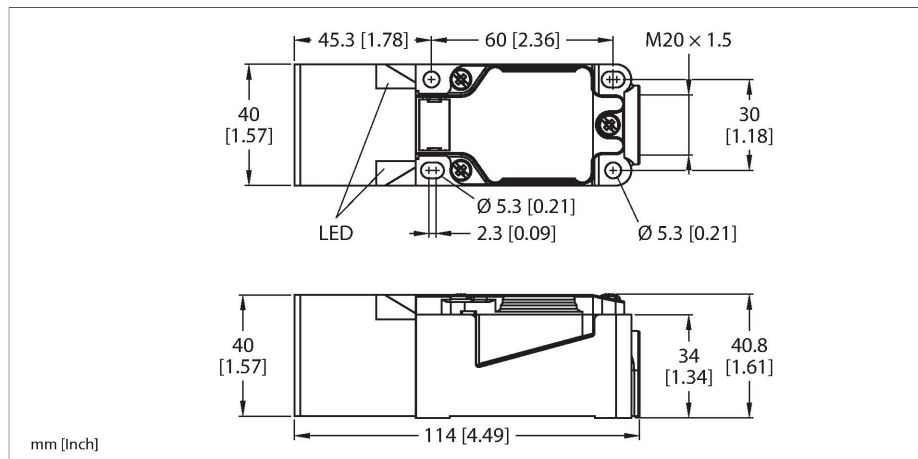


NI40U-CP40-VP6X2/S1384

Inductive Sensor – With Extended Switching Distance

For Outdoor Applications



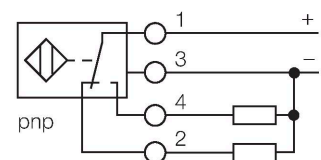
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- 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
- Degree of protection IP68
- Large detection range
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- Improved suitability for outdoor applications
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Terminal chamber

Technical data

Type	NI40U-CP40-VP6X2/S1384
ID	100031444
Special version	S1384 Corresponds to: Improved suitability for outdoor applications
General data	
Rated switching distance	40 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 20 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 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_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Switching frequency	0.25 kHz

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Technical data

Mechanical data	
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²
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

Mounting instructions

Mounting instructions/Description

The image contains two isometric diagrams illustrating the mounting of a sensor. The top diagram shows the sensor (a yellow cube with a target symbol) mounted on a wall. Dimensions are indicated: 'D' is the distance between the sensor and the wall, 'W' is the width of the mounting bracket, 'T' is the distance from the sensor to the top of the bracket, 'S' is the distance from the sensor to the bottom of the bracket, 'N' is the distance from the sensor to the top of the wall, and 'G' is the distance from the sensor to the side of the wall. The bottom diagram shows the sensor mounted on a panel. Dimensions are indicated: 'B' is the width of the sensor's active area, and 'G' is the distance from the sensor to the side of the panel.

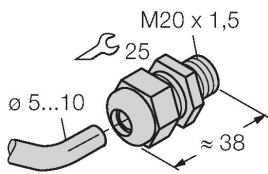
Distance D	240 mm
Distance W	120 mm
Distance T	140 mm
Distance S	60 mm
Distance G	240 mm
Distance N	30 mm
Width active area B	40 mm

Accessories

STRM M20X1.5 SCHWARZ

6965902

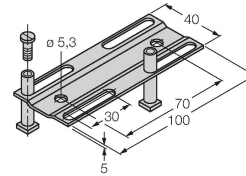
M20 × 1.5 cable gland



JS025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

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

