



# IQ40-20NPP-KK0

IQ Standard

INDUCTIVE PROXIMITY SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
IQ40-20NPP-KK0	7900221

Other models and accessories → [www.sick.com/IQ\\_Standard](http://www.sick.com/IQ_Standard)

### Detailed technical data

#### Features

<b>Housing</b>	Rectangular
<b>Housing</b>	Standard
<b>Dimensions (W x H x D)</b>	40 mm x 40 mm x 121 mm
<b>Sensing range <math>S_n</math></b>	20 mm
<b>Safe sensing range <math>S_a</math></b>	16.2 mm
<b>Installation type</b>	Non-flush
<b>Switching frequency</b>	300 Hz
<b>Connection type</b>	Terminal connection with M20 gland
<b>Switching output</b>	PNP
<b>Output function</b>	NC or NO
<b>Output characteristic</b>	Wire configurable
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP65 <sup>1)</sup>

<sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 36 V DC
<b>Voltage drop</b>	≤ 2.5 V <sup>1)</sup>
<b>Hysteresis</b>	1 % ... 15 %
<b>Temperature drift (of <math>S_r</math>)</b>	± 10 %
<b>EMC</b>	According to EN 60947-5-2
<b>Continuous current <math>I_a</math></b>	≤ 250 mA
<b>Cable gland clamping area</b>	M20 1.5
<b>Wire size</b>	≤ 2.5 mm <sup>2</sup>
<b>Short-circuit protection</b>	✓
<b>Reverse polarity protection</b>	✓

<sup>1)</sup> With  $I_a$  max and  $U_b$  24 V.

<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>Ambient operating temperature</b>	-25 °C ... +80 °C
<b>Housing material</b>	Plastic
<b>Sensing face material</b>	Plastic, PPE

<sup>1)</sup> With I<sub>a</sub> max and U<sub>b</sub> 24 V.

## Reduction factors

<b>Note</b>	The values are reference values which may vary
<b>Stainless steel (V2A, 304)</b>	Approx. 0.7
<b>Aluminum (Al)</b>	Approx. 0.3
<b>Copper (Cu)</b>	Approx. 0.2
<b>Brass (Br)</b>	Approx. 0.4

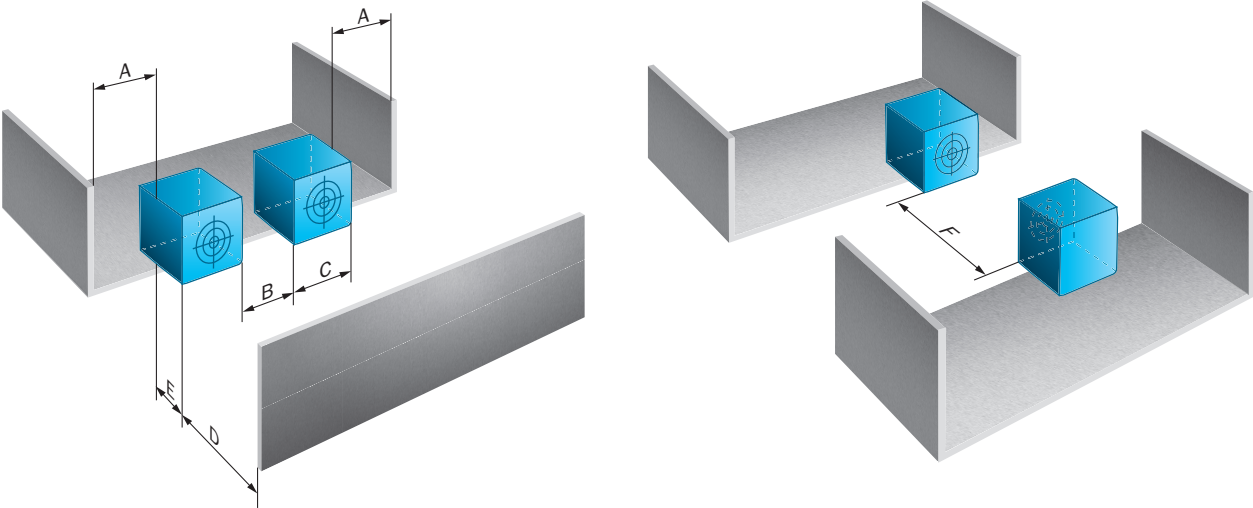
## Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	80 mm
<b>B</b>	80 mm
<b>C</b>	40 mm
<b>D</b>	60 mm
<b>F</b>	120 mm

## Classifications

<b>ECLASS 5.0</b>	27270101
<b>ECLASS 5.1.4</b>	27270101
<b>ECLASS 6.0</b>	27270101
<b>ECLASS 6.2</b>	27270101
<b>ECLASS 7.0</b>	27270101
<b>ECLASS 8.0</b>	27270101
<b>ECLASS 8.1</b>	27270101
<b>ECLASS 9.0</b>	27270101
<b>ECLASS 10.0</b>	27270101
<b>ECLASS 11.0</b>	27270101
<b>ECLASS 12.0</b>	27274001
<b>ETIM 5.0</b>	EC002714
<b>ETIM 6.0</b>	EC002714
<b>ETIM 7.0</b>	EC002714
<b>ETIM 8.0</b>	EC002714
<b>UNSPSC 16.0901</b>	39122230

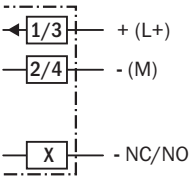
Installation note



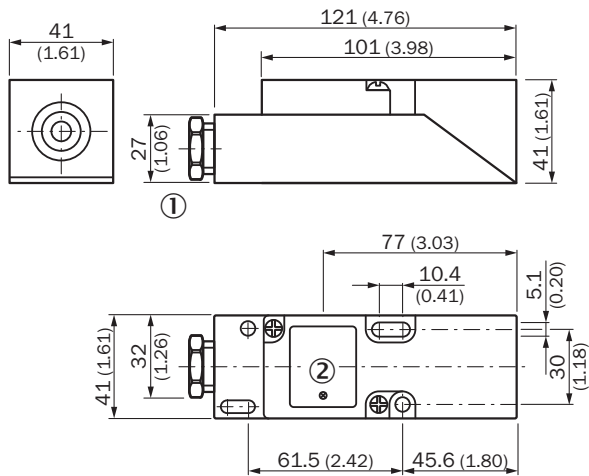
Connection type



Connection diagram Cd-019



## Dimensional drawing



Dimensions in mm (inch)

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)