



# IN40-E0101K

IN4000 Direct

NON-CONTACT SAFETY SWITCHES

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
IN40-E0101K	6027388

Other models and accessories → [www.sick.de/IN4000\\_Direct](http://www.sick.de/IN4000_Direct)



### Detailed technical data

#### Features

<b>Sensor principle</b>	Inductive
<b>Number of safe outputs</b>	2
<b>Switching delay from state change</b>	Max. 50 ms <sup>1)</sup>
<b>Safe switch on distance S<sub>ao</sub></b>	10 mm ... 15 mm <sup>2)</sup>
<b>Safe switch off distance S<sub>ar</sub></b>	30 mm <sup>2)</sup>
<b>Monitoring time minimum dwell time</b>	≥ 0.2 s

<sup>1)</sup> During this time the output is switched off (Logical "0"), see response range.

<sup>2)</sup> Dependent on material. The indicated values refer to steel ST37.

#### Safety-related parameters

<b>Safety integrity level</b>	SIL3 (IEC 61508), SILCL3 (EN 62061)
<b>Category</b>	Category 4 (EN ISO 13849)
<b>Performance level</b>	PL e (EN ISO 13849)
<b>PFHd (mean probability of a dangerous failure per hour)</b>	2.5 x 10 <sup>-9</sup> (EN ISO 13849)
<b>T<sub>M</sub> (mission time)</b>	10 years (EN ISO 13849) <sup>1)</sup> 20 years (EN ISO 13849) <sup>2)</sup>
<b>Type</b>	Type 3 (EN ISO 14119)
<b>Actuator coding level</b>	Non-coded (EN ISO 14119)
<b>Classification in compliance with IEC/EN 60947-5-3</b>	PDF-M

<sup>1)</sup> At -25 °C ... +70 °C and 5 % ... 95 % relative air humidity.

<sup>2)</sup> At +10 °C ... +40 °C and 5 % ... 70 % relative air humidity.

#### Interfaces

<b>Connection type</b>	Plug connector, M12, 4-pin
Flexi Loop-compatible plug connector	✓
<b>Power indication</b>	✓
<b>Status display</b>	✓

Electrical data

<b>Protection class</b>	III (EN 50178)
<b>Supply voltage <math>V_s</math></b>	24 V DC (19.2 V DC ... 30 V DC)
<b>Power consumption</b>	15 mA
<b>Type of output</b>	Semiconductor (OSSD)

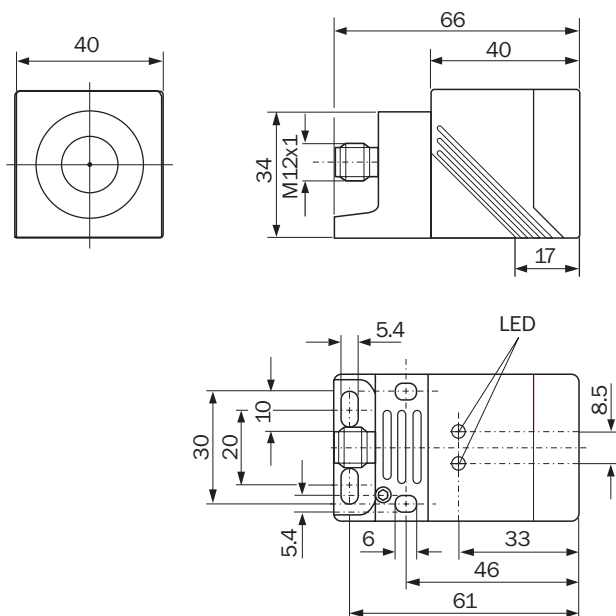
Mechanical data

<b>Design</b>	Rectangular
<b>Dimensions</b>	40 mm x 40 mm x 66 mm
<b>Weight</b>	0.22 kg
<b>Housing material</b>	Die-cast zinc (housing), PPE (cover)
<b>Installation type</b>	Non-flush

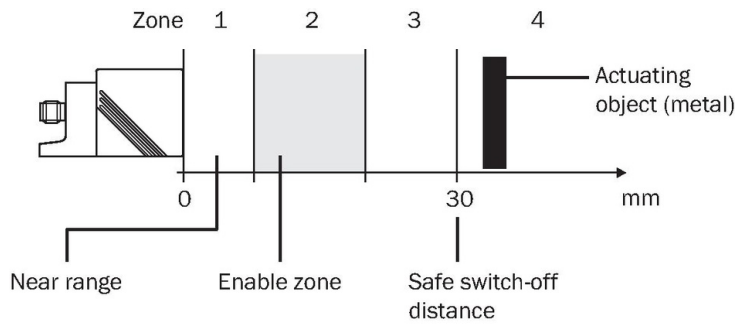
Ambient data

<b>Enclosure rating</b>	IP 67 (IEC 60529)
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>Storage temperature</b>	-25 °C ... +70 °C
<b>Vibration resistance</b>	10 Hz ... 55 Hz, 1 mm (EN 60947-5-3)
<b>Shock resistance</b>	30 g, 11 ms (EN 60947-5-3)

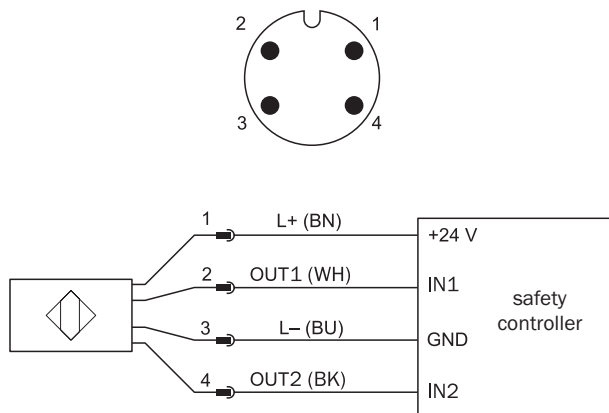
Dimensional drawing (Dimensions in mm (inch))



## Response range



## Connection diagram



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