

# IH34-30NUS-KU0

IH Standard

**INDUCTIVE PROXIMITY SENSORS** 





#### Ordering information

| Туре           | Part no. |
|----------------|----------|
| IH34-30NUS-KU0 | 7902134  |

Other models and accessories → www.sick.com/IH\_Standard

Illustration may differ





#### Detailed technical data

#### **Features**

| Housing                           | Cylindrical                                |
|-----------------------------------|--|
| Housing                           | Standard design                            |
| Diameter                          | Ø 34 mm                                    |
| Sensing range S <sub>n</sub>      | 30 mm                                      |
| Safe sensing range S <sub>a</sub> | 24.3 mm                                    |
| Installation type                 | Non-flush                                  |
| Switching frequency               | 25 Hz <sup>1)</sup><br>50 Hz <sup>2)</sup> |
| Connection type                   | Cable, 2-wire, 2 m                         |
| Output function                   | NO   |
| Electrical wiring                 | AC/DC 2-wire                               |
| Enclosure rating                  | IP67 <sup>3)</sup>                         |

<sup>&</sup>lt;sup>1)</sup> Supply voltage AC.

#### Mechanics/electronics

| Supply voltage | 20 V AC/DC 250 V AC/DC     |
|----------------|----------------------------|
| Voltage drop   | ≤ 6.5 V (AC)<br>≤ 6 V (DC) |

 $<sup>^{1)}</sup>$  Supply voltage  $U_B$  and constant ambient temperature Ta.

<sup>&</sup>lt;sup>2)</sup> Supply voltage DC.

<sup>3)</sup> According to EN 60529.

<sup>2)</sup> Of Sr

 $<sup>^{3)}</sup>$  Supply voltage AC (+50  $^{\circ}$  C).

 $<sup>^{4)}</sup>$  Supply voltage AC (+80  $^{\circ}$  C).

<sup>&</sup>lt;sup>5)</sup> Supply voltage DC.

 $<sup>^{6)}</sup>$  20 ms / 0.5 Hz.

 $<sup>^{7)}</sup>$  Miniature fuse to IEC 60217-2 Sheet 1,  $\leq$  2 A (quick-blow).

 $<sup>^{8)}</sup>$  Control of small electromagnetic loads with holding currents < 200 mA.

<sup>9)</sup> Control of solenoids.

| Hysteresis                              | 1 % 15 %  |
|---|---|
| Reproducibility                         | ≤ 10 % <sup>1) 2)</sup>   |
| Temperature drift (of S <sub>r</sub> )  | ± 10 %  |
| EMC                                     | According to EN 60947-5-2<br>As per EN 55011, class B                               |
| Continuous current I <sub>a</sub>       | $\leq$ 350 mA <sup>3)</sup> $\leq$ 250 mA <sup>4)</sup> $\leq$ 100 mA <sup>5)</sup> |
| Load current                            | ± 5 mA  |
| Off-state current                       | ≤ 2.5 mA (AC 250 V)<br>≤ 1.3 mA (AC 110 V)<br>≤ 0.8 mA (DC 24 V)                    |
| Short-time withstand current            | 2.2 A <sup>6)</sup>   |
| Cable material                          | PVC   |
| Conductor size                          | 0.5 mm <sup>2</sup>   |
| Cable diameter                          | Ø 5.6 mm  |
| Short-circuit protection                | 7)  |
| Shock and vibration resistance          | 30 g, 11 ms / 10 55 Hz, 1 mm  |
| Ambient operating temperature           | -25 °C +80 °C   |
| Housing material                        | Plastic, PBT  |
| Sensing face material                   | Plastic   |
| Housing length                          | 82 mm   |
| Protection class                        | П   |
| Rated insulation voltage U <sub>i</sub> | 250 V AC  |
| Usage category                          | AC-140 <sup>8)</sup><br>DC-13 <sup>9)</sup>   |
| Contamination rating                    | 3   |
| Rated impulse withstand voltage         | 4 kV  |
|   |   |

 $<sup>^{1)}\,\</sup>mbox{Supply}$  voltage  $\mbox{U}_{\mbox{\footnotesize B}}$  and constant ambient temperature Ta.

# Safety-related parameters

| $MTF_D$                       | 971 years |
|-------------------------------|-----------|
| DC <sub>avg</sub>             | 0 %       |
| T <sub>M</sub> (mission time) | 20 years  |

#### Reduction factors

| Note                       | The values are reference values which may vary |
|----------------------------|--|
| Stainless steel (V2A, 304) | Approx. 0.7                                    |

<sup>&</sup>lt;sup>2)</sup> Of Sr.

 $<sup>^{3)}</sup>$  Supply voltage AC (+50  $^{\circ}\text{C}).$ 

 $<sup>^{4)}</sup>$  Supply voltage AC (+80  $^{\circ}\text{C}).$ 

<sup>5)</sup> Supply voltage DC.

 $<sup>^{6)}</sup>$  20 ms / 0.5 Hz.

 $<sup>^{7)}</sup>$  Miniature fuse to IEC 60217-2 Sheet 1,  $\leq$  2 A (quick-blow).

<sup>8)</sup> Control of small electromagnetic loads with holding currents < 200 mA.

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| Aluminum (AI) | Approx. 0.3 |
|---------------|-------------|
| Copper (Cu)   | Approx. 0.2 |
| Brass (Br)    | Approx. 0.4 |

#### Installation note

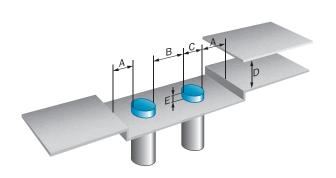
| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A      | 34 mm                                 |
| В      | 85 mm                                 |
| C      | 34 mm                                 |
| D      | 90 mm                                 |
| E      | 60 mm                                 |
| F      | 240 mm                                |

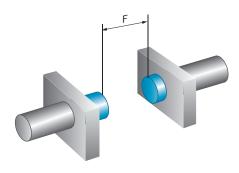
#### Classifications

| ECLASS 5.0     | 27270101 |
|----------------|----------|
| ECLASS 5.1.4   | 27270101 |
| ECLASS 6.0     | 27270101 |
| ECLASS 6.2     | 27270101 |
| ECLASS 7.0     | 27270101 |
| ECLASS 8.0     | 27270101 |
| ECLASS 8.1     | 27270101 |
| ECLASS 9.0     | 27270101 |
| ECLASS 10.0    | 27270101 |
| ECLASS 11.0    | 27270101 |
| ECLASS 12.0    | 27274001 |
| ETIM 5.0       | EC002714 |
| ETIM 6.0       | EC002714 |
| ETIM 7.0       | EC002714 |
| ETIM 8.0       | EC002714 |
| UNSPSC 16.0901 | 39122230 |

#### Installation note

Non-flush installation





## Connection type



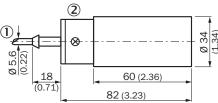
### Connection diagram

#### Cd-012



## Dimensional drawing (Dimensions in mm (inch))

IH34-30Nxx-xU0



- ① Connection
- ② Display LED

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