Online data sheet



# IME30-38NNSZC0K

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ

## Ordering information

| Type | Part no. |
|---|---|
| IME30-38NNSZC0K | 1071303 |

Other models and accessories → www.sick.com/IME

## Detailed technical data

### Features

| | |
|---|---|
| **Housing** | Cylindrical thread design |
| **Housing** | Short-body |
| **Thread size** | M30<br>1.5 |
| **Diameter** | Ø 30 mm |
| **Sensing range $S_n$** | 38 mm |
| **Safe sensing range $S_a$** | 30.78 mm |
| **Installation type** | Non-flush |
| **Switching frequency** | 100 Hz |
| **Connection type** | Male connector M12, 4-pin |
| **Switching output** | NPN |
| **Output function** | NO |
| **Electrical wiring** | DC 3-wire |
| **Enclosure rating** | IP67 [1] |
| **Special features** | Triple sensing range |

[1] According to EN 60529.

### Mechanics/electronics

| | |
|---|---|
| **Supply voltage** | 10 V DC ... 30 V DC |
| **Ripple** | ≤ 10 % |
| **Voltage drop** | ≤ 2 V [1] |
| **Current consumption** | ≤ 10 mA [2] |

[1] At $I_a$ max.
[2] Without load.
[3] Ub and Ta constant.
[4] Of Sr.

| | |
|---|---|
| **Time delay before availability** | ≤ 200 ms |
| **Warm-up time** | 90 s |
| **Hysteresis** | 1 % ... 15 % |
| **Reproducibility** | ≤ 5 % [3) 4)] |
| **Temperature drift (of $S_r$)** | ± 10 % |
| **EMC** | According to EN 60947-5-2 |
| **Continuous current $I_a$** | ≤ 200 mA |
| **Current consumption, no load** | ≤ 10 mA |
| **Short-circuit protection** | ✓ |
| **Reverse polarity protection** | ✓ |
| **Power-up pulse protection** | ✓ |
| **Shock and vibration resistance** | 30 g, 11 ms/10 Hz ... 55 Hz, 1 mm |
| **Ambient operating temperature** | –25 °C ... +75 °C |
| **Ambient storage temperature** | –25 °C ... +75 °C |
| **Housing material** | Metal, Nickel-plated brass |
| **Sensing face material** | Plastic, Plastic |
| **Housing length** | 52 mm |
| **Thread length** | 22 mm |
| **Tightening torque, max.** | ≤ 70 Nm |
| **UL File No.** | NRKH.E181493 |

[1)] At $I_a$ max.
[2)] Without load.
[3)] Ub and Ta constant.
[4)] Of Sr.

## Reduction factors

| | |
|---|---|
| **Note** | The values are reference values which may vary |
| **St37 steel (Fe)** | Approx. 1 |
| **Stainless steel (V2A, 304)** | Approx. 0.77 |
| **Aluminum (Al)** | Approx. 0.44 |
| **Copper (Cu)** | Approx. 0.37 |
| **Brass (Br)** | Approx. 0.46 |

## Installation note

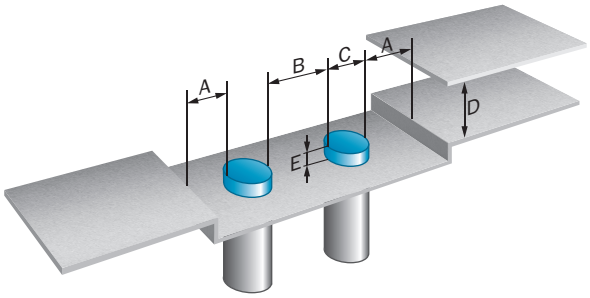
| | |
|---|---|
| **Remark** | Associated graphic see "Installation" |
| **A** | 80 mm |
| **B** | 180 mm |
| **C** | 30 mm |
| **D** | 114 mm |
| **E** | 35 mm |
| **F** | 380 mm |

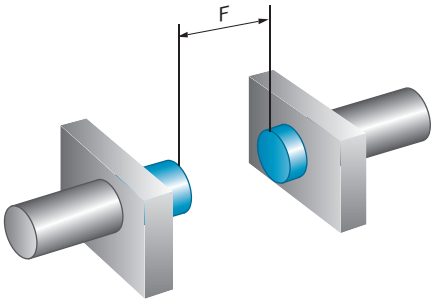
## Classifications

| | |
|---|---|
| **ECl@ss 5.0** | 27270101 |

| | |
|---|---|
| **ECl@ss 5.1.4** | 27270101 |
| **ECl@ss 6.0** | 27270101 |
| **ECl@ss 6.2** | 27270101 |
| **ECl@ss 7.0** | 27270101 |
| **ECl@ss 8.0** | 27270101 |
| **ECl@ss 8.1** | 27270101 |
| **ECl@ss 9.0** | 27270101 |
| **ETIM 5.0** | EC002714 |
| **ETIM 6.0** | EC002714 |
| **UNSPSC 16.0901** | 39122230 |

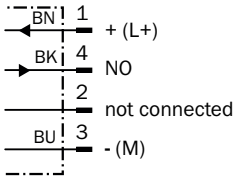
## Installation note



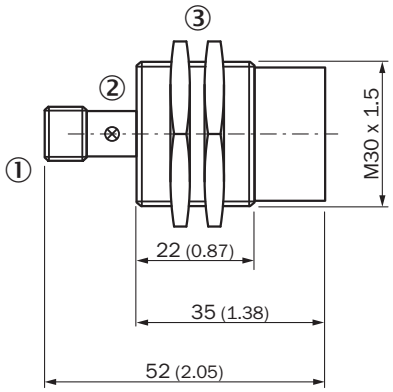

## Connection diagram

cd-007



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

IME30 Short-body housing, connector, non-flush




① Connection
② Indication LED
③ Fastening nuts (2x); width across 36, metal

## Recommended accessories

Other models and accessories ➜ www.sick.com/IME

| | Brief description | Type | Part no. |
|---|---|---|---|
| Universal bar clamp systems | | | |
|  | Universal bar clamp for mounting bars with 12 mm diameter, Zinc diecast, without mounting plate and screws | BEF-KHS-KH3 | 5322626 |
|  | Plate N10 for universal clamp bracket, M30, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware | BEF-KHS-N10 | 2062372 |
| Mounting brackets and plates | | | |
|  | Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware | BEF-WG-M30 | 5321871 |
|  | Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware | BEF-WN-M30 | 5308445 |
| Plug connectors and cables | | | |
|  | Head A: female connector, M12, 4-pin, straight, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YF2A14-020VB3XLEAX | 2096234 |
| | Head A: female connector, M12, 4-pin, straight, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YF2A14-050VB3XLEAX | 2096235 |
| | Head A: female connector, M12, 4-pin, straight, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 10 m | YF2A14-100VB3XLEAX | 2096236 |

| | Brief description | Type | Part no. |
|---|---|---|---|
|  | Head A: female connector, M12, 4-pin, angled, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YG2A14-020VB3XLEAX | 2095895 |
| | Head A: female connector, M12, 4-pin, angled, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YG2A14-050VB3XLEAX | 2095897 |
| | Head A: female connector, M12, 4-pin, angled, A-coded<br>Head B: open cable ends<br>Cable: Sensor/actuator cable, PVC, unshielded, 10 m | YG2A14-100VB3XLEAX | 2095898 |
|  | Head A: female connector, M12, 4-pin, straight<br>Head B: -<br>Cable: unshielded | DOS-1204-G | 6007302 |
|  | Head A: female connector, M12, 4-pin, angled<br>Head B: -<br>Cable: unshielded | DOS-1204-W | 6007303 |

# 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