Data sheet

# IME30-10BPOZW2K

IME

**INDUCTIVE PROXIMITY SENSORS**

SICK
Sensor Intelligence.

Illustration may differ

## Ordering information

| Type | part no. |
|---|---|
| IME30-10BP0ZW2K | 1041003 |

**Included in delivery:** BEF-MU-M30 (1)

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

## Detailed technical data

### Features

| | |
|---|---|
| **Housing** | Metric |
| **Housing** | Short-body |
| **Thread size** | M30 x 1.5 |
| **Diameter** | Ø 30 mm |
| **Sensing range $S_n$** | 10 mm |
| **Safe sensing range $S_a$** | 8.1 mm |
| **Installation type** | Flush |
| **Switching frequency** | 500 Hz |
| **Connection type** | Cable, 3-wire, 2 m |
| **Switching output** | PNP |
| **Switching output detail** | PNP |
| **Output function** | NC |
| **Electrical wiring** | DC 3-wire |
| **Enclosure rating** | IP67 [1] |
| **Items supplied** | Mounting nut, brass, nickel-plated (2x) |

[1] According to EN 60529.

### Mechanics/electronics

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

[1] At $I_a$ max.

[2] Supply voltage $U_B$ and constant ambient temperature Ta.

[3] Of Sr.

| | |
|---|---|
| **Time delay before availability** | ≤ 125 ms |
| **Hysteresis** | 5 % ... 15 % |
| **Reproducibility** | ≤ 2 % [2] [3] |
| **Temperature drift (of $S_r$)** | ± 10 % |
| **EMC** | According to EN 60947-5-2 |
| **Continuous current $I_a$** | ≤ 200 mA |
| **No load current** | ≤ 10 mA |
| **Cable material** | PVC |
| **Conductor size** | 0.25 mm² |
| **Cable diameter** | Ø 3.9 mm |
| **Short-circuit 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 |
| **Housing material** | Brass, nickel-plated |
| **Sensing face material** | Plastic, PA 66 |
| **Housing length** | 51 mm |
| **Thread length** | 35 mm |
| **Tightening torque, max.** | ≤ 100 Nm |
| **UL File No.** | NRKH.E181493 |

[1] At $I_a$ max.

[2] Supply voltage $U_B$ and constant ambient temperature Ta.

[3] Of Sr.

## Safety-related parameters

| | |
|---|---|
| **$MTTF_D$** | 1,735 years |
| **$DC_{avg}$** | 0 % |

## Reduction factors

| | |
|---|---|
| **Note** | The values are reference values which may vary |
| **St37 steel (Fe)** | 1 |
| **Stainless steel (V2A, 304)** | Approx. 0.8 |
| **Aluminum (Al)** | Approx. 0.45 |
| **Copper (Cu)** | Approx. 0.4 |
| **Brass (Br)** | Approx. 0.4 |

## Installation note

| | |
|---|---|
| **Remark** | Associated graphic see "Installation" |
| **B** | 30 mm |
| **C** | 30 mm |
| **D** | 30 mm |
| **F** | 80 mm |

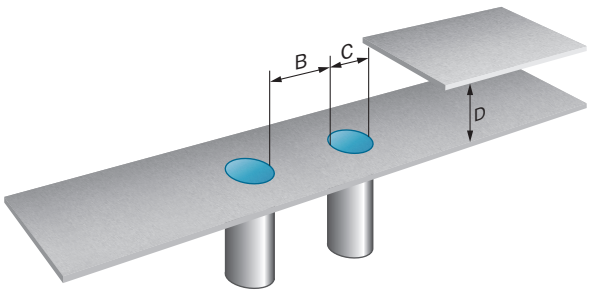
## Certificates

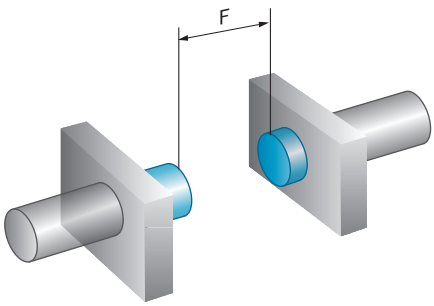
| | |
|---|---|
| **EU declaration of conformity** | ✓ |
| **UK declaration of conformity** | ✓ |
| **ACMA declaration of conformity** | ✓ |
| **Moroccan declaration of conformity** | ✓ |
| **China RoHS** | ✓ |
| **cULus certificate** | ✓ |

## Classifications

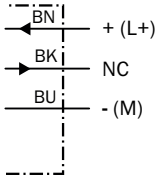
| | |
|---|---|
| **ECLASS 5.0** | 27270101 |
| **ECLASS 5.1.4** | 27270101 |
| **ECLASS 6.0** | 27270101 |
| **ECLASS 6.2** | 27270101 |
| **ECLASS 7.0** | 27270101 |
| **ECLASS 8.0** | 27270101 |
| **ECLASS 8.1** | 27270101 |
| **ECLASS 9.0** | 27270101 |
| **ECLASS 10.0** | 27270101 |
| **ECLASS 11.0** | 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 Flush installation

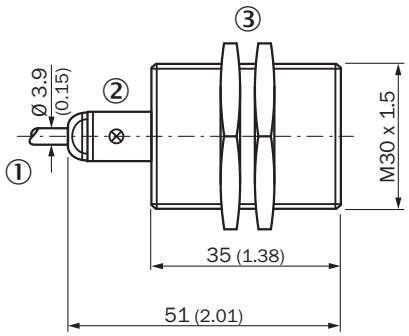


## Connection diagram Cd-003




## Dimensional drawing IME30 Short-body housing, cable, flush




Dimensions in mm (inch)
① Connection
② Display LED
③ Fastening nuts (2x); width across 36, metal

## Recommended accessories

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

| | Brief description | Type | part no. |
|---|---|---|---|
| Mounting systems | | | |
| | • **Description:** Mounting bracket for M30 sensors<br>• **Material:** Steel<br>• **Details:** Steel, zinc coated<br>• **Items supplied:** Without mounting hardware | BEF-WN-M30 | 5308445 |
| | • **Description:** Mounting plate for M30 sensors<br>• **Material:** Steel<br>• **Details:** Steel, zinc coated<br>• **Items supplied:** Without mounting hardware | BEF-WG-M30 | 5321871 |

# 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:

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