



IM08-1B5PS-ZTK

IM Standard

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

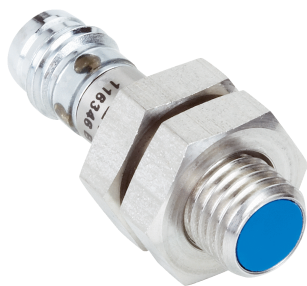


Illustration may differ



Ordering information

| Type | Part no. |
|----------------|----------|
| IM08-1B5PS-ZTK | 6020112 |

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

Detailed technical data

Features

| | |
|--|---------------------------|
| Housing | Cylindrical thread design |
| Housing | Short-body |
| Thread size | M8 x 1 |
| Diameter | Ø 8 mm |
| Sensing range S_n | 1.5 mm |
| Safe sensing range S_a | 1.22 mm |
| Installation type | Flush |
| Switching frequency | 5,000 Hz |
| Connection type | Connector M8, 3-pin |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |

¹⁾ According to EN 60529.

Mechanics/electronics

| | |
|---------------------------------------|-----------------------------------|
| Supply voltage | 10 V DC ... 30 V DC |
| Ripple | ≤ 20 % ¹⁾ |
| Voltage drop | ≤ 2 V ²⁾ |
| Current consumption | 10 mA ³⁾ |
| Time delay before availability | ≤ 10 ms |
| Hysteresis | ≤ 10 % |
| Reproducibility | ≤ 5 % ⁴⁾ ⁵⁾ |

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ U_b and T_a constant.

⁵⁾ Of S_r .

| | |
|---|----------------------------------|
| Temperature drift (of S_r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | ≤ 200 mA |
| Short-circuit protection | ✓ |
| Reverse polarity protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +70 °C |
| Housing material | Brass, Nickel-plated brass |
| Sensing face material | Plastic |
| Housing length | 29 mm |
| Thread length | 12 mm |
| Tightening torque, max. | 4 Nm |

1) Of V_S.

2) At I_a max.

3) Without load.

4) U_b and T_a constant.

5) Of S_r.

Reduction factors

| | |
|-----------------------------------|--|
| Note | The values are reference values which may vary |
| Stainless steel (V2A, 304) | Approx. 0.8 |
| Aluminum (Al) | Approx. 0.45 |
| Copper (Cu) | Approx. 0.4 |
| Brass (Br) | Approx. 0.5 |

Installation note

| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| A | 1.5 mm |
| B | 2 mm |
| C | 8 mm |
| D | 4.5 mm |
| E | 0 mm |
| F | 12 mm |

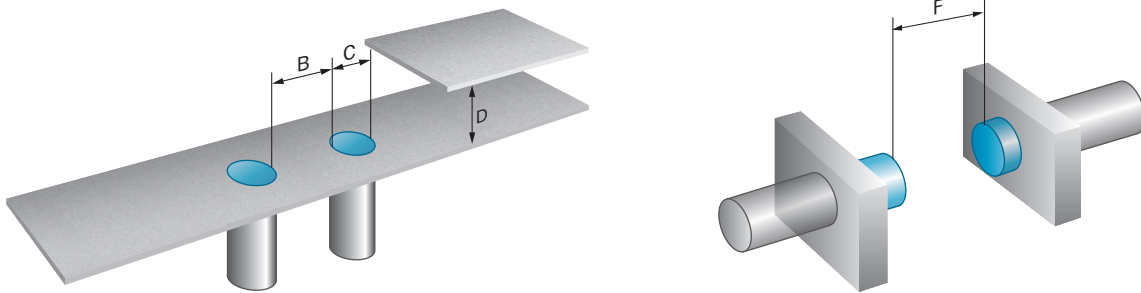
Classifications

| | |
|---------------------|----------|
| 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 |

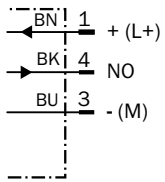
Installation note

Flush installation



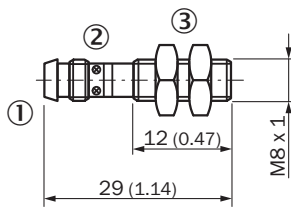
Connection diagram

Cd-002



Dimensional drawing (Dimensions in mm (inch))






IM08, male connector, flush



- ① Connection
- ② Indication LED
- ③ Fastening nuts (2x); width across 13, metal

Recommended accessories

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

| | Brief description | Type | Part no. |
|---|--|--------------------|----------|
| Mounting brackets and plates | | | |
|  | Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware | BEF-WG-M08 | 5321722 |
|  | Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware | BEF-WN-M08 | 5321721 |
| Terminal and alignment brackets | | | |
|  | Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included | BEF-KH-M08 | 2051477 |
| Plug connectors and cables | | | |
|  | Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YF8U13-020VA1XLEAX | 2095860 |
| | Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YF8U13-050VA1XLEAX | 2095884 |
|  | Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YG8U13-020VA1XLEAX | 2096165 |
| | Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YG8U13-050VA1XLEAX | 2096166 |
|  | Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded | DOS-0803-G | 7902077 |
|  | Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded | DOS-0803-W | 7902078 |
|  | Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded | STE-0803-G | 6037322 |

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