

IH04-0B8PS-VW1

INDUCTIVE PROXIMITY SENSORS



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| Туре | Part no. |
|----------------|----------|
| IH04-0B8PS-VW1 | 6020113 |

Other models and accessories -> www.sick.com/IMM

Ordering information

Illustration may differ



Detailed technical data

Features

| Housing | Cylindrical smooth housing |
|-----------------------------------|----------------------------|
| Housing | Standard design |
| Diameter | Ø 4 mm |
| Sensing range S _n | 0.8 mm |
| Safe sensing range S _a | 0.648 mm |
| Installation type | Flush |
| Switching frequency | 5,000 Hz |
| Connection type | Cable, 3-wire, 2 m |
| 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 | $\leq 2 V^{2}$ |
| Time delay before availability | ≤ 10 ms |
| Hysteresis | 1 % 10 % |
| Reproducibility | ≤ 1.5 % ³⁾ |
| Temperature drift (of S _r) | ± 10 % |
| EMC | EN 60947-5-2 IEC 61000-4-2: (Testlevel 2) IEC 61000-4-4: (Testlevel 2) |

$^{1)}$ Of $V_{\mbox{S}}.$

²⁾ With Ia = 200 mA.

 $^{3)}\,\mbox{Supply voltage U}_B$ and constant ambient temperature Ta.

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| Continuous current I _a | ≤ 200 mA |
|-----------------------------------|--|
| Cable material | PVC |
| Conductor size | 0.14 mm ² |
| Cable diameter | Ø 3.5 mm |
| Short-circuit protection | ✓ |
| Reverse polarity protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms / 10 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C +70 °C |
| Housing material | Stainless steel V2A, DIN 1.4305 / AISI 303 |
| Sensing face material | Plastic, POM |
| Housing length | 25 mm |
| UL File No. | NRKH.E191603 |

 $^{1)}$ Of V_S.

²⁾ With Ia = 200 mA.

 $^{\rm 3)}$ Supply voltage ${\rm U}_{\rm B}$ and constant ambient temperature Ta.

Safety-related parameters

| MTTF _D | 186 years |
|-------------------------------|-----------|
| DC _{avg} | 0% |
| T _M (mission time) | 20 years |

Reduction factors

| Note | The values are reference values which may vary |
|----------------------------|--|
| Stainless steel (V2A, 304) | Approx. 0.8 |
| Aluminum (Al) | Approx. 0.5 |
| Copper (Cu) | Approx. 0.45 |
| Brass (Br) | Approx. 0.55 |

Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A | 0 mm |
| В | 1 mm |
| С | 4 mm |
| D | 2.4 mm |
| E | 0 mm |
| F | 7 mm |

Classifications

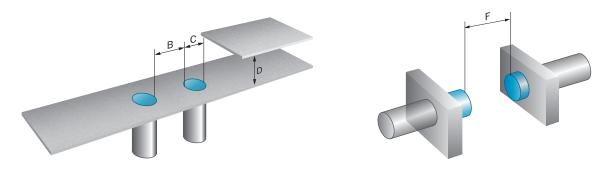
| ECLASS 5.0 | 27270101 |
|--------------|----------|
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0 | 27270101 |
| ECLASS 6.2 | 27270101 |
| ECLASS 7.0 | 27270101 |
| ECLASS 8.0 | 27270101 |

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| 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 |

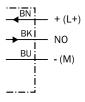
Installation note

Flush installation



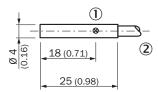
Connection diagram

Cd-001



Dimensional drawing (Dimensions in mm (inch))

Standard-body, flush, cable



Connection
 Display LED

Recommended accessories

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

| | Brief description | Туре | Part no. |
|---------------|---|------------------------|----------|
| Plug connecto | ors and cables | | |
| | Connection type head A: Female connector, M8, 3-pin, straight Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | DOS-0803-G | 7902077 |
| | Connection type head A: Female connector, M8, 3-pin, angled Description: Unshielded Connection systems: Solder connection Permitted cross-section: ≤ 0.25 mm² | DOS-0803-W | 7902078 |
| | Connection type head A: Male connector, M8, 3-pin, straight Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | STE-0803-G | 6037322 |
| Others | | | |
| | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U13- 020VA1XLEAX | 2095860 |
| | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U13- 050VA1XLEAX | 2095884 |
| • | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U13- 100VA1XLEAX | 2095885 |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG8U13- 020VA1XLEAX | 2096165 |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG8U13- O5OVA1XLEAX | 2096166 |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG8U13- 100VA1XLEAX | 2096209 |

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| | Brief description | Туре | Part no. |
|-------|---|------------------------|----------|
| 10 Kg | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Male connector, M12, 3-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U13- 020VA1M2A13 | 2096605 |
| 10 Kg | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Male connector, M12, 3-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF8U13- 050VA1M2A13 | 2096606 |

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