



# IH06-1B5PS-VWXS01

IMM

**INDUCTIVE PROXIMITY SENSORS**

**SICK**  
Sensor Intelligence.



## Ordering information

| Type              | Part no. |
|-------------------|----------|
| IH06-1B5PS-VWXS01 | 6033574  |

Other models and accessories → [www.sick.com/IMM](http://www.sick.com/IMM)

Illustration may differ



## Detailed technical data

## Features

|                                            |                         |
|--------------------------------------------|-------------------------|
| <b>Housing</b>                             | Cylindrical             |
| <b>Housing</b>                             | Extremely short model   |
| <b>Diameter</b>                            | Ø 6.5 mm                |
| <b>Sensing range <math>S_n</math></b>      | 1.5 mm                  |
| <b>Safe sensing range <math>S_a</math></b> | 1.215 mm                |
| <b>Installation type</b>                   | Flush                   |
| <b>Switching frequency</b>                 | 5,000 Hz                |
| <b>Connection type</b>                     | Cable, 3-wire, 2 m      |
| <b>Switching output</b>                    | PNP                     |
| <b>Output function</b>                     | NO                      |
| <b>Electrical wiring</b>                   | DC 3-wire               |
| <b>Enclosure rating</b>                    | IP67 <sup>1)</sup>      |
| <b>Special characteristic</b>              | Angled cable connection |

<sup>1)</sup> According to EN 60529.

## Mechanics/electronics

|                                       |                      |
|---------------------------------------|----------------------|
| <b>Supply voltage</b>                 | 10 V DC ... 30 V DC  |
| <b>Ripple</b>                         | ≤ 20 % <sup>1)</sup> |
| <b>Voltage drop</b>                   | ≤ 2 V <sup>2)</sup>  |
| <b>Time delay before availability</b> | ≤ 10 ms              |
| <b>Hysteresis</b>                     | 1 % ... 10 %         |
| <b>Reproducibility</b>                | ≤ 5 % <sup>3)</sup>  |

<sup>1)</sup> Of  $V_S$ .

<sup>2)</sup> With  $I_a = 200$  mA.

<sup>3)</sup> Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

|                                             |                                                                              |
|---------------------------------------------|------------------------------------------------------------------------------|
| <b>Temperature drift (of S<sub>r</sub>)</b> | ± 10 %                                                                       |
| <b>EMC</b>                                  | EN 60947-5-2<br>IEC 61000-4-2: (Testlevel 2)<br>IEC 61000-4-4: (Testlevel 3) |
| <b>Continuous current I<sub>a</sub></b>     | ≤ 200 mA                                                                     |
| <b>Cable material</b>                       | PVC                                                                          |
| <b>Conductor size</b>                       | 0.14 mm <sup>2</sup>                                                         |
| <b>Cable diameter</b>                       | Ø 3.5 mm                                                                     |
| <b>Short-circuit protection</b>             | ✓                                                                            |
| <b>Shock and vibration resistance</b>       | 30 g, 11 ms / 10 ... 55 Hz, 1 mm                                             |
| <b>Ambient operating temperature</b>        | -25 °C ... +70 °C                                                            |
| <b>Housing material</b>                     | Stainless steel V2A, DIN 1.4305 / AISI 303                                   |
| <b>Sensing face material</b>                | Plastic, POM                                                                 |
| <b>Housing length</b>                       | 16 mm                                                                        |
| <b>UL File No.</b>                          | NRKH.E191603                                                                 |

<sup>1)</sup> Of V<sub>S</sub>.

<sup>2)</sup> With I<sub>a</sub> = 200 mA.

<sup>3)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature T<sub>a</sub>.

## Installation note

|               |                                       |
|---------------|---------------------------------------|
| <b>Remark</b> | Associated graphic see "Installation" |
| <b>A</b>      | 1.75 mm                               |
| <b>B</b>      | 3 mm                                  |
| <b>C</b>      | 6.5 mm                                |
| <b>D</b>      | 4.5 mm                                |
| <b>E</b>      | 0 mm                                  |
| <b>F</b>      | 12 mm                                 |

## Classifications

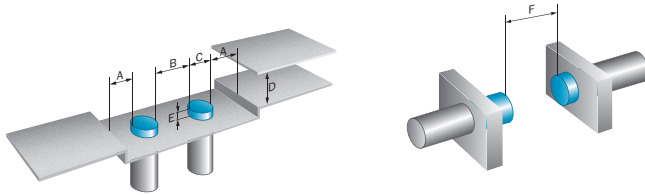
|                     |          |
|---------------------|----------|
| <b>ECLASS 5.0</b>   | 27270101 |
| <b>ECLASS 5.1.4</b> | 27270101 |
| <b>ECLASS 6.0</b>   | 27270101 |
| <b>ECLASS 6.2</b>   | 27270101 |
| <b>ECLASS 7.0</b>   | 27270101 |
| <b>ECLASS 8.0</b>   | 27270101 |
| <b>ECLASS 8.1</b>   | 27270101 |
| <b>ECLASS 9.0</b>   | 27270101 |
| <b>ECLASS 10.0</b>  | 27270101 |
| <b>ECLASS 11.0</b>  | 27270101 |
| <b>ECLASS 12.0</b>  | 27274001 |
| <b>ETIM 5.0</b>     | EC002714 |
| <b>ETIM 6.0</b>     | EC002714 |
| <b>ETIM 7.0</b>     | EC002714 |
| <b>ETIM 8.0</b>     | EC002714 |

UNSPSC 16.0901

39122230

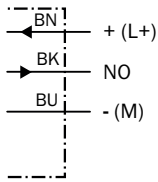
### Installation note

Flush installation



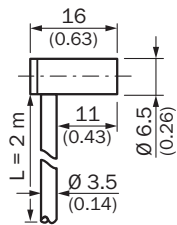
### Connection diagram

Cd-001



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

Ultrashort, flush, cable, IH06-1B5PS-VWXS01




### Recommended accessories

Other models and accessories → [www.sick.com/IMM](http://www.sick.com/IMM)

|                                                                                     | Brief description                        | Type       | Part no. |
|-------------------------------------------------------------------------------------|------------------------------------------|------------|----------|
| Terminal and alignment brackets                                                     |                                          |            |          |
|  | Plastic (PA6), without mounting hardware | BEF-KH-M06 | 2101067  |

|                                                                                     | Brief description                                                                                                                                                                                                                                                                                                                                                                                                                             | Type               | Part no. |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
| Others                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |          |
|    | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 2 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                  | YF8U13-020VA1XLEAX | 2095860  |
|    | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 5 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                  | YF8U13-050VA1XLEAX | 2095884  |
|    | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 10 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                 | YF8U13-100VA1XLEAX | 2095885  |
|    | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 2 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                    | YG8U13-020VA1XLEAX | 2096165  |
|   | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 5 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                    | YG8U13-050VA1XLEAX | 2096166  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 10 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                                   | YG8U13-100VA1XLEAX | 2096209  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Screw-type terminals</li> <li>• <b>Permitted cross-section:</b> 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></li> </ul>                                                                                                                    | STE-0803-G         | 6037322  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Screw-type terminals</li> <li>• <b>Permitted cross-section:</b> 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></li> </ul>                                                                                                                  | DOS-0803-G         | 7902077  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Solder connection</li> <li>• <b>Permitted cross-section:</b> ≤ 0.25 mm<sup>2</sup></li> </ul>                                                                                                                                            | DOS-0803-W         | 7902078  |
|  | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Connection type head B:</b> Male connector, M12, 3-pin, straight, A-coded</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 2 m, 3-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul> | YF8U13-020VA1M2A13 | 2096605  |

|                                                                                   | Brief description                                                                                                                                                                                                                                                                                                                                                                                                                      | Type               | Part no. |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
|  | <ul style="list-style-type: none"><li>• <b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li><li>• <b>Connection type head B:</b> Male connector, M12, 3-pin, straight, A-coded</li><li>• <b>Signal type:</b> Sensor/actuator cable</li><li>• <b>Cable:</b> 5 m, 3-wire, PVC</li><li>• <b>Description:</b> Sensor/actuator cable, unshielded</li><li>• <b>Application:</b> Zones with chemicals</li></ul> | YF8U13-050VA1M2A13 | 2096606  |

## 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.”

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