

# XS1N05PB311S

inductive sensor XS1 M5 - L41mm - stainless -  
Sn0.8mm - 5..24VDC - M8



## Main

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Range of product                   | OsiSense XS                                          |
| Series name                        | General purpose                                      |
| Sensor type                        | Inductive proximity sensor                           |
| Device application                 | -                                                    |
| Sensor name                        | XS1                                                  |
| Sensor design                      | Cylindrical M5                                       |
| Size                               | 41 mm                                                |
| Body type                          | Fixed                                                |
| Detector flush mounting acceptance | Flush mountable                                      |
| Material                           | Stainless steel                                      |
| Type of output signal              | Discrete                                             |
| Wiring technique                   | 3-wire                                               |
| [Sn] nominal sensing distance      | 0.8 mm                                               |
| Discrete output function           | 1 NC                                                 |
| Output circuit type                | DC                                                   |
| Discrete output type               | PNP                                                  |
| Electrical connection              | Male connector M8, 3 pins                            |
| [Us] rated supply voltage          | 5...24 V DC                                          |
| Switching capacity in mA           | <= 100 mA with overload and short-circuit protection |
| IP degree of protection            | IP67 conforming to IEC 60529                         |

## Complementary

|                        |                              |
|------------------------|------------------------------|
| Thread type            | M5 x 0.5                     |
| Detection face         | Frontal                      |
| Front material         | PPS                          |
| Enclosure material     | Stainless steel 303          |
| Operating zone         | 0...0.6 mm                   |
| Status LED             | Output state: 1 LED (yellow) |
| Supply voltage limits  | 5...30 V DC                  |
| Switching frequency    | <= 5000 Hz                   |
| Maximum voltage drop   | <2 V (closed)                |
| Current consumption    | 0...10 mA no-load            |
| Maximum delay first up | 5 ms                         |
| Maximum delay response | 1 ms                         |
| Maximum delay recovery | 1 ms                         |
| Marking                | CE                           |
| Threaded length        | 24 mm                        |
| Length                 | 42 mm                        |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA<br>UL                                                               |
| Ambient air temperature for operation | -25...70 °C                                                             |
| Ambient air temperature for storage   | -40...85 °C                                                             |
| Vibration resistance                  | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance                      | 50 gn for 11 ms conforming to IEC 60068-2-27                            |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Weight             | 12 g      |
| Package 1 Height             | 2.2 cm    |
| Package 1 width              | 5.7 cm    |
| Package 1 Length             | 15.1 cm   |
| Unit Type of Package 2       | BAG       |
| Number of Units in Package 2 | 1         |
| Package 2 Weight             | 26 g      |
| Package 2 Height             | 0.6 cm    |
| Package 2 width              | 20 cm     |
| Package 2 Length             | 15 cm     |
| Unit Type of Package 3       | S01       |
| Number of Units in Package 3 | 18        |
| Package 3 Weight             | 419.333 g |
| Package 3 Height             | 15 cm     |
| Package 3 width              | 15 cm     |
| Package 3 Length             | 40 cm     |

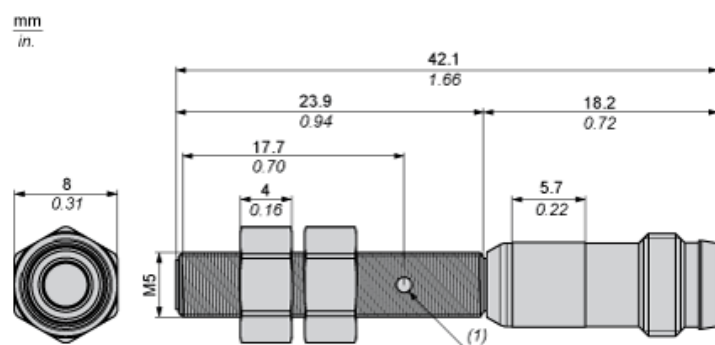
## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |
| Circularity Profile        |  <a href="#">End of Life Information</a>                                                          |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## Dimensions



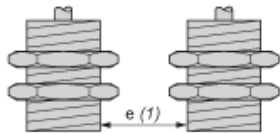
(1) LED

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Minimum Mounting Distances in mm

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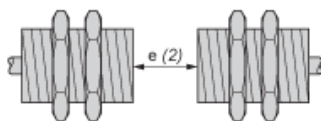
Side by side



e (1) 2 mm/0.79 in.

≥

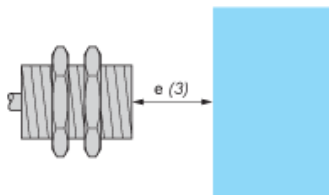
Face to face



e (2) 12 mm/0.47 in.

≥

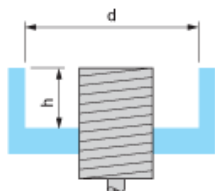
Facing a metal object



e (3) 3 mm/0.12 in.

≥

Mounted in a metal support



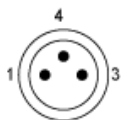
d ≥ 5 mm/0.17 in.

h ≥ 0 mm/0 in.

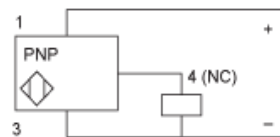
Tightening torque : 2.2 N.m. (values obtained with washers mounted)

## Wiring Schemes

M8 Connector



PNP

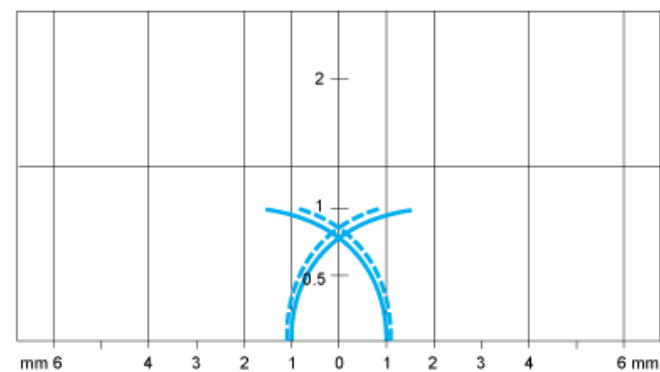


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Performance Curves

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Standard Steel Target (mm) : 5x5x1



— Pick-up points  
--- Drop-out points (object approaching from the side)  
(y) Sensing distance in mm