

# XS512B1DAL2

inductive sensor XS5 M12 - L53mm - brass -  
Sn2mm - 12..48VDC - cable 2m



## Main

|                                    |   |
|------------------------------------|---|
| Range of product                   | OsiSense XS   |
| Series name                        | General purpose   |
| Sensor type                        | Inductive proximity sensor  |
| Device application                 | -   |
| Sensor name                        | XS5   |
| Sensor design                      | Cylindrical M12   |
| Size                               | 54 mm   |
| Body type                          | Fixed   |
| Detector flush mounting acceptance | Flush mountable   |
| Material                           | Metal   |
| Type of output signal              | Discrete  |
| Wiring technique                   | 2-wire  |
| [Sn] nominal sensing distance      | 2 mm  |
| Discrete output function           | 1 NO  |
| Output circuit type                | DC  |
| Electrical connection              | cable   |
| Cable length                       | 2 m   |
| [Us] rated supply voltage          | 12...48 V DC  |
| Switching capacity in mA           | 1.5...100 mA DC with overload and short-circuit protection                      |
| IP degree of protection            | IP68 double insulation conforming to IEC 60529<br>IP69K conforming to DIN 40050 |

## Complementary

|                |         |
|----------------|---------|
| Thread type    | M12 x 1 |
| Detection face | Frontal |
| Front material | PPS     |

|                          |                              |
|--------------------------|------------------------------|
| Enclosure material       | Nickel plated brass          |
| Operating zone           | 0...1.6 mm                   |
| Differential travel      | 1...15% of Sr                |
| Cable composition        | 2 x 0.34 mm <sup>2</sup>     |
| Wire insulation material | PvR                          |
| Status LED               | Output state: 1 LED (yellow) |
| Supply voltage limits    | 10...58 V DC                 |
| Maximum residual current | 0.5 mA open state            |
| Switching frequency      | <= 4000 Hz                   |
| Maximum voltage drop     | <4 V (closed)                |
| Maximum delay first up   | 10 ms                        |
| Maximum delay response   | 0.2 ms                       |
| Maximum delay recovery   | 0.2 ms                       |
| Marking                  | CE                           |
| Threaded length          | 42 mm                        |
| Height                   | 12 mm                        |
| Length                   | 53 mm                        |
| Net weight               | 0.075 kg                     |

## Environment

|                                       |   |
|---------------------------------------|---|
| Product certifications                | CSA<br>UL<br>CCC  |
| 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             | 91 g     |
| Package 1 Height             | 4.5 cm   |
| Package 1 width              | 9.8 cm   |
| Package 1 Length             | 13.5 cm  |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 44       |
| Package 2 Weight             | 3.977 kg |
| Package 2 Height             | 30 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

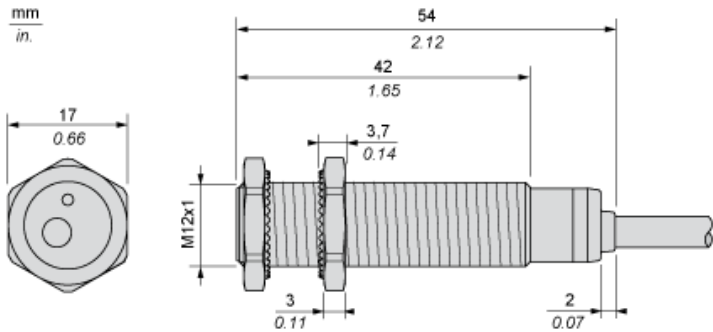
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><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 | 12 months |
|----------|-----------|

Dimensions



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Minimum Mounting Distances

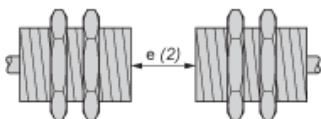
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Side by side



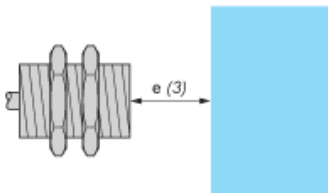
$e (1) \geq 4 \text{ mm}/0.16 \text{ in.}$

Face to face



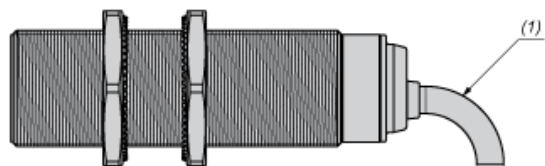
$e (2) \geq 24 \text{ mm}/0.94 \text{ in.}$

Facing a metal object



$e (3) \geq 6 \text{ mm}/0.24 \text{ in.}$

Mounting



(1) Bending cable: 4 x external cable diameter

## Wiring Schemes

### 2-Wire Non-polarised

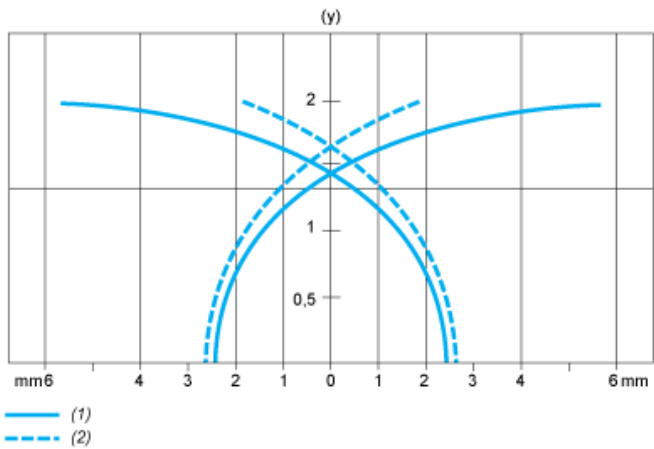
NO output



BU : Blue  
BN : Brown

Performance Curves

Standard Steel Target : 12x12x1 mm



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