

# XS1N12NC410

inductive sensor XS1 M12 - L33mm - brass -  
Sn2mm - 12..24VDC - cable 2m



## Main

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Range of product                   | OsiSense XS                                          |
| Series name                        | General purpose                                      |
| Sensor type                        | Inductive proximity sensor                           |
| Sensor name                        | XS1                                                  |
| Sensor design                      | Cylindrical M12                                      |
| Size                               | 37 mm                                                |
| Body type                          | Fixed                                                |
| Detector flush mounting acceptance | Flush mountable                                      |
| Material                           | Metal                                                |
| Type of output signal              | Discrete                                             |
| Wiring technique                   | 4-wire                                               |
| [Sn] nominal sensing distance      | 2 mm                                                 |
| Discrete output function           | 1 NO + 1 NC                                          |
| Output circuit type                | DC                                                   |
| Discrete output type               | NPN                                                  |
| Electrical connection              | Cable                                                |
| Cable length                       | 2 m                                                  |
| [Us] rated supply voltage          | 12...24 V DC with reverse polarity protection        |
| Switching capacity in mA           | <= 200 mA with overload and short-circuit protection |
| IP degree of protection            | IP68 double insulation conforming to IEC 60529       |

## 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        | 4 x 0.22 mm <sup>2</sup>     |
| Wire insulation material | PvR                          |
| Status LED               | Output state: 1 LED (yellow) |
| Supply voltage limits    | 10...36 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   | 0.1 ms                       |
| Maximum delay recovery   | 0.1 ms                       |
| Marking                  | CE                           |
| Threaded length          | 25 mm                        |
| Length                   | 37 mm                        |
| Net weight               | 0.07 kg                      |

## 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             | 98 g   |
| Package 1 Height             | 4.2 cm |
| Package 1 width              | 13 cm  |
| Package 1 Length             | 9.6 cm |

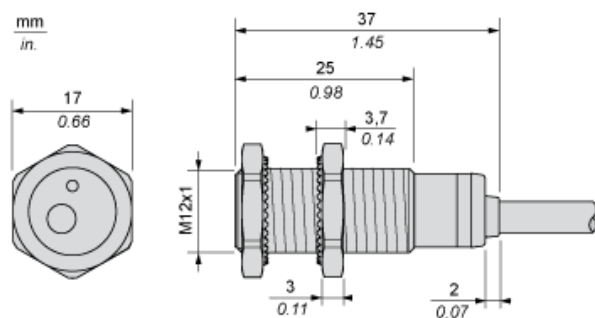
## Offer Sustainability

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



### Minimum Mounting Distances

Side by side



e (1) 4 mm/0.16 in.

≥

Face to face



e (2) 24 mm/0.94 in.

≥

Facing a metal object



e (3) 6 mm/0.24 in.

≥

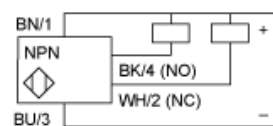
### Mounting



(1) Bending cable: 4 x external cable diameter

## Wiring Schemes

### NPN 4-wire



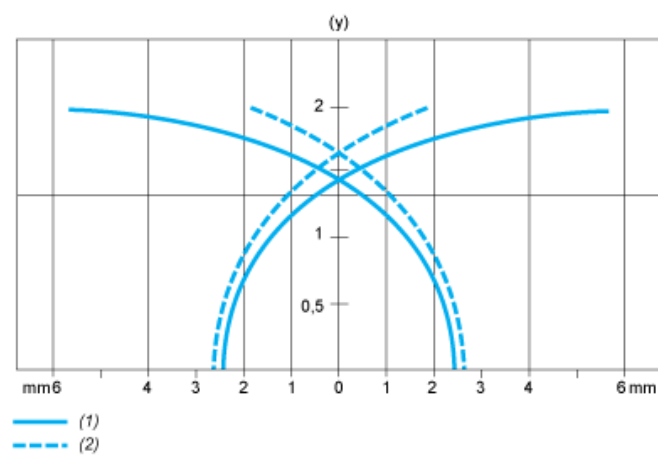
BU : Blue  
BN : Brown  
BK : Black  
WH : White

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Performance Curves

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Standard Steel Target : 12x12x1 mm



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