

# XS1N12NA349D

Inductive proximity sensors XS, inductive sensor XS1 M12, L50mm, brass, Sn4mm, 12...24 VDC, M12



## Main

|                                    |                                                               |
|------------------------------------|---------------------------------------------------------------|
| Range of product                   | Telemecanique Inductive proximity sensors XS                  |
| Series name                        | General purpose                                               |
| Sensor type                        | Inductive proximity sensor                                    |
| Device application                 | -                                                             |
| Sensor name                        | XS1                                                           |
| Sensor design                      | Cylindrical M12                                               |
| Size                               | 50 mm                                                         |
| Body type                          | Fixed                                                         |
| Detector flush mounting acceptance | Flush mountable                                               |
| Material                           | Metal                                                         |
| Enclosure material                 | Nickel plated brass                                           |
| Type of output signal              | Discrete                                                      |
| Wiring technique                   | 3-wire                                                        |
| [Sn] nominal sensing distance      | 4 mm                                                          |
| Discrete output function           | 1 NO                                                          |
| Output circuit type                | DC                                                            |
| Discrete output type               | NPN                                                           |
| Electrical connection              | Male connector M12, 4 pins                                    |
| [Us] rated supply voltage          | 12...24 V DC with reverse polarity protection                 |
| Switching capacity in mA           | <= 200 mA DC with overload and short-circuit protection       |
| IP degree of protection            | IP67 conforming to IEC 60529<br>IP69K conforming to DIN 40050 |

## Complementary

|                        |                              |
|------------------------|------------------------------|
| Thread type            | M12 x 1                      |
| Detection face         | Frontal                      |
| Front material         | PPS                          |
| Operating zone         | 0...3.2 mm                   |
| Differential travel    | 1...15% of Sr                |
| Status LED             | Output state: 1 LED (yellow) |
| Supply voltage limits  | 10...36 V DC                 |
| Switching frequency    | <= 2500 Hz                   |
| Maximum voltage drop   | <2 V (closed)                |
| Current consumption    | 0...10 mA no-load            |
| Maximum delay first up | 5 ms                         |
| Maximum delay response | 0.2 ms                       |
| Maximum delay recovery | 0.2 ms                       |
| Marking                | CE                           |
| Threaded length        | 30 mm                        |
| Height                 | 12 mm                        |
| Length                 | 50 mm                        |
| Net weight             | 0.02 kg                      |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA[RETURN]UL                                                           |
| Ambient air temperature for operation | -25...50 °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 Height             | 1.700 cm  |
| Package 1 Width              | 5.500 cm  |
| Package 1 Length             | 15.400 cm |
| Package 1 Weight             | 28.000 g  |
| Unit Type of Package 2       | S01       |
| Number of Units in Package 2 | 22        |
| Package 2 Height             | 15 cm     |
| Package 2 Width              | 15 cm     |
| Package 2 Length             | 40 cm     |
| Package 2 Weight             | 1.023 kg  |

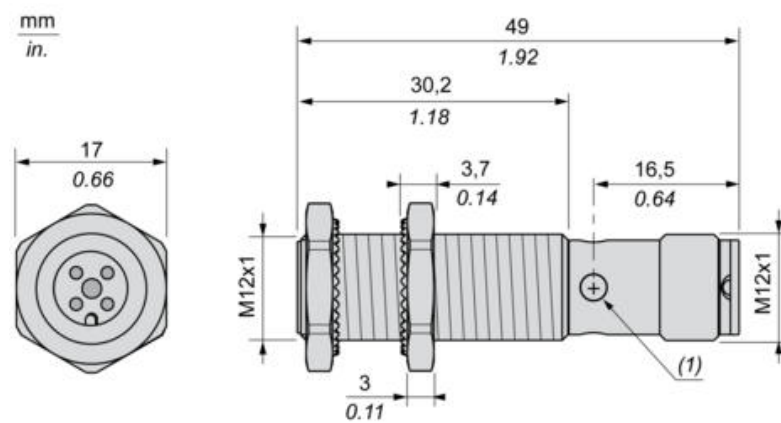
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| Circularity Profile                        |  <a href="#">End of Life Information</a>                                                                                                                                                                                                                                                       |
| California proposition 65                  | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

## Contractual warranty

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

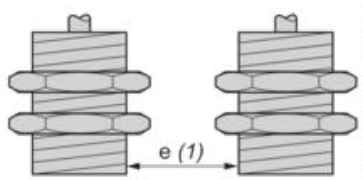
## Dimensions



(1) : LED

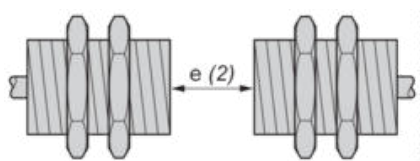
### Minimum Mounting Distances in mm

Side by side



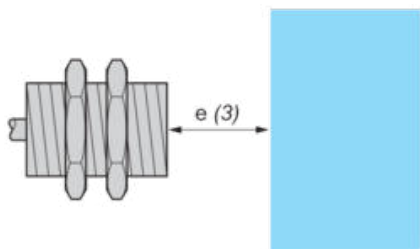
$e(1) \geq 8 \text{ mm}/0.31 \text{ in.}$

Face to face



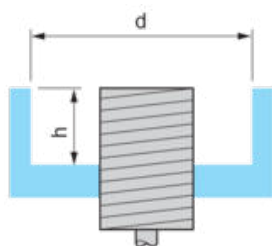
$e(2) \geq 48 \text{ mm}/1.89 \text{ in.}$

Facing a metal object



$e(3) \geq 12 \text{ mm}/0.47 \text{ in.}$

Mounted in a metal support



$d \geq 14 \text{ mm}/0.55 \text{ in.}$

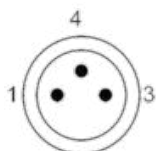
$h \geq 2.4 \text{ mm}/0.09 \text{ in}$

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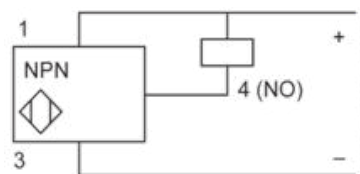
## Wiring Schemes

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M8 Connector



NPN

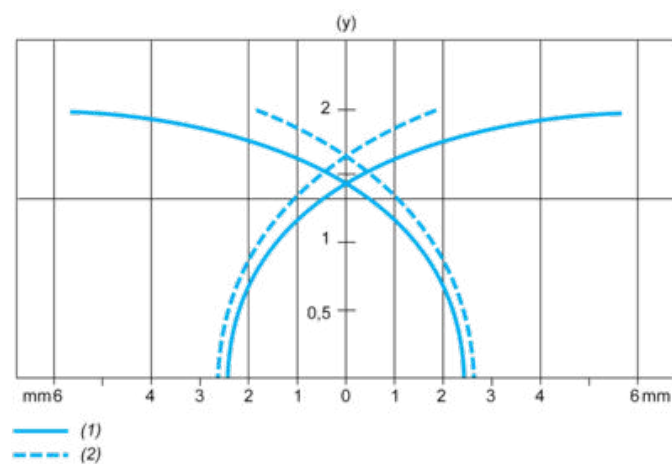


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Performance Curves

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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