



## Main

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| Range of product              | OsiSense XX                                   |
| Sensor type                   | Ultrasonic sensor                             |
| Series name                   | General purpose                               |
| Sensor name                   | XXV                                           |
| Sensor design                 | Cylindrical M18                               |
| Detection system              | Diffuse                                       |
| [Sn] nominal sensing distance | 0.05 m fixed                                  |
| Material                      | Metal                                         |
| Type of output signal         | Discrete                                      |
| Discrete output function      | 1 NO                                          |
| Wiring technique              | 3-wire                                        |
| Discrete output type          | PNP                                           |
| [Us] rated supply voltage     | 12...24 V DC with reverse polarity protection |
| Electrical connection         | Male connector M12 4 pins                     |
| [Sd] sensing range            | 0.003...0.05 m                                |
| Beam angle                    | 10 °                                          |
| IP degree of protection       | IP67 conforming to IEC 60529                  |

## Complementary

|                                                   |                                  |
|---------------------------------------------------|----------------------------------|
| Enclosure material                                | Brass                            |
| Front material                                    | Epoxy                            |
| Thread type                                       | M18 x 1                          |
| Supply voltage limits                             | 10...36 V DC                     |
| [Sa] assured operating distance                   | 0.003...0.05 m                   |
| Maximum differential travel                       | 3 mm                             |
| Blind zone                                        | 0...3 mm                         |
| Transmission frequency                            | 360 kHz                          |
| Repeat accuracy                                   | 1.5 %                            |
| Deviation angle from 90° of object to be detected | -8...8 °                         |
| Minimum size of detected object                   | Cylinder diameter 2 mm at 0.02 m |

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Status LED                | 1 LED (yellow) for output state                   |
| Current consumption       | 15 mA                                             |
| Maximum switching current | 200 mA with overload and short-circuit protection |
| Voltage drop              | < 2 V                                             |
| Switching frequency       | <= 80 Hz                                          |
| Delay first up            | 5 ms                                              |
| Delay response            | 4 ms                                              |
| Delay recovery            | 4 ms                                              |
| Marking                   | CE                                                |
| Threaded length           | 51 mm                                             |
| Height                    | 18 mm                                             |
| Width                     | 18 mm                                             |
| Depth                     | 75 mm                                             |
| Product weight            | 0.05 kg                                           |

## Environment

|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| Standards                             | IEC 60947-5-2                                              |
| Product certifications                | cULus                                                      |
| Ambient air temperature for operation | 0...60 °C                                                  |
| Ambient air temperature for storage   | -40...80 °C                                                |
| Vibration resistance                  | +/- 2 mm conforming to IEC 60068-2-6 10...55 Hz            |
| Shock resistance                      | 50 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27 |
| Resistance to electrostatic discharge | 8 kV level 4 conforming to IEC 61000-4-2                   |
| Resistance to electromagnetic fields  | 10 V/m level 3 conforming to IEC 61000-4-3                 |
| Resistance to fast transients         | 1 kV level 3 conforming to IEC 61000-4-4                   |

## Offer Sustainability

|                                  |                                                                                                                                                                                                                           |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RoHS (date code: YYWW)           | Compliant - since 1214 - Schneider Electric declaration of conformity<br><a href="#"> Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                                                                                                    |
| Product end of life instructions | Available                                                                                                                                                                                                                 |

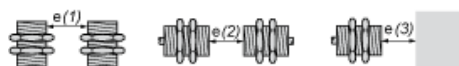
## Contractual warranty

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

Technical drawing of a bolt assembly. The drawing shows a bolt with a hexagonal head and a threaded shank. The dimensions are given in millimeters (mm) and inches (in.).

- Head diameter:  $\varnothing 18$  mm /  $\varnothing 0.71$  in.
- Head length: 2.36 mm / 0.09 in.
- Shank diameter:  $\varnothing 12$  mm /  $\varnothing 0.47$  in.
- Shank length: 51 mm / 2.0 in.
- Total length: 75 mm / 2.95 in.
- Thread specification: M12x1 and M18x1.

## Minimum Mounting Distances



e(1) > 25 mm  
e(2) > 700 mm  
e(3) > 60 mm

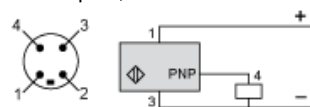
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## Wiring Diagram

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### 3-Wire Type

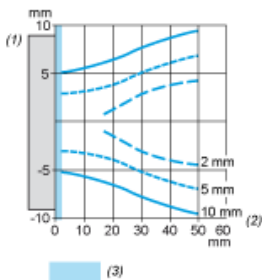
NO outputs, PNP



(1)      (+)  
(3)      (-)

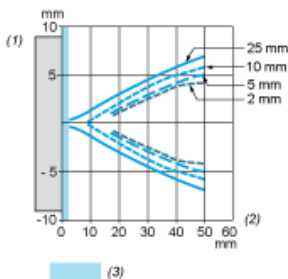
Curves

Square Object



- (1) Parallel movement
- (2) Distance
- (3) Blind zone for diffuse sensors.

Cylindrical Object



- (1) Parallel movement
- (2) Distance
- (3) Blind zone for diffuse sensors.