



## Main

|                               |                                                           |
|-------------------------------|-----------------------------------------------------------|
| Range of product              | OsiSense XU                                               |
| Series name                   | General purpose single mode                               |
| Electronic sensor type        | Photo-electric sensor                                     |
| Sensor name                   | XUX                                                       |
| Sensor design                 | Compact 92 x 71                                           |
| Detection system              | Diffuse with background suppression                       |
| Material                      | Plastic                                                   |
| Type of output signal         | Discrete                                                  |
| Supply circuit type           | AC/DC                                                     |
| Wiring technique              | 5-wire                                                    |
| Discrete output function      | 1 NO or 1 NC programmable                                 |
| Electrical connection         | Screw-clamp terminals, 1 x 0.75...1 x 1.5 mm <sup>2</sup> |
| Product specific application  | Long sensing distance with high accuracy                  |
| Emission                      | Infrared                                                  |
| [Sn] nominal sensing distance | 6.56 ft (2 m)                                             |

## Complementary

|                           |                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Enclosure material        | PC                                                                                                                         |
| Lens material             | PMMA                                                                                                                       |
| Output type               | Relay                                                                                                                      |
| Cable entry               | ISO 16 cable gland, cable outer diameter: 0.28...0.39 in (7...10 mm)                                                       |
| Status LED                | 1 LED (green) supply on<br>1 LED (red) instability<br>1 LED (yellow) output state                                          |
| [Us] rated supply voltage | 24...240 V AC/DC                                                                                                           |
| Supply voltage limits     | 20...264 V AC/DC                                                                                                           |
| Switching frequency       | 20 Hz                                                                                                                      |
| Voltage drop              | <= 1.5 V (closed state)                                                                                                    |
| Current consumption       | 35 mA (no-load)                                                                                                            |
| Time delay range          | 0.02...15 s monostable, on delay or off-delay delay                                                                        |
| Delay first up            | < 200 ms                                                                                                                   |
| Delay response            | < 25 ms                                                                                                                    |
| Delay recovery            | < 25 ms                                                                                                                    |
| Electrical durability     | 500000 cycles, switching capacity: 0.5 A, cos $\varphi$ = 0.4<br>500000 cycles, switching capacity: 3 A, cos $\varphi$ = 1 |
| Product weight            | 0.44 lb(US) (0.2 kg)                                                                                                       |

## Environment

|                                       |                                                                                                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| product certifications                | CE<br>CSA<br>UL                                                                                                                                        |
| ambient air temperature for operation | -13...131 °F (-25...55 °C)                                                                                                                             |
| ambient air temperature for storage   | -40...158 °F (-40...70 °C)                                                                                                                             |
| vibration resistance                  | 7 gn (f = 10...55 Hz) conforming to IEC 60068-2-6                                                                                                      |
| shock resistance                      | 10 gn (duration = 11 ms) conforming to IEC 60068-2-27                                                                                                  |
| IP degree of protection               | IP30 (with cover open) conforming to IEC 60529<br>IP65 (double insulation) conforming to IEC 60529<br>IP67 (double insulation) conforming to IEC 60529 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

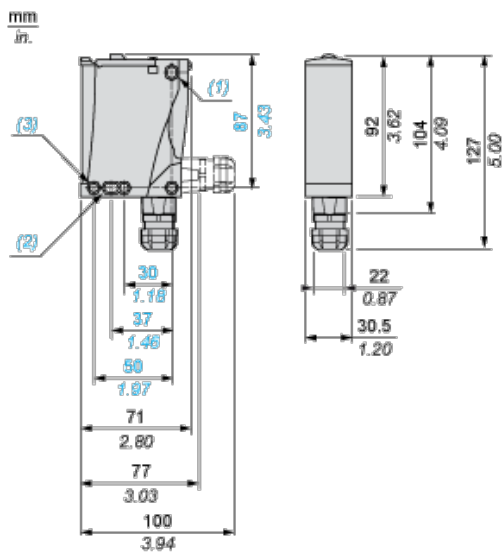
## Offer Sustainability

|                                                                                                                           |                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Not Green Premium product                                                                                                 | Not Green Premium product                                                                                                 |
| Compliant - since 1136 - Schneider Electric declaration of conformity                                                     | Compliant - since 1136 - Schneider Electric declaration of conformity                                                     |
| Reference not containing SVHC above the threshold                                                                         | Reference not containing SVHC above the threshold                                                                         |
| WARNING: This product can expose you to chemicals including:                                                              | WARNING: This product can expose you to chemicals including:                                                              |
| Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                               | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                               |
| Diisodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. | Diisodecyl 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 more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                             |

## Contractual warranty

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

## Dimensions



- (1) Elongated hole  $\varnothing$  5.5 x 7
- (2) Elongated hole  $\varnothing$  5.5 x 9
- (3)  $\varnothing$  5.5 hole

## Wiring Schemes

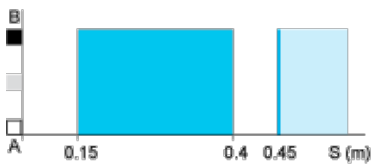
### Relay Output AC/DC

| Terminals |  |              |
|-----------|--|--------------|
| 1         |  | AC/DC        |
| 2         |  | AC/DC        |
| 3         |  | NO           |
| 4         |  | Relay common |
| 5         |  | NC           |

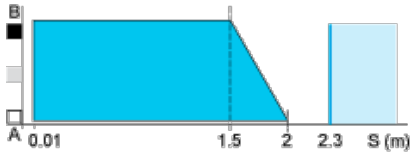
## Detection Curves

### Variation of Usable Sensing Distance $S_u$

Teach Mode at Minimum



**Teach Mode at Maximum**

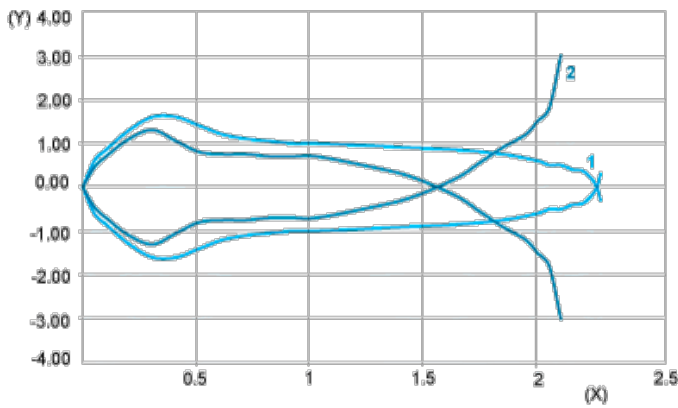


- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B :Object reflection coefficient

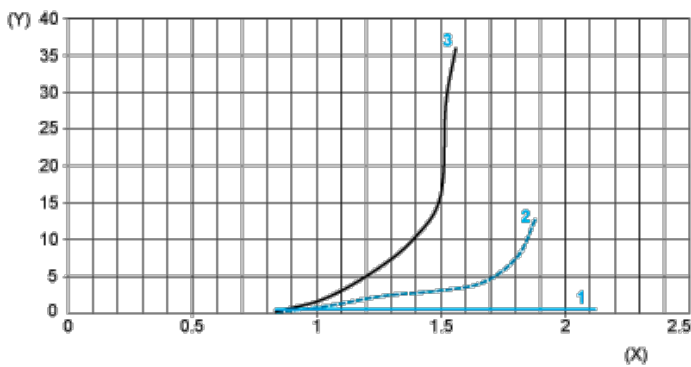
- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

**Detection Curves**



- 1 : White 90%
- 2 : Grey 18%
- (Y) Detection lobe (cm)
- (X) Object distance (m)
- Object 10 x 10 cm

**Relative Difference in Sensing Distances According to Object Colour**



- 1 : White 90%
- 2 : Grey 18%
- 3 : Black 6%
- (Y) Relative error (%)
- (X) Object distance (m)
- Object 10 x 10 cm