



## Main

|                               |  |
|-------------------------------|--|
| Range of product              | OsiSense XU  |
| Series name                   | General purpose multimode  |
| Electronic sensor type        | Photo-electric sensor  |
| Sensor name                   | XUX  |
| Sensor design                 | Compact 92 x 71  |
| Detection system              | Multimode  |
| 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 1.5 mm <sup>2</sup> or 1 x 0.75 mm <sup>2</sup> with adaptor  |
| Product specific application  | -  |
| Emission                      | Infrared diffuse<br>Infrared diffuse with background suppression<br>Infrared thru beam<br>Red polarised reflex   |
| [Sn] nominal sensing distance | 6.56 ft (2 m) diffuse<br>4.27 ft (1.3 m) diffuse with background suppression<br>131.23 ft (40 m) thru beam need a transmitter XUX0ARCTT16T<br>36.09 ft (11 m) polarised reflex need reflector XUZC50 |

## Complementary

|                           |  |
|---------------------------|--|
| Enclosure material        | PBT  |
| Lens material             | PMMA   |
| Maximum sensing distance  | 49.21 ft (15 m) polarised reflex<br>9.84 ft (3 m) diffuse<br>196.85 ft (60 m) thru beam<br>4.27 ft (1.3 m) diffuse with background suppression   |
| Output type               | Relay  |
| Add on output             | With alarm output, <= 100 mA with overload and short-circuit protection  |
| Cable entry               | 1 entry for M16 x 1.5 cable gland, cable outer diameter: 0.28...0.39 in (7...10 mm)  |
| Status LED                | 1 LED (green) supply<br>1 LED (red) instability<br>1 LED (yellow) output state   |
| [Us] rated supply voltage | 24...240 V AC/DC   |
| Switching capacity in mA  | 0.5 A (cos $\varphi$ = 0.4 for 0.5 million cycles at 1 operating cycle per second at 250 V)<br>3 A (cos $\varphi$ = 1 for 0.5 million cycles at 1 operating cycle per second at 250 V) |
| Switching frequency       | <= 20 Hz   |
| Voltage drop              | <= 1.5 V (closed state)  |
| Power consumption in W    | 2 W AC/DC  |
| Time delay range          | 0.02...15 s monostable, on-delay or off-delay (programmable) delay   |
| Delay first up            | < 200 ms   |
| Delay response            | < 25 ms  |
| Delay recovery            | < 25 ms  |
| Setting-up                | Self-teaching  |
| Electrical durability     | 500000 cycles, cos $\varphi$ = 0.4, 60 cyc/mn at 250 V<br>500000 cycles, cos $\varphi$ = 1, 60 cyc/mn at 250 V   |
| Depth                     | 3.03 in (77 mm)  |

The information provided in this documentation contains general descriptions and/or technical characteristics 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.

|                |                      |
|----------------|----------------------|
| Height         | 3.62 in (92 mm)      |
| Width          | 1.22 in (31 mm)      |
| 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, amplitude = +/- 1.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6                        |
| shock resistance                      | 30 gn (duration = 11 ms) conforming to IEC 60068-2-27  |
| IP degree of protection               | IP65 double insulation conforming to IEC 60529<br>IP67 double insulation conforming to IEC 60529 |

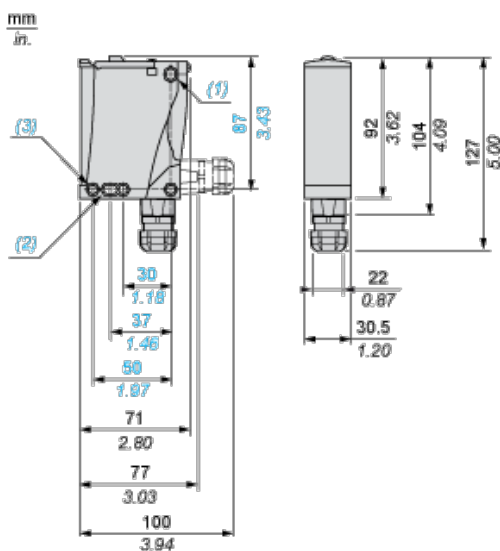
## Offer Sustainability

|  |  |
|--|--|
| Not Green Premium product  | Not Green Premium product  |
| Compliant - since 0914 - Schneider Electric declaration of conformity  | Compliant - since 0914 - 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                                |
| Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. | 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 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

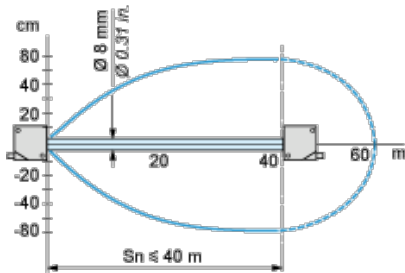
### Relay Output AC/DC

### Terminals

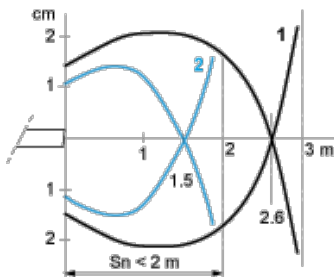
|   |   |              |
|---|---|--------------|
| 1 |  | AC/DC        |
| 2 |  | AC/DC        |
| 3 |  | NO           |
| 4 |  | Relay common |
| 5 |  | NC           |

### Detection Curves

#### With Thru-beam Accessory (Thru-beam)

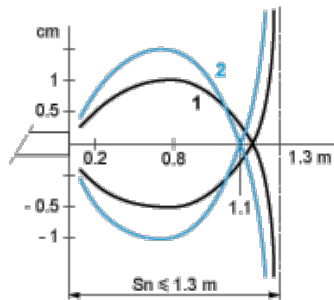


#### Without Accessory (Diffuse)



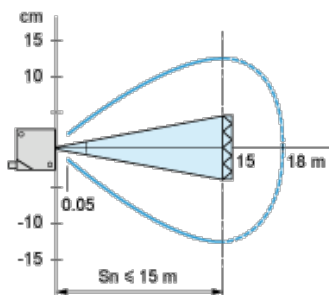
- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

#### Without Accessory (Diffuse with background suppression)



- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

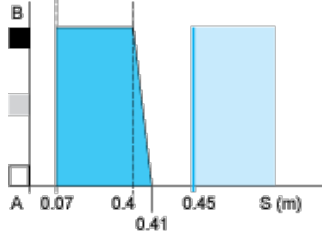
#### With reflector (Polarised reflex)



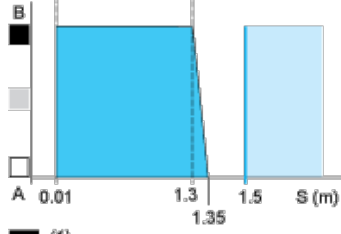
With reflector XUZC50

## Variation of Usable Sensing Distance $S_u$ (Without accessory, with adjustable background suppression)

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)