



## 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           | DC                                                                                                                                                                                                         |
| Wiring technique              | 3-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 | 36.09 Ft (11 m) polarised reflex need reflector<br>XUZC50<br>131.23 Ft (40 m) thru beam need a transmitter<br>XUX0AKSAT16T<br>6.56 Ft (2 m) diffuse<br>4.27 ft (1.3 m) diffuse with background suppression |

## 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               | Solid state                                                                                                                                    |
| Add on output             | With alarm output, <= 100 mA overload and short-circuit protection                                                                             |
| Cable entry               | 1 entry for M16 x 1.5 cable gland 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 | 12...24 V DC reverse polarity protection                                                                                                       |
| Switching capacity in mA  | <= 100 mA overload and short-circuit protection)                                                                                               |
| Switching frequency       | <= 250 Hz                                                                                                                                      |
| Maximum voltage drop      | <1.5 V closed state)                                                                                                                           |
| Current consumption       | <= 35 mA no-load                                                                                                                               |
| Maximum delay first up    | 200 ms                                                                                                                                         |
| Maximum delay response    | 2 ms                                                                                                                                           |
| Maximum delay recovery    | 2 ms                                                                                                                                           |
| Setting-up                | Self-teaching                                                                                                                                  |
| Depth                     | 3.03 in (77 mm)                                                                                                                                |
| Height                    | 3.62 in (92 mm)                                                                                                                                |

|               |                      |
|---------------|----------------------|
| Maximum Width | 1.22 in (31 mm)      |
| Net Weight    | 0.44 lb(US) (0.2 kg) |

## Environment

|                                       |                                                                      |
|---------------------------------------|----------------------------------------------------------------------|
| Product certifications                | UL<br>CSA<br>CE                                                      |
| 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 +/- 1.5 mm 10...55 Hz) IEC 60068-2-6                            |
| Shock resistance                      | 30 gn 11 ms) IEC 60068-2-27                                          |
| IP degree of protection               | IP65 double insulation IEC 60529<br>IP67 double insulation IEC 60529 |

## Ordering and shipping details

|                       |                                |
|-----------------------|--------------------------------|
| Category              | 22481 - SENSORS, PHOTOELECTRIC |
| Discount Schedule     | DS2                            |
| GTIN                  | 00785901582410                 |
| Nbr. of units in pkg. | 1                              |
| Package weight(Lbs)   | 0.42 lb(US) (0.19 kg)          |
| Returnability         | Yes                            |
| Country of origin     | FR                             |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Package 1 Height             | 1.65 in (4.2 cm)        |
| Package 1 width              | 3.74 in (9.5 cm)        |
| Package 1 Length             | 5.12 in (13 cm)         |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 22                      |
| Package 2 Weight             | 10.45 lb(US) (4.741 kg) |
| Package 2 Height             | 5.91 in (15 cm)         |
| Package 2 width              | 11.81 in (30 cm)        |
| Package 2 Length             | 15.75 in (40 cm)        |

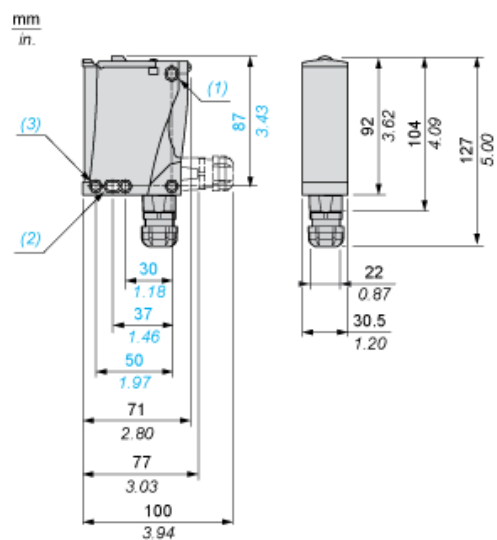
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| 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> |
| 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



- (1) Elongated hole Ø 5.5 x 7
- (2) Elongated hole Ø 5.5 x 9
- (3) Ø 5.5 hole

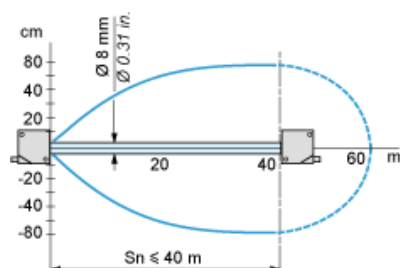
Wiring Schemes

PNP/NPN DC

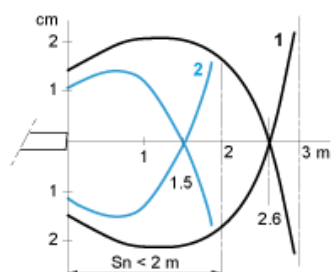
| M12 |   | Terminals |   |                |
|-----|---|-----------|---|----------------|
| 1   | ● | 1         | ⊘ | +              |
| 3   | ● | 2         | ⊘ | -              |
| 4   | ● | 3         | ⊘ | Output         |
| 2   | ● | 4         | ⊘ | Alarm inactive |

## Detection Curves

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



### Without Accessory (Diffuse)

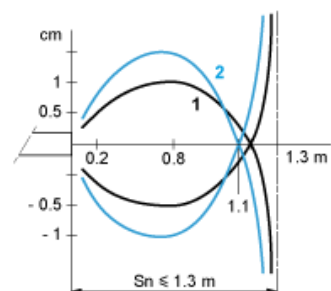


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

### Without Accessory (Diffuse with background suppression)

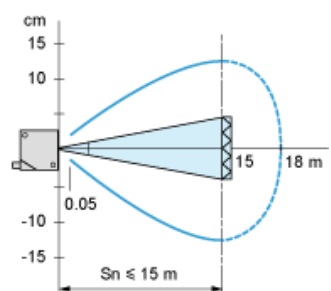


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

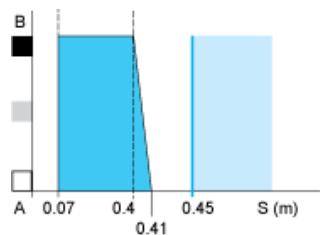
### With reflector (Polarised reflex)



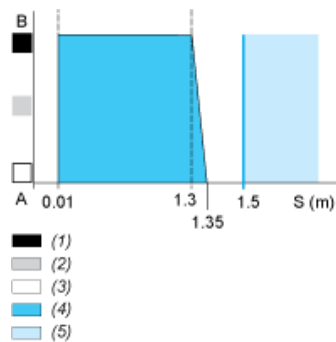
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum



A-B : Object reflection coefficient

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