



## 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	2 m

## Complementary

Enclosure material	PC
Lens material	PMMA
Output type	Relay
Cable entry	ISO 16 cable gland, cable outer diameter: 7...10 mm
Status LED	1 LED (green) for supply on 1 LED (red) for instability 1 LED (yellow) for 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 f = 0.4 500000 cycles, switching capacity: 3 A, cos f = 1
Product weight	0.2 kg

## Environment

Product certifications	CE CSA UL
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-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 IP65 (double insulation) conforming to IEC 60529 IP67 (double insulation) conforming to IEC 60529

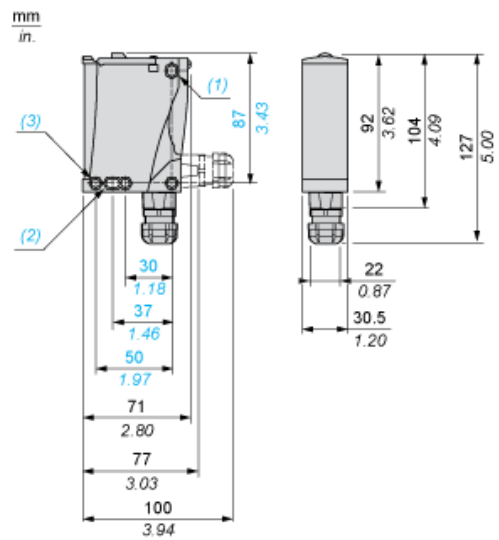
## Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 1136 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>

## Contractual warranty

Warranty period	18 months
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## Dimensions



- (1) Elongated hole  $\text{Ø } 5.5 \times 7$
- (2) Elongated hole  $\text{Ø } 5.5 \times 9$
- (3)  $\text{Ø } 5.5$  hole

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Wiring Schemes

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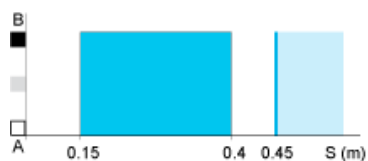
Relay Output AC/DC

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

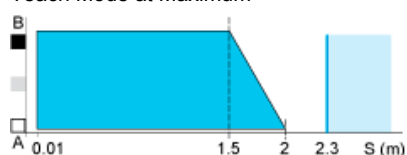
Detection Curves

Variation of Usable Sensing Distance  $S_u$

Teach Mode at Minimum



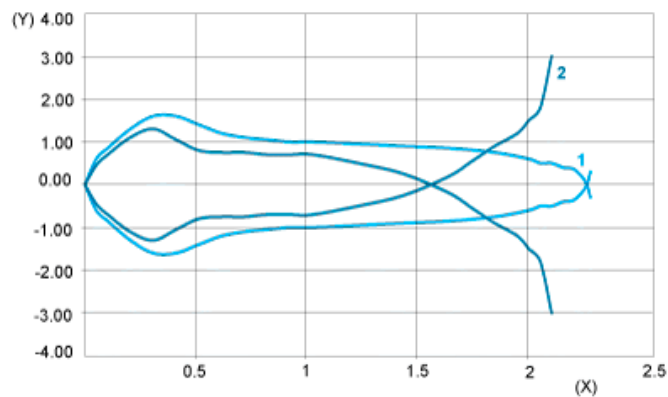
Teach Mode at Maximum



- (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)

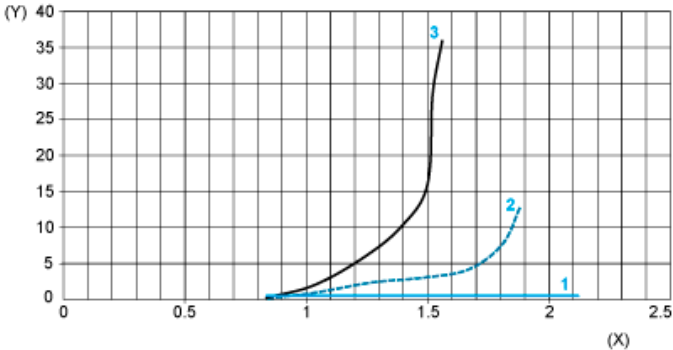
Detection Curves



- 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