



## Main

Range of Product	Telemecanique Photoelectric sensors 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 0.28...0.39 in (7...10 mm)
Status LED	Supply on 1 LED green) Instability 1 LED red) Output state 1 LED yellow)
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20...264 V AC/DC
Switching frequency	20 Hz
Maximum 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
Maximum delay first up	200 ms
Maximum delay response	25 ms
Maximum delay recovery	25 ms
Electrical durability	500000 Cycles 0.5 A 0.4 500000 cycles 3 A 1
Net Weight	0.44 lb(US) (0.2 kg)

## Environment

Product Certifications	CE CSA 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 10...55 Hz) IEC 60068-2-6
Shock resistance	10 gn 11 ms) IEC 60068-2-27
IP degree of protection	IP30 IEC 60529 with cover open) IP65 IEC 60529 double insulation) IP67 IEC 60529 double insulation)

## Ordering and shipping details

Category	22481-SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389119039901
Nbr. of units in pkg.	1
Package weight(Lbs)	7.30 oz (207.0 g)
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.57 in (4 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	10.61 lb(US) (4.813 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)

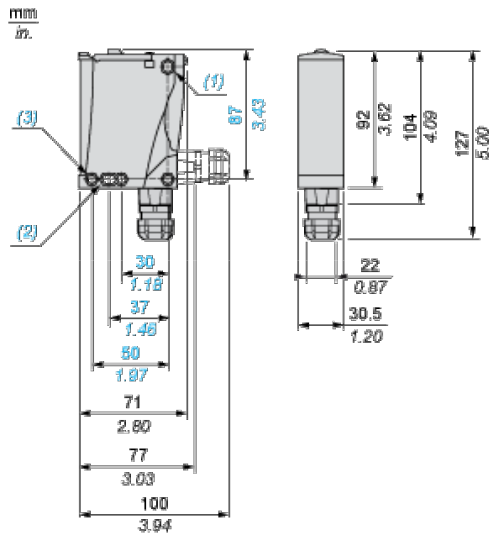
## Offer Sustainability

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
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Dimensions



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

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## Wiring Schemes

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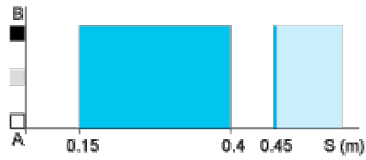
### Relay Output AC/DC

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

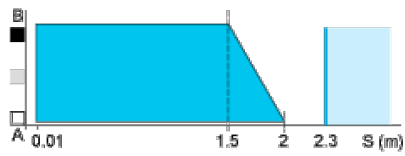
Detection Curves

Variation of Usable Sensing Distance  $S_u$

Teach Mode at Minimum



Teach Mode at Maximum

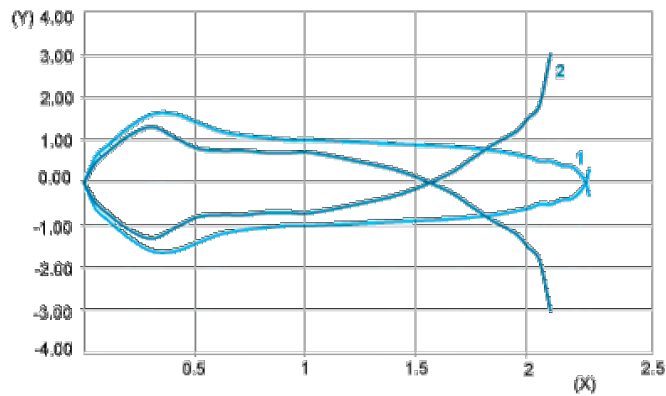


- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

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

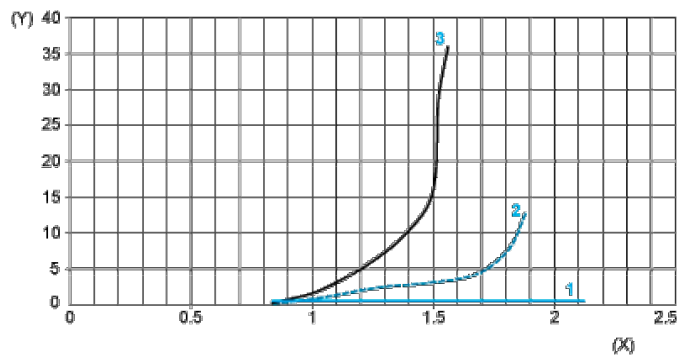
Detection Curves



- 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