



Main

Range of product	Telemecanique Photoelectric sensors 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 Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	11 M polarised reflex need reflector XUZC50 40 M thru beam need a transmitter XUX0ARCTT16T 2 M diffuse 1.3 m diffuse with background suppression

Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	15 M polarised reflex 3 M diffuse 60 M thru beam 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: 7...10 mm
Status LED	1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC/DC
Switching capacity in mA	0.5 A (cos φ = 0.4 for 0.5 million cycles at 1 operating cycle per second at 250 V) 3 A (cos φ = 1 for 0.5 million cycles at 1 operating cycle per second at 250 V)
Switching frequency	<= 20 Hz
Maximum voltage drop	<1.5 V (closed state)
Maximum power consumption in W	2 W AC/DC
Time delay range	0.02...15 s monostable, on-delay or off-delay (programmable) delay
Maximum delay first up	200 ms
Maximum delay response	25 ms
Maximum delay recovery	25 ms
Setting-up	Self-teaching
Electrical durability	500000 Cycles, cos f = 1, operating rate <60 cyc/mn at 250 V 500000 cycles, cos f = 0.4, operating rate <60 cyc/mn at 250 V
Depth	77 mm
Height	92 mm

Width	31 mm
Net weight	0.2 kg

## Environment

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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.000 cm
Package 1 Width	9.500 cm
Package 1 Length	4.000 cm
Package 1 Weight	209.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.119 kg
Unit Type of Package 3	P06
Number of Units in Package 3	352
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	90.850 kg

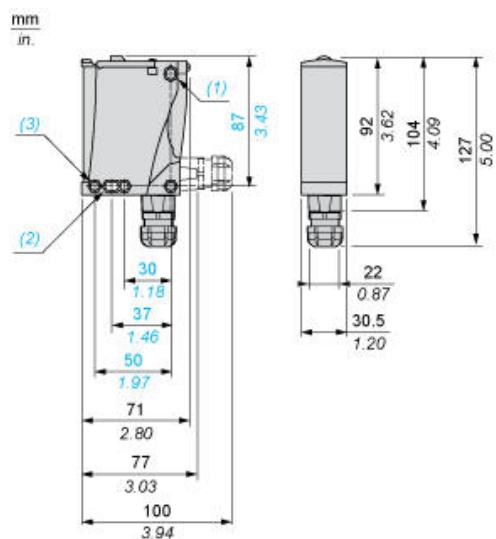
## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl 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>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



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

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### Wiring Schemes

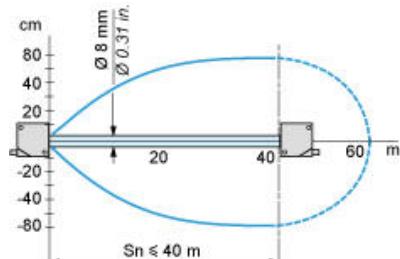
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#### Relay Output AC/DC

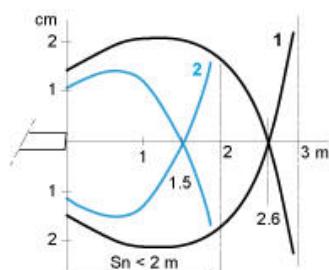
Terminals		
1	Ø	AC/DC
2	Ø	AC/DC
3	Ø	NO
4	Ø	Relay common
5	Ø	NC

## Detection Curves

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



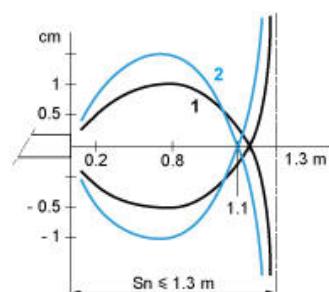
### Without Accessory (Diffuse)



1 : White 90%  
2 : Grey 18%

Object 10 x 10 cm

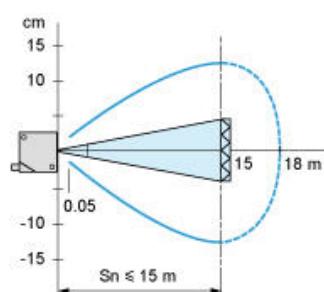
### Without Accessory (Diffuse with background suppression)



1 : White 90%  
2 : Grey 18%

Object 10 x 10 cm

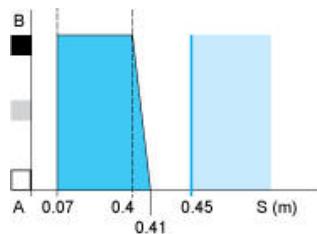
### With reflector (Polarised reflex)



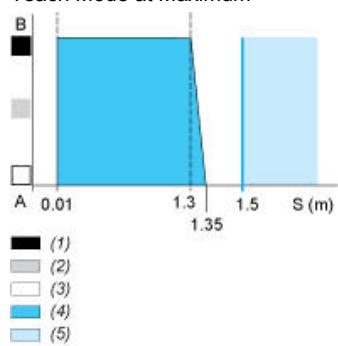
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum



A-B : Object reflection coefficient

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