

# XUX0AKSAM12

photo-electric sensor - XUX - multi - Sn 0..40m  
- 12..24VDC - M12

Product availability: Stock - Normally stocked in distribution facility



## 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	1 male connector M12, 4 pins
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	6.56 ft (2 m) diffuse 4.27 ft (1.3 m) diffuse with background suppression 131.23 ft (40 m) thru beam need a transmitter XUX0AKSAM12T 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 9.84 ft (3 m) diffuse 196.85 ft (60 m) thru beam 4.27 ft (1.3 m) diffuse with background suppression
Output type	Solid state
Add on output	With alarm output, <= 100 mA with overload and short-circuit protection
Status LED	1 LED (green) supply 1 LED (red) instability 1 LED (yellow) output state
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 250 Hz
Voltage drop	<= 1.5 V (closed state)
Current consumption	<= 35 mA (no-load)
Delay first up	< 200 ms
Delay response	< 2 ms
Delay recovery	< 2 ms
Setting-up	Self-teaching
Depth	3.03 in (77 mm)
Height	3.62 in (92 mm)
Width	1.22 in (31 mm)
Product weight	0.44 lb(US) (0.2 kg)


## Environment

Product certifications	CSA CE 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 IP67 double insulation conforming to IEC 60529

## Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	00785901582489
Nbr. of units in pkg.	1
Package weight(Lbs)	0.41999999999999998
Returnability	Y
Country of origin	FR

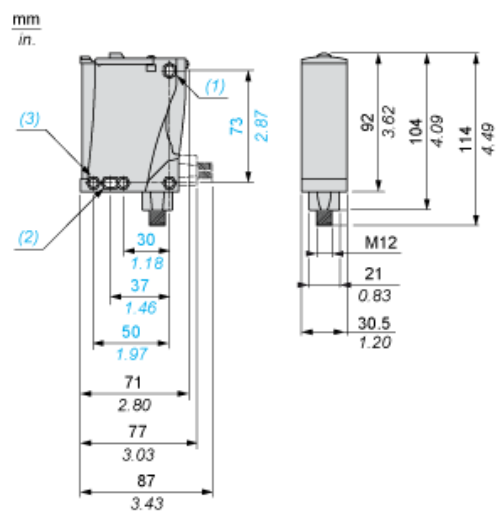
## Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 0914 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including:
- - - - - Substance 1	Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and
- - - - - Substance 2	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
- - - - - More information	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

Warranty period	18 months
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## Dimensions



- (1) Elongated hole  $\varnothing 5.5 \times 7$
- (2) Elongated hole  $\varnothing 5.5 \times 9$
- (3)  $\varnothing 5.5$  hole

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Mounting and Clearance

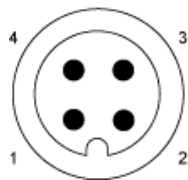
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Possible Orientation of Elbowed Connector (Rear View)



Wiring Schemes

M12 Connector

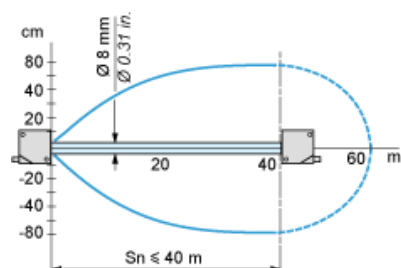


PNP/NPN DC

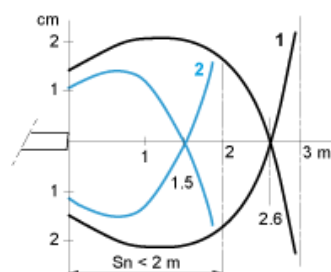
M12		Terminals		
1	●	1	⊘	+
3	●	2	⊘	-
4	●	3	⊘	Output
2	●	4	⊘	Alarm inactive

## Detection Curves

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

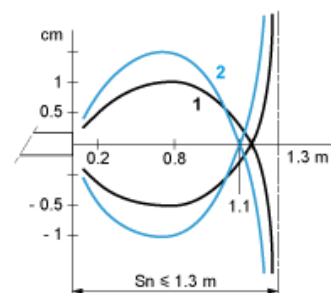


### Without Accessory (Diffuse)



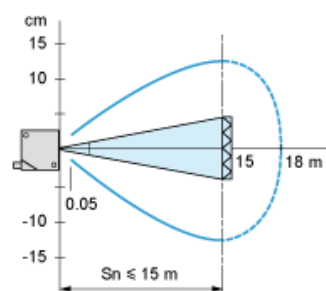
1 : White 90%  
2 : Grey 18%  
Object 10 x 10 cm

### Without Accessory (Diffuse with background suppression)



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

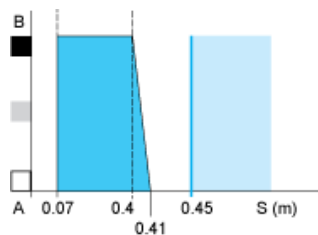
### With reflector (Polarised reflex)



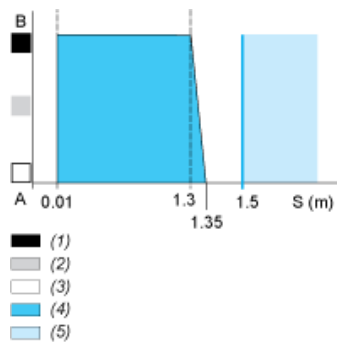
With reflector XUZC50

## 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)

# Mouser Electronics

Authorized Distributor

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Schneider Electric:

[XUX0AKSAM12](#)