XUX0AKSAM12

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

Green Premium™ Product

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	11 m polarised reflex need reflector XUZC50 40 m thru beam need a transmitter XUX0AKSAM12T 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	Solid state
Add on output	With alarm output, <= 100 mA with overload and short-circuit protection
Status LED	1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for 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	77 mm
Height	92 mm
Width	31 mm
Product weight	0.2 kg

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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, 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

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0914 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold

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Sensors

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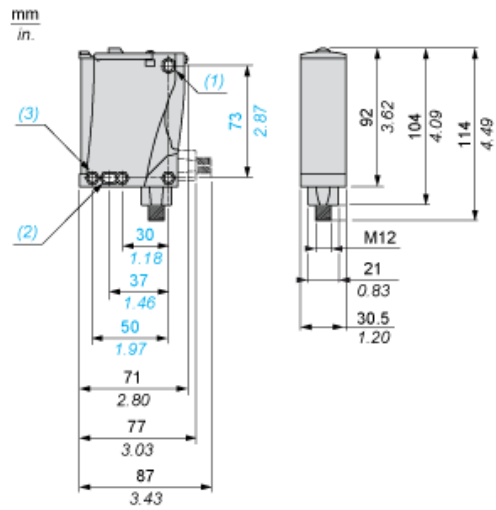
(1)   Elongated hole Ø 5.5 x 7
(2)   Elongated hole Ø 5.5 x 9
(3)   Ø 5.5 hole

Mounting and Clearance

Possible Orientation of Elbowed Connector (Rear View)

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Sensors

Product data sheet
Connections and Schema

XUX0AKSAM12

Wiring Schemes

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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)
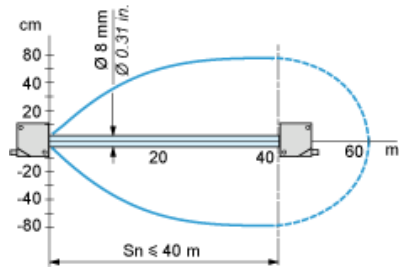
Without Accessory (Diffuse)
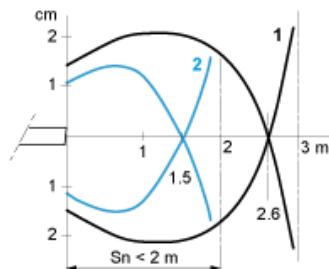
1 :   White 90%
2 :   Grey 18%

Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)
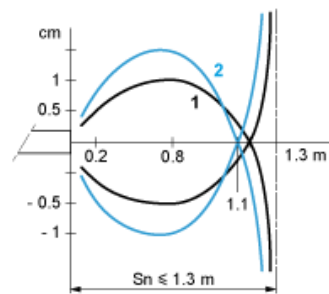
1 :   White 90%
2 :   Grey 18%

Object 10 x 10 cm
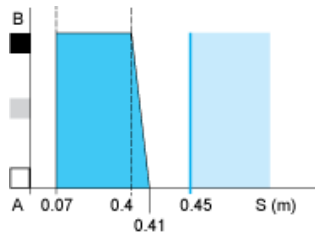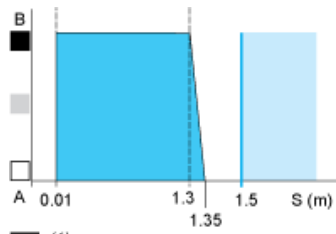
With reflector (Polarised reflex)
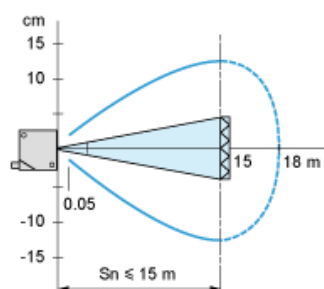
With reflector XUZC50

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Variation of Usable Sensing Distance Su (Without accessory, with adjustable background suppression)

Teach Mode at Minimum

Teach Mode at Maximum

- (1)
- (2)
- (3)
- (4)
- (5)

A-B : Object reflection coefficient
(1)   Black 6%
(2)   Grey 18%
(3)   White 90%
(4)   Sensing range
(5)   Non sensing zone (matt surfaces)