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
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 35 mA no-load
Maximum delay first up	200 ms
Maximum delay response	2 ms
Maximum delay recovery	2 ms
Setting-up	Self-teaching
Depth	77 mm
Height	92 mm
Width	31 mm
Net weight	0.2 kg

Telemecanique Sensors

Environment

Product certifications	UL CSA CE
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 Weight	199 g
Package 1 Height	4.2 cm
Package 1 width	9.5 cm
Package 1 Length	13 cm
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Weight	4.698 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months

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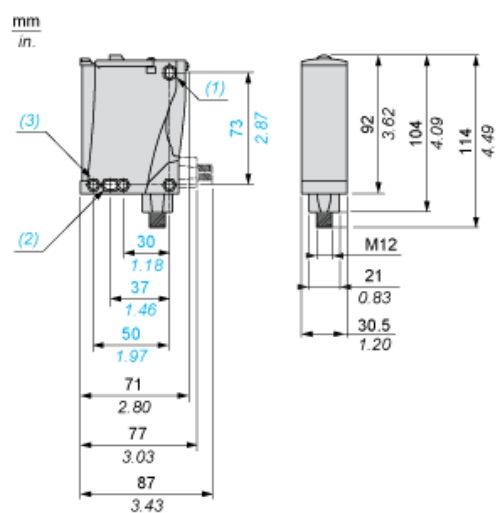
(1)   Elongated hole Ø 5.5 x 7
(2)   Elongated hole Ø 5.5 x 9
(3)   Ø 5.5 hole

Mounting and Clearance

Possible Orientation of Elbowed Connector (Rear View)

Telemecanique
Sensors

XUX0AKSAM12

Wiring Schemes

M12 Connector
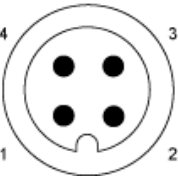
PNP/NPN DC

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

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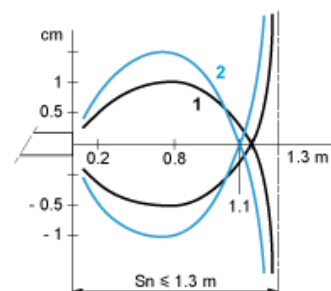---

With Thru-beam Accessory (Thru-beam)
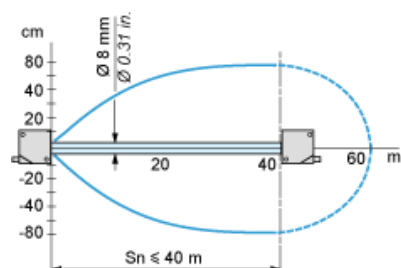
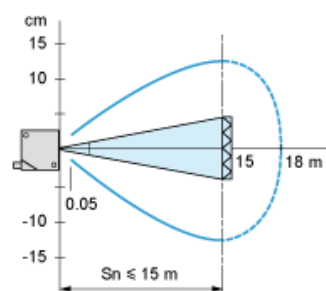### Without Accessory (Diffuse)
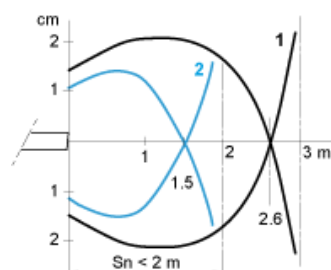
1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)
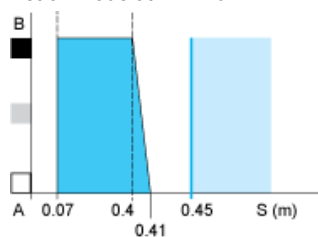

1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

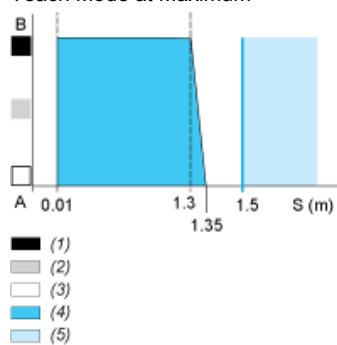### With reflector (Polarised reflex)

With reflector XUZC50

Variation of Usable Sensing Distance 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)