

# XUM0ANSAM8

photo-electric sensor - XUM - multi - Sn 0..10m -  
12..24VDC - M8



## Main

Range of product	OsiSense XU
Series name	General purpose multimode
Electronic sensor type	Photo-electric sensor
Sensor name	XUM
Sensor design	Miniature
Detection system	Multimode
Material	Plastic
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	NPN
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M8, 4 pins
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	0.1 m diffuse with background suppression 0.4 m diffuse 3 m polarised reflex need reflector XUZC50 10 m thru beam need a transmitter XUM0AKSAM8T

## Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	14 m thru beam 4 m polarised reflex 0.1 m diffuse with background suppression 0.55 m diffuse
Output type	Solid state
Add on output	With alarm output, 50 mA
Wire insulation material	PVC
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 240 Hz
Voltage drop	1.5 V (closed state)
Current consumption	35 mA (no-load)
Delay first up	< 100 ms
Delay response	< 2 ms
Delay recovery	< 2 ms
Setting-up	Self-teaching
Depth	20 mm
Height	45 mm
Width	12 mm
Product weight	0.035 kg

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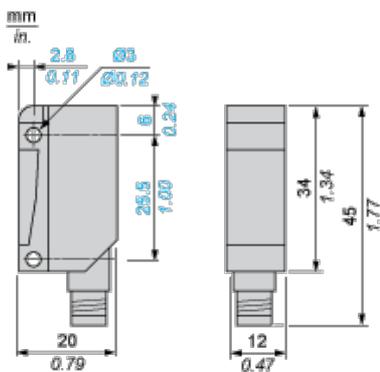
## Environment

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 conforming to IEC 60529 IP67 conforming to IEC 60529

## Offer Sustainability

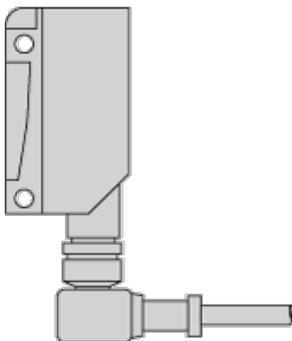
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0841 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

## Dimensions



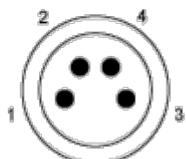
## Mounting and Clearance

### Possible Orientation of Elbowed Connector



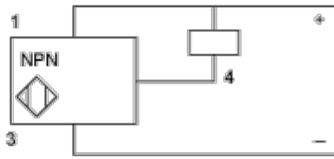
## Wiring Schemes

### M8 Connector



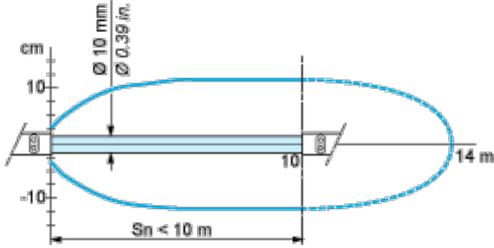
- 1 : (+)
- 3 : (-)
- 4 : OUT/Output

**Receiver, NPN Output**

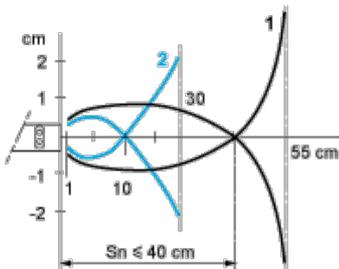


**Detection Curves**

**With Thru-beam Accessory (Thru-beam)**



**Without Accessory (Diffuse)**

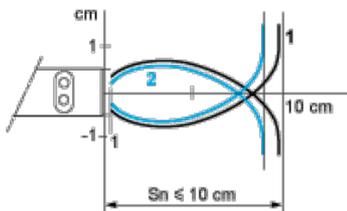


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

**Without Accessory (Diffuse with background suppression)**

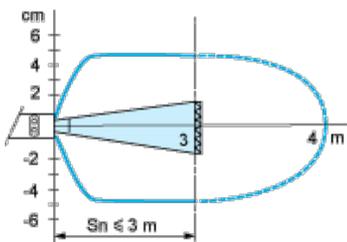


1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

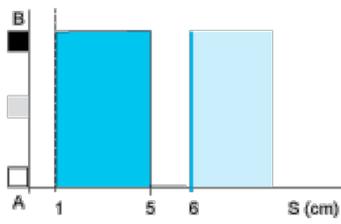
**With reflector (Polarised reflex)**



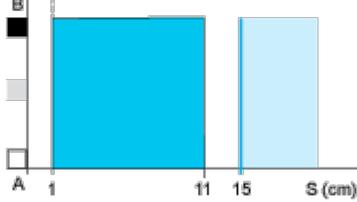
With reflector XUZC50

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

Teach Mode at Minimum



**Teach Mode at Maximum**



- (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)