

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	3 m polarised reflex need reflector XUZC50 10 m thru beam need a transmitter XUM0AKSAM8T 0.1 m diffuse with background suppression 0.4 m diffuse

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

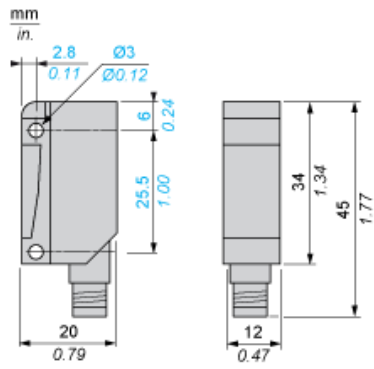
Environment

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

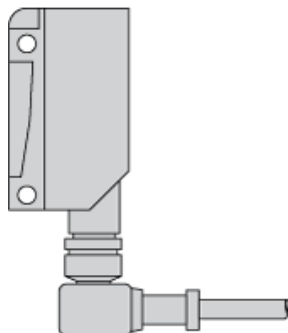
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0841 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

Dimensions



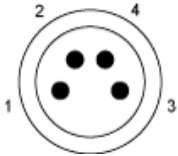
Mounting and Clearance

Possible Orientation of Elbowed Connector



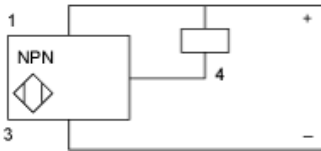
Wiring Schemes

M8 Connector



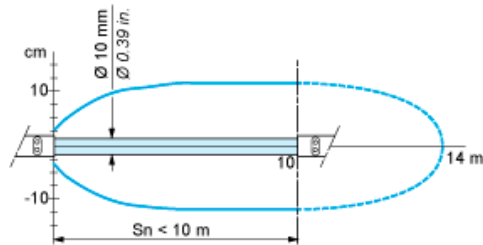
- 1 : (+)
- 3 : (-)
- 4 : OUT/Output

Receiver, NPN Output

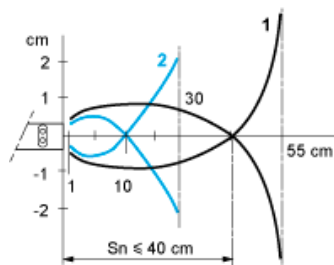


Detection Curves

With Thru-beam Accessory (Thru-beam)

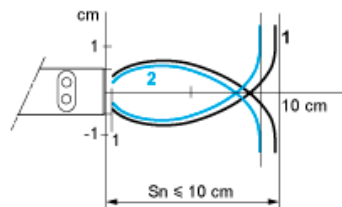


Without Accessory (Diffuse)



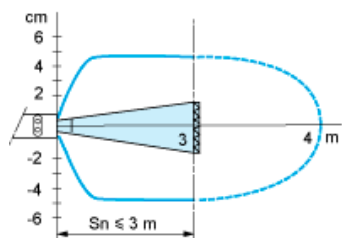
1: White 90%
2: Grey 18%
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



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

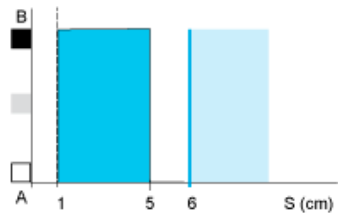
With reflector (Polarised reflex)



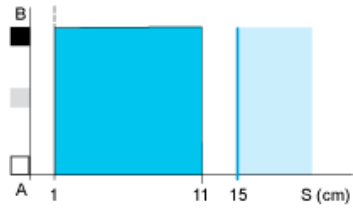
With reflector XUZC50

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

Teach Mode at Minimum



Teach Mode at Maximum



- (1) Black
- (2) Grey
- (3) White
- (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)