

Product data sheet

Characteristics

XUM0APSA10

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



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	PNP
Discrete output function	1 NO or 1 NC programmable
Electrical connection	Cable
Cable length	10 m
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 XUM0AKSAL10T 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	PvR
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	100 ms
Maximum delay response	2 ms
Maximum delay recovery	2 ms
Setting-up	Self-teaching

Depth	20 mm
Height	34 mm
Width	12 mm

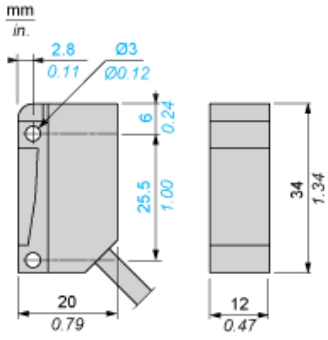
Environment

Product certifications	CSA UL 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

Contractual warranty

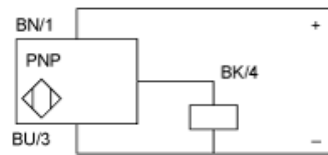
Warranty	18 months
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Dimensions



Wiring Schemes

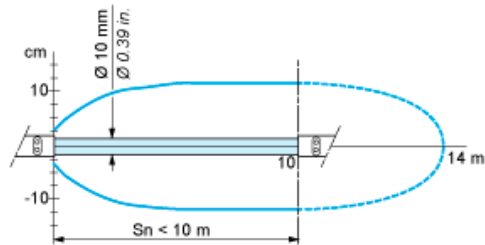
Receiver, PNP Output



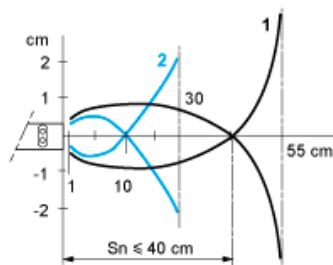
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)

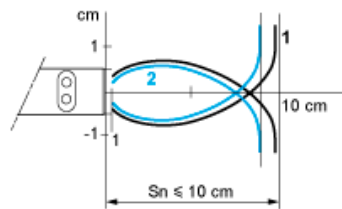


Without Accessory (Diffuse)



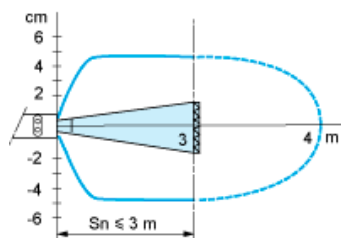
1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



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

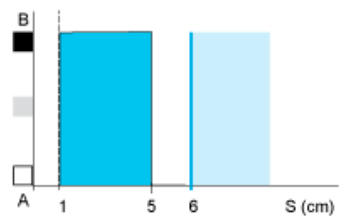
With reflector (Polarised reflex)



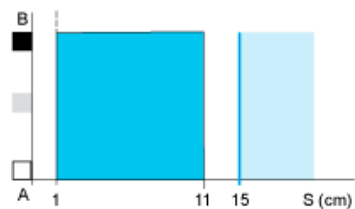
With reflector XUZC50

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)