

Product data sheet

Characteristics

XUAH0515S

photo-electric sensor - XUA - diffuse - Sn

0.05m - 12..24VDC - M8



Main

Range of product	OsiSense XU
Series name	Application assembly
Electronic sensor type	Photo-electric sensor
Sensor name	XUA
Sensor design	Cylindrical M8
Detection system	Diffuse
Material	Metal
Line of sight type	Axial
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO
Electrical connection	1 male connector M8, 3 pins
Product specific application	-
Emission	Infrared diffuse
[Sn] nominal sensing distance	0.05 m diffuse

Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	0.06 m
Output type	Solid state
Add on output	Without
Cable composition	3 x 0.14 mm ²
Wire insulation material	PvR
Cable outer diameter	3.5 mm
Status LED	1 LED (yellow) for output state
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply voltage limits	10...30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 1000 Hz
Voltage drop	<= 1 V (closed state)
Current consumption	<= 25 mA (no-load)
Delay first up	<= 20 ms
Delay response	<= 0.5 ms
Delay recovery	<= 0.5 ms
Setting-up	Without sensitivity adjustment
Diameter	8 mm
Length	48 mm
Product weight	0.5 kg

Environment

Product certifications	CULus CE
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-30...70 °C
Vibration resistance	7 gn, amplitude = +/- 1 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

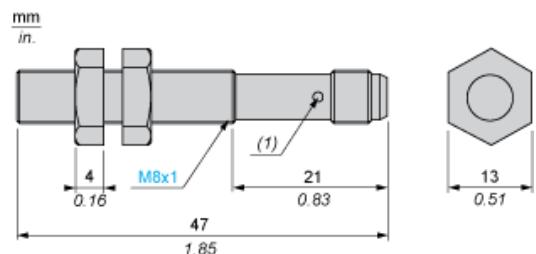
Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 0732 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

Contractual warranty

Warranty period	18 months
-----------------	-----------

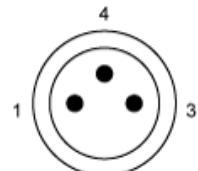
Dimensions



(1) LED, 4 viewing ports at 90°
Note Fixing nut tightening torque : <2N.m

Wiring Schemes

M8 Connector

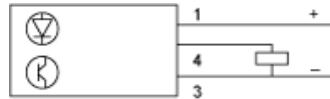


1 : (+)

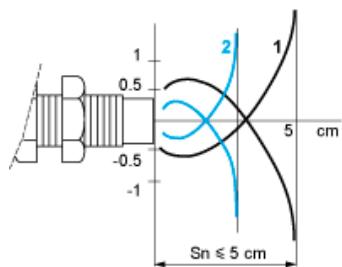
3 : (-)

4 : OUT or test

PNP



Detection Curves

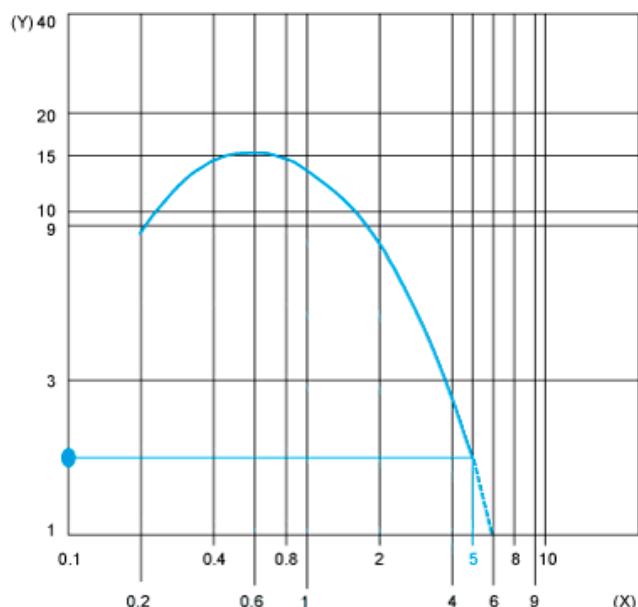


1 : White 90%

2 : Grey 18%

Object 5 x 5 cm

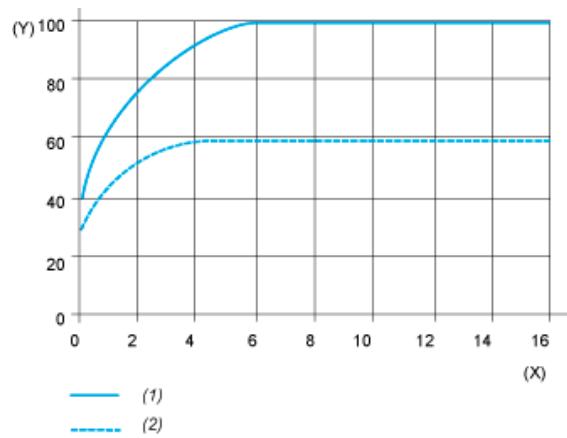
Excess Gain Curves (Ambient temperature: $\pm 25^{\circ}\text{C}$)



(Y) Gain

(X) Distance (m)

Object 5 x 5 cm, White 90%



(1) White

(2) Grey

(Y) Variation of sensing distance S_n

(X) Side of square object (cm)

Detection differential (H) when object approaches from the front: $H \leq 25\%$ of S_n