



Main

Range of product	OsiSense XU
Series name	General purpose single mode
Electronic sensor type	Photo-electric sensor
Sensor name	XUM
Sensor design	Miniature
Detection system	Diffuse with background suppression
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	Remote male connector M12, 4 pins
Cable length	0.98 ft (0.3 m)
Product specific application	-
Emission	Red diffuse with background suppression
[Sn] nominal sensing distance	0.98 ft (0.3 m) diffuse with background suppression

Complementary

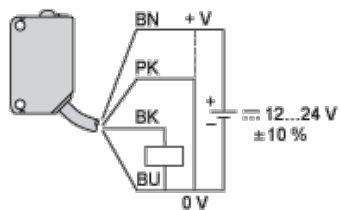
Enclosure material	PBT
Lens material	PC
Maximum sensing distance	0.98 ft (0.3 m) diffuse with background suppression
Output type	Solid state
Wire insulation material	PVC
Status LED	1 LED (green) instability 1 LED (orange) output state
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply voltage limits	10...30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Voltage drop	<= 2 V (closed state)
Current consumption	<= 20 mA (no-load)
Delay first up	< 100 ms
Delay response	< 1 ms
Setting-up	Sensitivity adjustment by potentiometer
Depth	0.79 in (20 mm)
Height	1.3 in (33 mm)
Length	0.43 in (11 mm)
Width	0.43 in (11 mm)
Product weight	0.04 lb(US) (0.02 kg)

Environment

product certifications	CE CURus
ambient air temperature for operation	-13...131 °F (-25...55 °C)
ambient air temperature for storage	-22...158 °F (-30...70 °C)
immunity to ambient light	3000 lux with natural light 3000 lux with incandescent light
vibration resistance	20 gn, amplitude = +/- 1.5 mm (f = 10...500 Hz) conforming to IEC 60068-2-6

- 3 : (-)
4 : Output

PNP Output



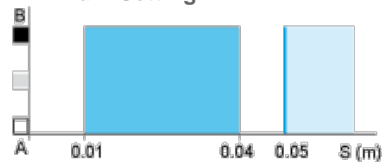
- BU : Blue
BN : Brown
BK : Black
PK : Pink

Note : This scheme is represented in "background suppression" mode, cabling of pink (PK) wire to 0 V

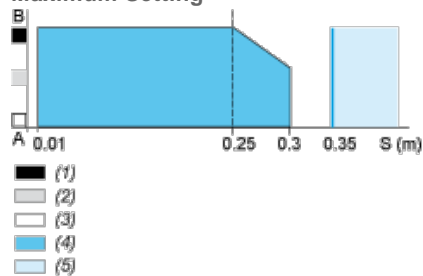
Detection Curves

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



A-B : Object reflection coefficient

- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)