



## Main

Range of product	OsiSense XU
Series name	Application assembly Application material handling
Electronic sensor type	Photo-electric sensor
Sensor name	XUK
Sensor design	Compact 50 x 50
Detection system	Diffuse distance sensor
Material	Plastic
Type of output signal	Analogue + discrete
Wiring technique	5-wire
Discrete output type	PNP or NPN
Discrete output function	1 NO or 1 NC programmable
Analogue output range	4...20 mA
Electrical connection	1 male connector M12, 5 pins
Product specific application	Distance measurement on object
Emission	Red laser diffuse distance sensor class 1 conforming to IEC 60825-1
[Sn] nominal sensing distance	5 m diffuse distance sensor

## Complementary

Enclosure material	ABS/PC
Lens material	PMMA
Maximum sensing distance	5 m diffuse distance sensor
Output type	Solid state Analog
Add on input	External teach
Status LED	1 LED (yellow) for output state 1 LED (green/yellow) for supply on/output state
[Us] rated supply voltage	24 V DC with reverse polarity protection
Supply voltage limits	18...30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 500 Hz

Maximum voltage drop	<2 V
Current consumption	<= 60 mA no-load
Maximum delay first up	300 ms
Maximum delay response	1.2 ms
Maximum delay recovery	1.2 ms
Setting-up	Using teach button or remote teaching
Depth	50 mm
Height	50 mm
Width	23 mm
Product weight	0.035 kg

## Environment

Product certifications	Ecolab CULus CE
Ambient air temperature for operation	-20...50 °C, UL certified -40...60 °C
Ambient air temperature for storage	-40...80 °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	IP67 conforming to IEC 60529 IP69K conforming to DIN 40050

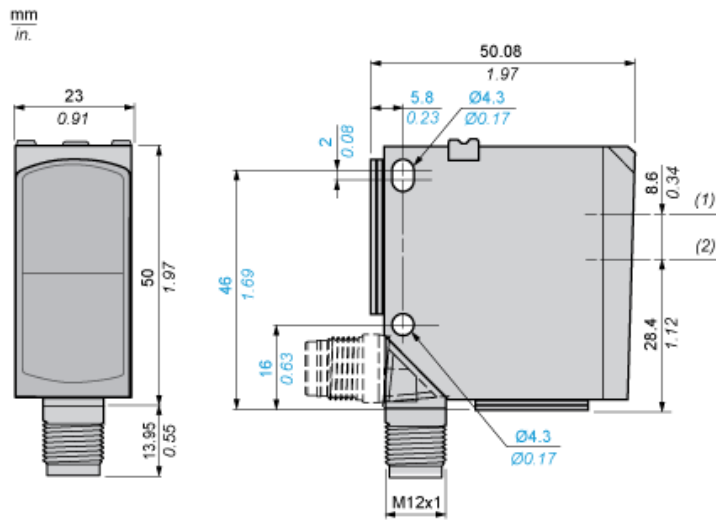
## Offer Sustainability

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>

## Contractual warranty

Warranty	18 months
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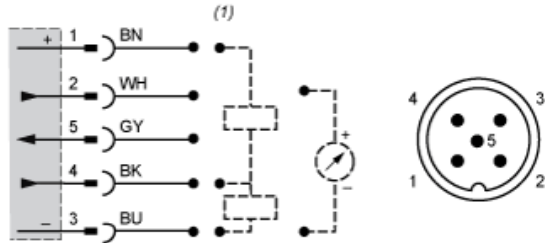
Dimensions



- (1) Transmitter optical axis
- (2) Receiver optical axis

## Connections and Schema

### Connector Wiring



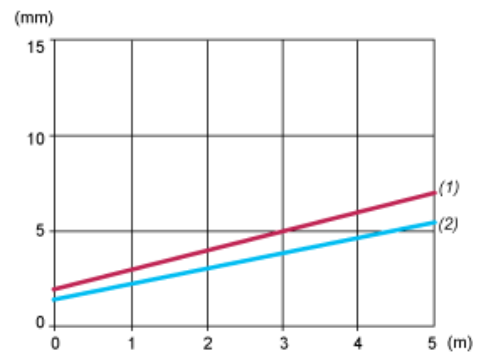
- (1) Auto-detect
- 1: + UB (BN: Brown)
- 2: QA (WH: White)
- 3: -UB (BU: Blue)
- 4: Q (BK: Black)
- 5: IN (GY: Grey)

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Curves

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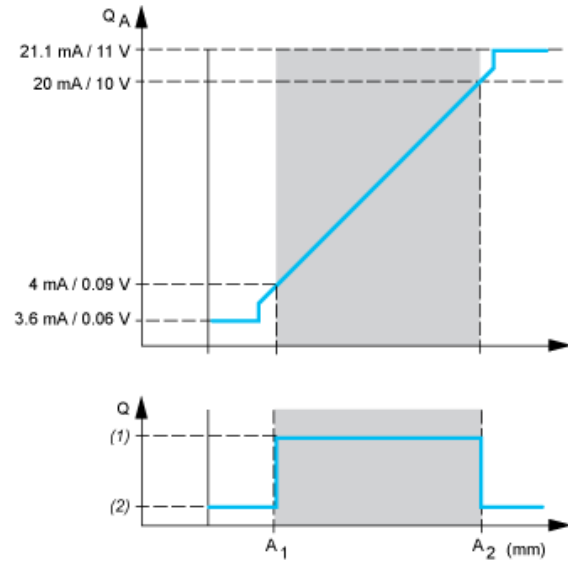
Size of light spot (typical)



(1) Vertical (y)  
(2) Horizontal (x)  
0...15 mm: Size  
0...5 m : Distance

Curves

Output characteristic curve

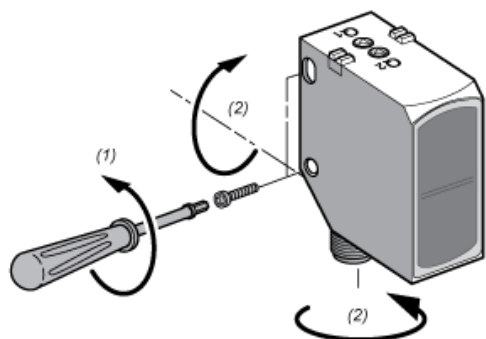


QA : Analogue output  
Q : Switching output  
(1) High  
(2) Low

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Mounting

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- (1) < 1,5 Nm (13 lb-in)
- (2) < 1 Nm (8.85 lb-in)