

# XUK8TAE1MM12

photo-electric sensor - XUK - diffuse - Sn 5m  
1Q auto PNP/NPN 1Qa 0...10V



## Main

|                               |   |
|-------------------------------|---|
| Range of product              | OsiSense XU   |
| Series name                   | Application assembly<br>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         | 0...10 V  |
| Electrical connection         | 1 male connector M12, 5 pins                          |
| Product specific application  | Distance measurement on object                        |
| Emission                      | Red laser diffuse distance sensor class 1 IEC 60825-1 |
| [Sn] nominal sensing distance | 16.40 ft (5 m) diffuse distance sensor                |

## Complementary

|                           |  |
|---------------------------|--|
| Enclosure material        | ABS/PC   |
| Lens material             | PMMA   |
| Maximum sensing distance  | 16.40 ft (5 m) diffuse distance sensor                                 |
| Output type               | Analog<br>Solid state  |
| Add on input              | External teach   |
| Status LED                | 1 LED yellow)output state<br>1 LED green/yellow)supply on/output state |
| [Us] rated supply voltage | 24 V DC 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                     | 1.97 in (50 mm)  |
| Height                    | 1.97 in (50 mm)  |
| Width                     | 0.91 in (23 mm)  |
| Net weight                | 0.08 lb(US) (0.035 kg)   |

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## Environment

|                                       |   |
|---------------------------------------|---|
| Product certifications                | CE<br>CULus<br>Ecolab                                       |
| Ambient air temperature for operation | -4...122 °F (-20...50 °C), UL<br>-40...140 °F (-40...60 °C) |
| Ambient air temperature for storage   | -40...176 °F (-40...80 °C)                                  |
| Vibration resistance                  | 7 gn +/- 1.5 mm 10...55 Hz IEC 60068-2-6                    |
| Shock resistance                      | 30 gn 11 ms) IEC 60068-2-27                                 |
| IP degree of protection               | IP67 IEC 60529<br>IP69K DIN 40050                           |



## Ordering and shipping details

|                       |                                |
|-----------------------|--------------------------------|
| Category              | 22481 - SENSORS, PHOTOELECTRIC |
| Discount Schedule     | DS2                            |
| GTIN                  | 00785901005025                 |
| Nbr. of units in pkg. | 1                              |
| Package weight(Lbs)   | 0.13 lb(US) (0.06 kg)          |
| Returnability         | Yes                            |
| Country of origin     | DE                             |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Package 1 Height             | 1.10 in (2.8 cm)       |
| Package 1 width              | 3.54 in (9 cm)         |
| Package 1 Length             | 2.36 in (6 cm)         |
| Unit Type of Package 2       | S01                    |
| Number of Units in Package 2 | 28                     |
| Package 2 Weight             | 4.07 lb(US) (1.848 kg) |
| Package 2 Height             | 5.91 in (15 cm)        |
| Package 2 width              | 5.91 in (15 cm)        |
| Package 2 Length             | 15.75 in (40 cm)       |

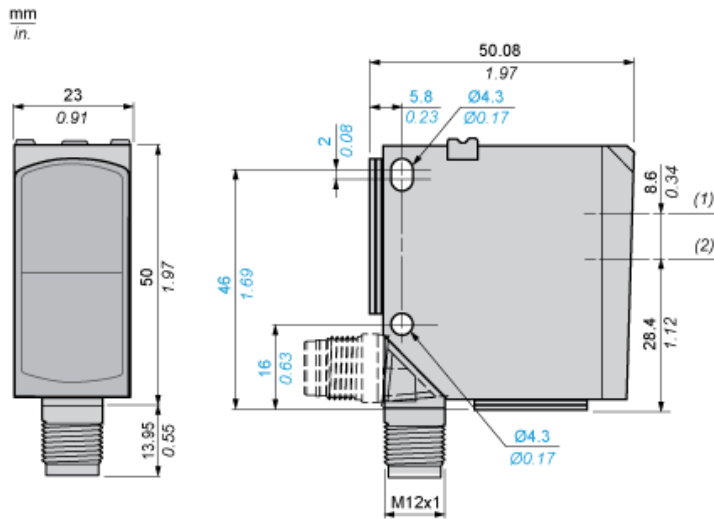
## Offer Sustainability

|                            |   |
|----------------------------|---|
| California proposition 65  | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| 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 |  Yes   |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

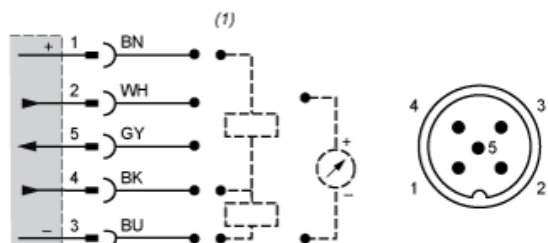
## Dimensions



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

## Connections and Schema

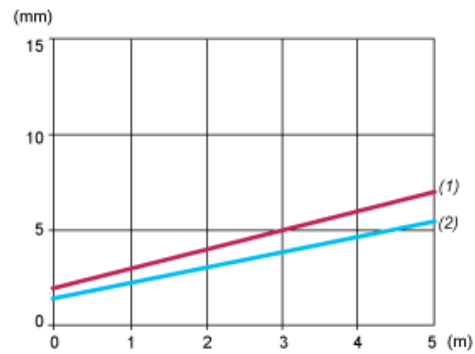
### Connector Wiring



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

Curves

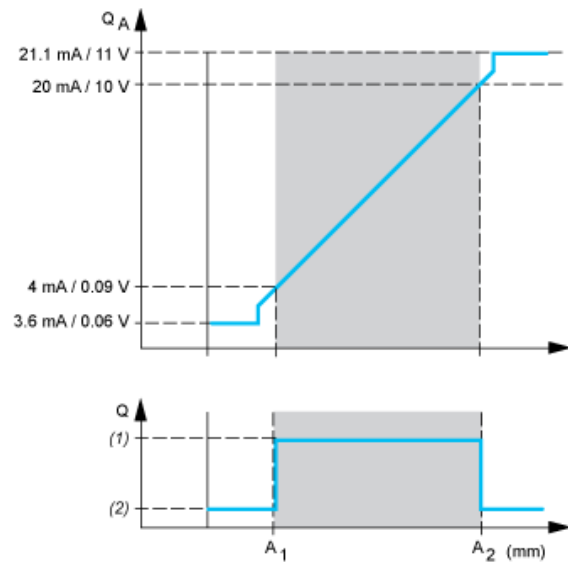
Size of light spot (typical)



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

Curves

Output characteristic curve

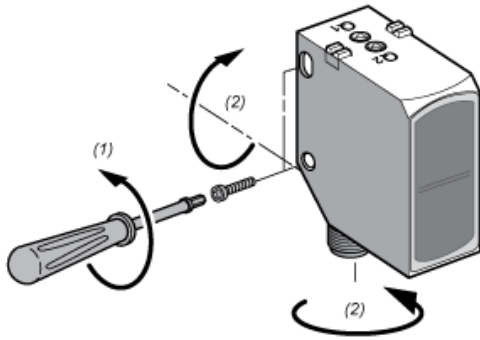


- QA : Analogue output
- Q : Switching output
- (1) High
- (2) Low

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Mounting

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