

# XUM8APCNL03M12

photo-electric sensor - XUM - BGS - Sn 0.3m - 12..24VDC - M12 - cable 0.3m



## 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<br>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)     |
| Maximum voltage drop      | <2 V (closed state)                                  |
| Current consumption       | <= 20 mA no-load                                     |
| Maximum delay first up    | 100 ms   |
| Maximum delay response    | 1 ms   |
| Setting-up                | Sensitivity adjustment by potentiometer              |
| Depth                     | 0.79 in (20 mm)                                      |
| Height                    | 1.30 in (33 mm)                                      |
| Length                    | 0.43 in (11 mm)                                      |
| Maximum Width             | 0.43 in (11 mm)                                      |
| Net Weight                | 0.04 lb(US) (0.02 kg)                                |

## Environment

|                                       |   |
|---------------------------------------|---|
| Product certifications                | CE<br>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 natural light<br>3000 lux incandescent light |
| Vibration resistance                  | 20 gn +/- 1.5 mm 10...500 Hz) IEC 60068-2-6           |
| Shock resistance                      | 50 gn (duration = 11 ms) conforming to IEC 60068-2-27 |
| IP degree of protection               | IP67 conforming to IEC 60529                          |

## Ordering and shipping details

|                       |                                       |
|-----------------------|---------------------------------------|
| Category              | 22415 - SENSORS, PHOTOELECTRIC, BASIC |
| Discount Schedule     | DS2                                   |
| GTIN                  | 00785901145233                        |
| Nbr. of units in pkg. | 1                                     |
| Package weight(Lbs)   | 0.05 lb(US) (0.02 kg)                 |
| Returnability         | No                                    |
| Country of origin     | CN                                    |

## Packing Units

|                  |          |
|------------------|----------|
| Package 1 Height | 0.200 dm |
| Package 1 width  | 1.600 dm |
| Package 1 Length | 2.000 dm |

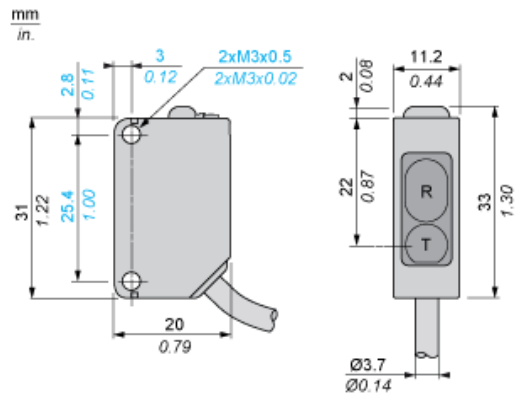
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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 | <a href="#">Yes</a>   |

## Contractual warranty

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

Dimensions

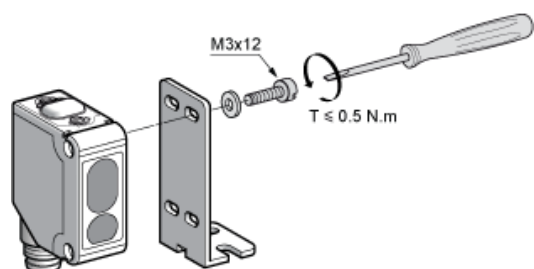


R: Reception  
T: Transmission

---

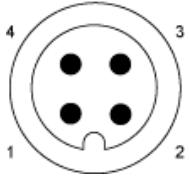
Mounting

---



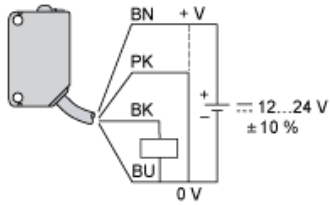
## Wiring Schemes

### M12 Connector



- 1 : (+)
- 2 : Mode/Input
- 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

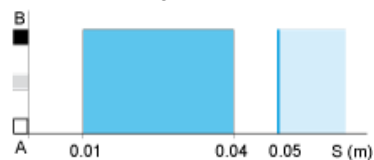
---

Detection Curves

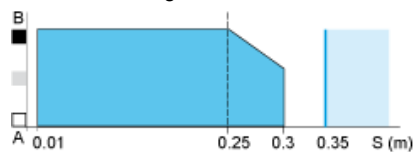
---

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (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)