

# XU8M18MA230

Photoelectric sensors XU, XU8, BGS, Sn 0.12 m, 24...240VAC/DC, cable 2 m



## Main

|                               |                                                      |
|-------------------------------|------------------------------------------------------|
| Range of Product              | Telemecanique Photoelectric sensors XU               |
| Series name                   | General purpose single mode                          |
| Electronic sensor type        | Photo-electric sensor                                |
| Sensor name                   | XU8                                                  |
| Sensor design                 | Cylindrical M18                                      |
| Detection system              | Diffuse with background suppression                  |
| Material                      | Metal                                                |
| Line of sight type            | Axial                                                |
| Type of output signal         | Discrete                                             |
| Supply circuit type           | AC/DC                                                |
| Wiring Technique              | 2-wire                                               |
| Discrete output function      | 1 NO                                                 |
| Electrical connection         | Cable                                                |
| Cable length                  | 6.56 ft (2 m)                                        |
| Product Specific Application  | -                                                    |
| Emission                      | Infrared diffuse with background suppression         |
| [Sn] nominal sensing distance | 0.39 ft (0.12 m) diffuse with background suppression |

## Complementary

|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Enclosure Material        | Nickel Plated Brass                                                        |
| Lens material             | PMMA                                                                       |
| Maximum sensing distance  | 0.39 ft (0.12 m)                                                           |
| Output Type               | Solid state                                                                |
| Add on output             | Without                                                                    |
| Wire insulation material  | PvR                                                                        |
| Status LED                | 1 LED yellow)output state                                                  |
| [Us] rated supply voltage | 24...240 V AC/DC                                                           |
| Supply voltage limits     | 20...264 V AC/DC                                                           |
| Maximum residual current  | 1.5 mA open state                                                          |
| Switching capacity in mA  | 10...200 mA to be used with 0.4 A quick-blow fuse in series with the load) |
| Switching frequency       | <= 25 Hz                                                                   |
| Maximum voltage drop      | <6 V closed state)                                                         |
| Maximum delay first up    | 300 ms                                                                     |
| Maximum delay response    | 20 ms                                                                      |
| Maximum delay recovery    | 20 ms                                                                      |
| Setting-up                | Sensitivity adjustment                                                     |
| Diameter                  | 0.71 in (18 mm)                                                            |
| Length                    | 3.23 in (82 mm)                                                            |
| Net Weight                | 0.33 lb(US) (0.15 kg)                                                      |

## Environment

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| Product Certifications                | CSA<br>UL<br>CE                           |
| Ambient air temperature for operation | -13...131 °F (-25...55 °C)                |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °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 double insulation IEC 60529          |

## Ordering and shipping details

|                       |                                |
|-----------------------|--------------------------------|
| Category              | 22481 - SENSORS, PHOTOELECTRIC |
| Discount Schedule     | DS2                            |
| GTIN                  | 3389110736441                  |
| Nbr. of units in pkg. | 1                              |
| Package weight(Lbs)   | 4.69 oz (133 g)                |
| Returnability         | Yes                            |
| Country of origin     | FR                             |

## Packing Units

|                              |                       |
|------------------------------|-----------------------|
| Unit Type of Package 1       | PCE                   |
| Package 1 Height             | 1.61 in (4.1 cm)      |
| Package 1 width              | 3.70 in (9.4 cm)      |
| Package 1 Length             | 5.12 in (13 cm)       |
| Unit Type of Package 2       | S02                   |
| Number of Units in Package 2 | 22                    |
| Package 2 Weight             | 7.32 lb(US) (3.32 kg) |
| Package 2 Height             | 5.91 in (15 cm)       |
| Package 2 width              | 11.81 in (30 cm)      |
| Package 2 Length             | 15.75 in (40 cm)      |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| 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> |
| REACH Regulation           | <a href="#">REACH Declaration</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>                                                                                                                                                                                                                                                                                                                                                               |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                                                                                                                     |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                                                                                                           |

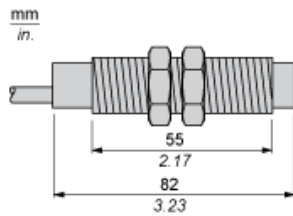
## Contractual warranty

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

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Dimensions

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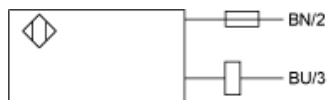


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## Wiring Schemes

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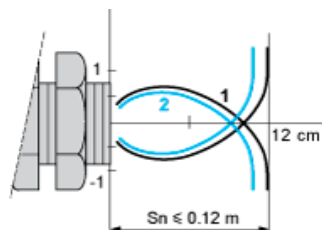
### 2-wire AC or DC



BU : Blue  
BN : Brown

## Detection Curves

### Diffuse System with Adjustable Background Suppression



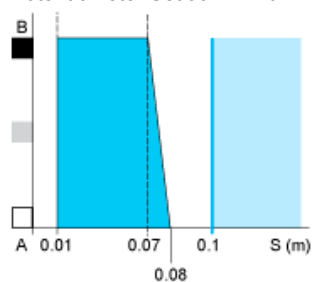
1 : White 90%

2 : Grey 18%

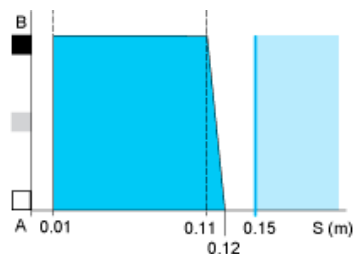
Object 10 x 10 cm

### Variation of Usable Sensing Distance $S_u$

Potentiometer Set at Minimum



Potentiometer Set at Maximum



- (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)