



## Main

|                               |   |
|-------------------------------|---|
| Range of Product              | Telemecanique Photoelectric sensors XU  |
| Series name                   | General purpose multimode   |
| Electronic sensor type        | Photo-electric sensor   |
| Sensor name                   | XUB   |
| Sensor design                 | Cylindrical M18   |
| Detection system              | Multimode   |
| Material                      | Plastic   |
| Line of sight type            | Axial   |
| 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         | Cable   |
| Cable length                  | 6.56 ft (2 m)   |
| Product Specific Application  | -   |
| Emission                      | Infrared diffuse<br>Infrared diffuse with background suppression<br>Infrared thru beam<br>Red polarised reflex  |
| [Sn] nominal sensing distance | 9.84 Ft (3 m) polarised reflex need reflector XUZC50<br>65.62 Ft (20 m) thru beam need a transmitter XUB0AKSNL2T<br>0.39 Ft (0.12 m) diffuse with background suppression<br>0.98 ft (0.3 m) diffuse |

## Complementary

|                           |   |
|---------------------------|---|
| Enclosure Material        | PBT   |
| Lens material             | PMMA  |
| Maximum sensing distance  | 0.39 Ft (0.12 m) diffuse with background suppression<br>1.31 Ft (0.4 m) diffuse<br>98.43 Ft (30 m) thru beam<br>14.76 ft (4.5 m) polarised reflex |
| Output Type               | Solid state   |
| Add on output             | Without   |
| Wire insulation material  | PvR   |
| Status LED                | 1 LED green)supply<br>1 LED red)instability<br>1 LED yellow)output state  |
| [Us] rated supply voltage | 12...24 V DC reverse polarity protection  |
| Supply voltage limits     | 10...36 V DC  |
| Switching capacity in mA  | <= 100 mA overload and short-circuit protection)  |
| Switching frequency       | <= 250 Hz   |
| Maximum voltage drop      | <1.5 V closed state)  |
| Current consumption       | 35 mA no-load   |
| Maximum delay first up    | 200 ms  |
| Maximum delay response    | 2 ms  |
| Maximum delay recovery    | 2 ms  |

|            |                        |
|------------|------------------------|
| Setting-up | Self-teaching          |
| Diameter   | 0.71 in (18 mm)        |
| Length     | 2.52 in (64 mm)        |
| Net Weight | 0.21 lb(US) (0.095 kg) |

## Environment

|                                       |  |
|---------------------------------------|--|
| Product Certifications                | UL<br>CE<br>CSA  |
| 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               | IP65 double insulation IEC 60529<br>IP67 double insulation IEC 60529 |

## Ordering and shipping details

|                       |                                |
|-----------------------|--------------------------------|
| Category              | 22481 - SENSORS, PHOTOELECTRIC |
| Discount Schedule     | DS2                            |
| GTIN                  | 3389110148336                  |
| Nbr. of units in pkg. | 1                              |
| Package weight(Lbs)   | 3.59 oz (101.9 g)              |
| Returnability         | Yes                            |
| Country of origin     | ID                             |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Package 1 Height             | 1.65 in (4.2 cm)       |
| Package 1 width              | 3.74 in (9.5 cm)       |
| Package 1 Length             | 5.20 in (13.2 cm)      |
| Unit Type of Package 2       | S02                    |
| Number of Units in Package 2 | 22                     |
| Package 2 Weight             | 5.73 lb(US) (2.601 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)       |

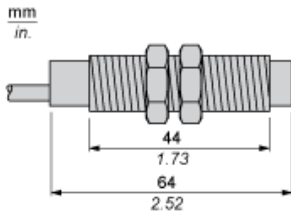
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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 |
|----------|-----------|

## Dimensions

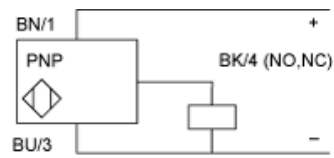


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## Connections and Schemes

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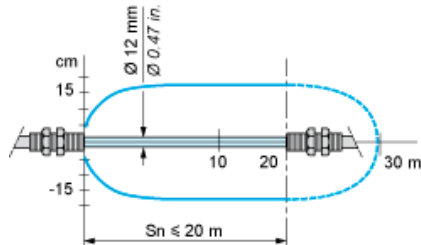
### PNP



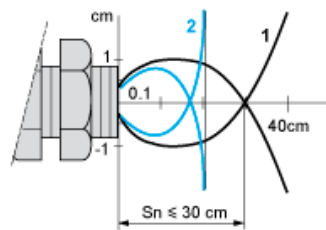
BN : Brown  
BU : Blue  
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)

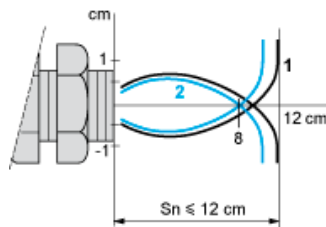


Without Accessory (Diffuse)



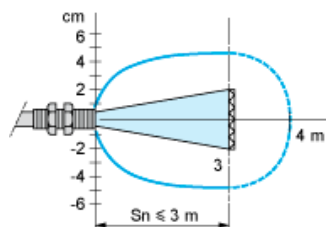
- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

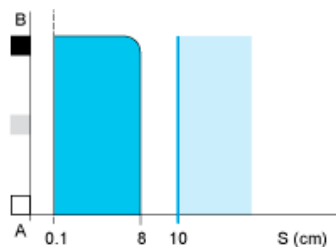
With reflector (Polarised reflex)



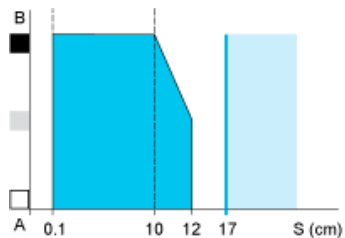
With reflector XUZC50

## Variation of Usable Sensing Distance $S_u$ (Without accessory, with adjustable background suppression)

Teach Mode at Minimum



Teach Mode at Maximum



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

A-B : Object reflection coefficient

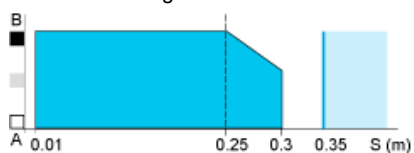
- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

## Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



- (1) Black
- (2) Grey
- (3) White
- (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)