



## Main

|                               |                                                                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of Product              | Telemecanique Photoelectric sensors XU                                                                                                         |
| Series name                   | Application                                                                                                                                    |
| Electronic sensor type        | Photo-electric sensor                                                                                                                          |
| Sensor name                   | XUY                                                                                                                                            |
| Sensor design                 | Fork                                                                                                                                           |
| Detection system              | Thru beam                                                                                                                                      |
| Emission                      | Infrared LED, modulated                                                                                                                        |
| Passage width                 | 1.97 in (50 mm)                                                                                                                                |
| Passage depth                 | 3.74 in (95 mm)                                                                                                                                |
| Material                      | Metal/plastic                                                                                                                                  |
| Supply circuit type           | DC                                                                                                                                             |
| Wiring Technique              | 4-wire                                                                                                                                         |
| Discrete output type          | PNP and NPN                                                                                                                                    |
| Discrete output function      | 1 NO or 1 NC programmable                                                                                                                      |
| Electrical connection         | 1 male connector M8, 4 pins                                                                                                                    |
| Product Specific Application  | Detection of reference marks<br>Detection of labels<br>Detection of double sheet<br>Detection on vibrating rail<br>Detection on small conveyor |
| [Sn] nominal sensing distance | 1.97 in (50 mm)                                                                                                                                |

## Complementary

|                                       |                                                                             |
|---------------------------------------|-----------------------------------------------------------------------------|
| Enclosure Material                    | Painted aluminium and polyamide/glass                                       |
| Keypad Type                           | Yellow                                                                      |
| Minimum object diameter for detection | 0.01 in (0.2 mm)                                                            |
| Type of output signal                 | Discrete                                                                    |
| Output Type                           | Solid state                                                                 |
| Status LED                            | Adjustment mode and keypad locking 1 LED red)<br>Output state 1 LED yellow) |
| [Us] rated supply voltage             | 12...24 V DC reverse polarity protection                                    |
| Supply voltage limits                 | 10...30 V DC                                                                |
| Switching capacity in mA              | 100 mA overload and short-circuit protection)                               |
| Switching frequency                   | 10 kHz                                                                      |
| Maximum voltage drop                  | <2 V closed state)                                                          |
| Current consumption                   | 40 mA no-load                                                               |
| Load capacitance                      | 330 nF                                                                      |
| Time response                         | -20...20 µs                                                                 |
| Setting-up                            | Self teaching                                                               |
| Net Weight                            | 0.42 lb(US) (0.19 kg)                                                       |

## Environment

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| Product Certifications                | CULus<br>CE                                           |
| Ambient Air Temperature for Operation | -4...140 °F (-20...60 °C)                             |
| Ambient Air Temperature for Storage   | -22...176 °F (-30...80 °C)                            |
| Immunity to ambient light             | 10000 Lux natural light<br>5000 lux incandescent bulb |
| Vibration resistance                  | 7 gn +/- 0.75 mm 10...55 Hz) IEC 60068-2-6            |
| Shock resistance                      | 30 gn 11 ms) IEC 60068-2-27                           |
| IP degree of protection               | IP65 IEC 60529                                        |

## Ordering and shipping details

|                   |                              |
|-------------------|------------------------------|
| Category          | 22481-SENSORS, PHOTOELECTRIC |
| Discount Schedule | DS2                          |
| GTIN              | 3389119006583                |
| Returnability     | No                           |
| Country of origin | FR                           |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Number of Units in Package 1 | 1                      |
| Package 1 Height             | 0.59 in (1.5 cm)       |
| Package 1 Width              | 5.12 in (13.0 cm)      |
| Package 1 Length             | 6.42 in (16.3 cm)      |
| Package 1 Weight             | 3.35 oz (95.0 g)       |
| Unit Type of Package 2       | S01                    |
| Number of Units in Package 2 | 12                     |
| Package 2 Height             | 5.91 in (15.0 cm)      |
| Package 2 Width              | 5.91 in (15.0 cm)      |
| Package 2 Length             | 15.75 in (40.0 cm)     |
| Package 2 Weight             | 3.01 lb(US) (1.365 kg) |

## 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> |
| 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>                                                                                                                                                                                                                                                                                                                                                               |

## Contractual warranty

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

Dimensions



(1) Optical axis

Dimensions in mm

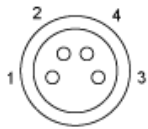
| A  | B  | b1  | C  |
|----|----|-----|----|
| 50 | 95 | 110 | 40 |

Dimensions in in.

| A    | B    | b1   | C    |
|------|------|------|------|
| 1.97 | 3.74 | 4.33 | 1.57 |

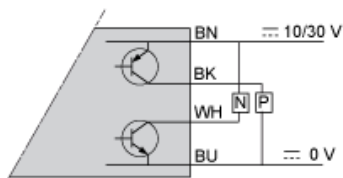
## Wiring Schemes

### M8 Connector



- 1 : BN: Brown
- 2 : WH: White
- 3 : BU: Blue
- 4 : BK: Black

### 4-Wire, PNP/NPN Outputs



- BN : Brown
- WH : White
- BK : Black
- BU : Blue