



## 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                 | 50 mm                                                                                                                                          |
| Passage depth                 | 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 | 50 mm                                                                                                                                          |

## Complementary

|                                       |                                                                                 |
|---------------------------------------|---------------------------------------------------------------------------------|
| Enclosure material                    | Painted aluminium and polyamide/glass                                           |
| Keypad type                           | Yellow                                                                          |
| Minimum object diameter for detection | 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 with 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                            | 0.19 kg                                                                         |

## Environment

|                                       |                                                                            |
|---------------------------------------|----------------------------------------------------------------------------|
| Product certifications                | cULus[RETURN]CE                                                            |
| Ambient air temperature for operation | -20...60 °C                                                                |
| Ambient air temperature for storage   | -30...80 °C                                                                |
| Immunity to ambient light             | 10000 Lux natural light<br>5000 lux incandescent bulb                      |
| Vibration resistance                  | 7 gn, amplitude = +/- 0.75 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |

|                         |                                                       |
|-------------------------|-------------------------------------------------------|
| Shock resistance        | 30 gn (duration = 11 ms) conforming to IEC 60068-2-27 |
| IP degree of protection | IP65 conforming to IEC 60529                          |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 1.5 cm   |
| Package 1 Width              | 13.0 cm  |
| Package 1 Length             | 16.3 cm  |
| Package 1 Weight             | 95.0 g   |
| Unit Type of Package 2       | S01      |
| Number of Units in Package 2 | 12       |
| Package 2 Height             | 15.0 cm  |
| Package 2 Width              | 15.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 1.365 kg |

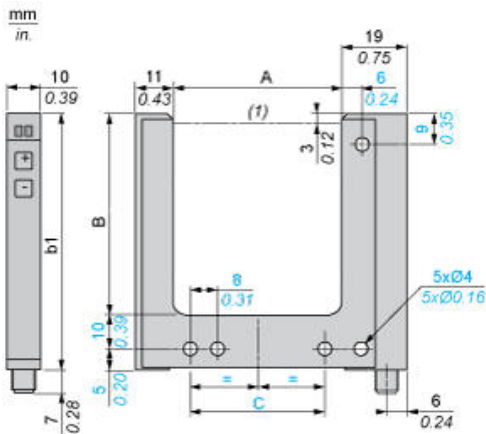
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

## Contractual warranty

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

Dimensions



(1) Optical axis

Dimensions in mm

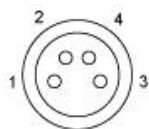
| A  | B  | b1  | C  |
|----|----|-----|----|
| 50 | 95 | 110 | 40 |

Dimensions in in.

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

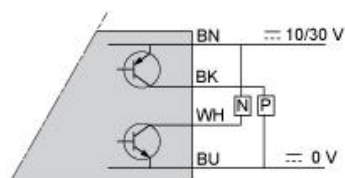
## Wiring Schemes

### 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