



## Main

|                               |                                        |
|-------------------------------|----------------------------------------|
| Range of product              | Telemecanique Photoelectric sensors XU |
| Series name                   | Application                            |
| Electronic sensor type        | Photo-electric sensor                  |
| Sensor name                   | XUY                                    |
| Sensor design                 | Roller sensor                          |
| Detection system              | Diffuse                                |
| Material                      | Metal                                  |
| Type of output signal         | Discrete                               |
| Supply circuit type           | DC                                     |
| Wiring technique              | 3-wire                                 |
| Discrete output type          | PNP or NPN                             |
| Discrete output function      | 1 NO or 1 NC programmable              |
| Electrical connection         | 1 remote male connector M8, 4 pins     |
| Cable length                  | 0.3 m                                  |
| Product specific application  | Conveyor system                        |
| Emission                      | Infrared                               |
| [Sn] nominal sensing distance | 0.1 m diffuse                          |

## Complementary

|                           |                                                |
|---------------------------|------------------------------------------------|
| Enclosure material        | Aluminium                                      |
| Lens material             | Polycarbonate                                  |
| Cover material            | PVC                                            |
| Pulse frequency           | 1 kHz                                          |
| Output type               | Solid state                                    |
| Status LED                | 1 LED color: yellow for output signal          |
| [Us] rated supply voltage | 24 V DC with reverse polarity protection       |
| Supply voltage limits     | 18...30 V DC                                   |
| Switching capacity in mA  | 100 mA (overload and short-circuit protection) |
| Switching frequency       | 500 Hz                                         |
| Maximum voltage drop      | <2 V at 100 mA (closed state)                  |
| Current consumption       | < 35 mA no-load                                |
| Maximum delay response    | 1 ms                                           |
| Diameter                  | 12 mm                                          |
| Length                    | 250 mm                                         |
| Net weight                | 0.045 kg                                       |

## Environment

|                                       |                              |
|---------------------------------------|------------------------------|
| Product certifications                | cCSAus[RETURN]CE             |
| Ambient air temperature for operation | -10...55 °C                  |
| Ambient air temperature for storage   | -20...80 °C                  |
| IP degree of protection               | IP50 conforming to IEC 60529 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TWSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

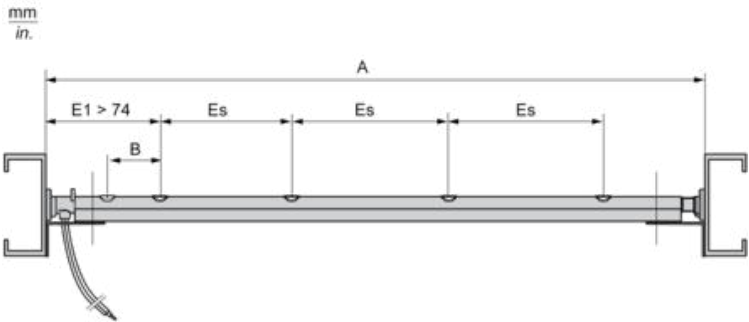
## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 9.0 cm  |
| Package 1 Width              | 9.0 cm  |
| Package 1 Length             | 63.0 cm |
| Package 1 Weight             | 500.0 g |

## 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>                                                                                                                                                                                                                                                                                                    |

Dimensions



Dimensions in mm

| A   | B  | ES  |
|-----|----|-----|
| 250 | 29 | 108 |

Dimensions in in.

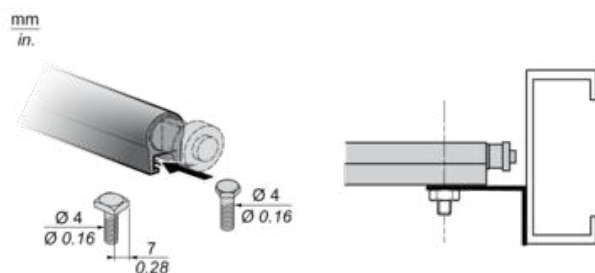
| A    | B    | ES   |
|------|------|------|
| 9.84 | 1.14 | 4.25 |

## Mounting

Mounting on the Sides Hexagonal Supports (2 of Each Support are Supplied with the Sensor)

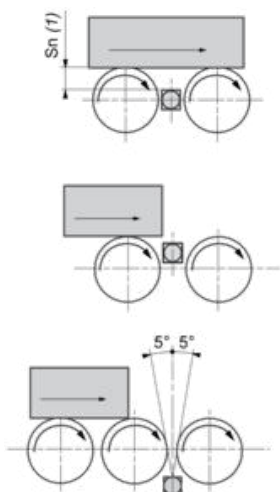


Mounting Underneath (Brackets, Screws and Nuts not Supplied)



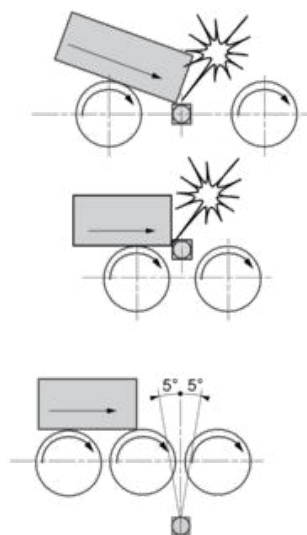
## Mounting Precautions

Recommended mounting



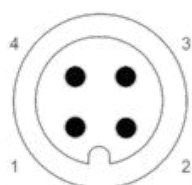
(1)  $S_n \leq 100$  mm

Not recommended



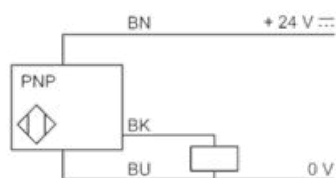
## Wiring Schemes

### M8 Connector



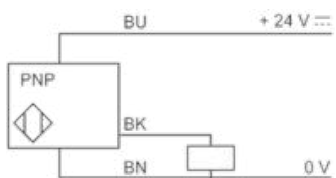
- 1 : Brown
- 2 : White (disconnected)
- 3 : Blue
- 4 : Black

### PNP, NO Output



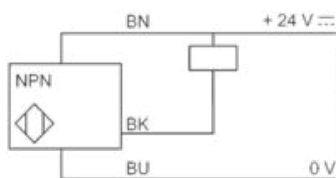
- BN : Brown
- BU : Blue
- BK : Black

### PNP, NC Output



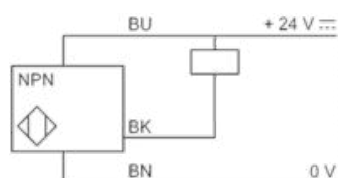
- BN : Brown
- BU : Blue
- BK : Black

### NPN, NC Output



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

## NPN, NO Output



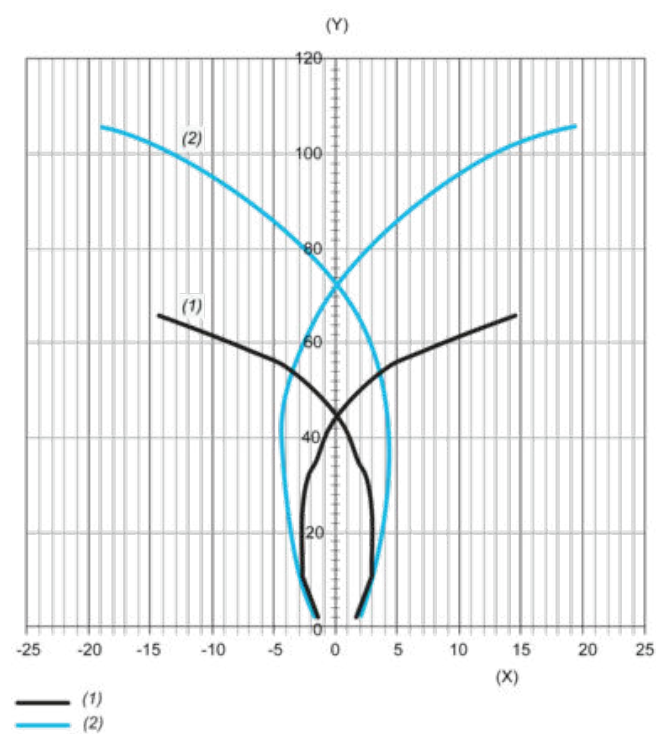
BN : Brown

BU : Blue

BK : Black

## Detection Curves

### Conveyor Axis - Load Running Direction



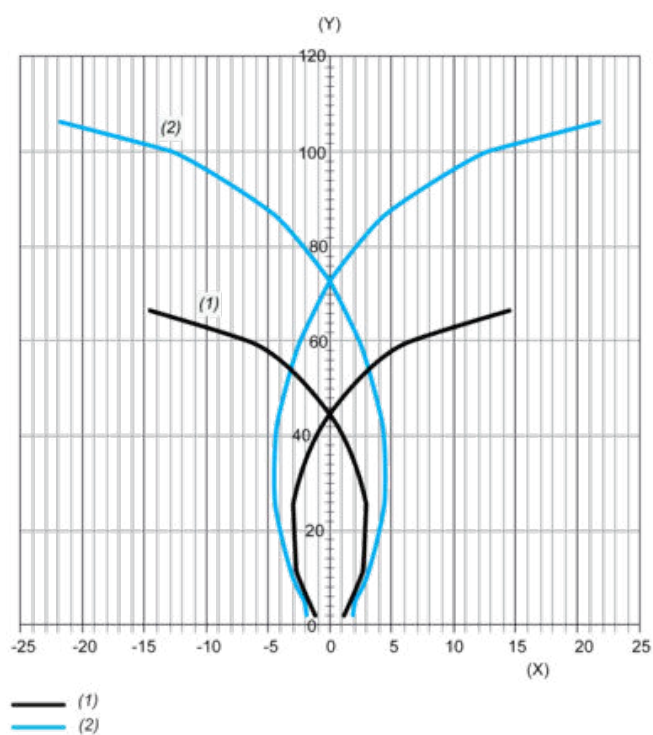
(1) Black 6%

(2) White 92%

(x) Distance between the target and the optical axis in mm

(y) Distance between the target and the sensor in mm

# Roller Axis - Direction at Right-angles to Load Running



(1) Black 6%

(2) White 92%

(x) Distance between the target and the optical axis in mm

(y) Distance between the target and the sensor in mm