# Product data sheet
## Characteristics

# XUYPS2CO945S
## Photoelectric sensors XU, XUY, BGS, 2 channels, Sn 600 mm, 12...24 VDC, M8

### Main

| | |
|---|---|
| Range of Product | Telemecanique Photoelectric sensors XU |
| Series name | Application material handling |
| Electronic sensor type | Photo-electric sensor |
| Sensor name | XUY |
| Sensor design | Compact |
| Detection system | Diffuse with background suppression |
| Material | Plastic |
| Type of output signal | Discrete |
| 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 | Control of filling<br>2 channels triangulation<br>Detection of object on conveyor against reflective background |
| Emission | Infrared LED, modulated |
| [Sn] nominal sensing distance | 1.97…23.62 in (50…600 mm) |

### Complementary

| | |
|---|---|
| Enclosure Material | Glass impregnated nylon |
| Output Type | Solid state |
| Status LED | Output state 1 LED green) |
| [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 | > 370 Hz |
| Maximum voltage drop | <2 V closed state) |
| Current consumption | < 1.5 mA no-load |
| Maximum delay response | 1.8 ms |
| Maximum delay recovery | 1.8 ms |
| Net Weight | 0.12 lb(US) (0.055 kg) |

### Environment

| | |
|---|---|
| Product Certifications | CE |
| Ambient Air Temperature for Operation | 32…122 °F (0…50 °C) |
| Ambient Air Temperature for Storage | -4…140 °F (-20…60 °C) |
| Immunity to ambient light | 10000 Lux natural light<br>1300 lux incandescent bulb |
| IP degree of protection | IP65 IEC 60529 |

## Ordering and shipping details

| | |
|---|---|
| Category | 22481-SENSORS, PHOTOELECTRIC |
| Discount Schedule | DS2 |
| GTIN | 3389119007269 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 2.79 oz (79.0 g) |
| Returnability | No |
| Country of origin | FR |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.42 in (3.6 cm) |
| Package 1 width | 2.80 in (7.1 cm) |
| Package 1 Length | 5.12 in (13 cm) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 15 |
| Package 2 Weight | 3.08 lb(US) (1.398 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 5.91 in (15 cm) |
| Package 2 Length | 15.75 in (40 cm) |

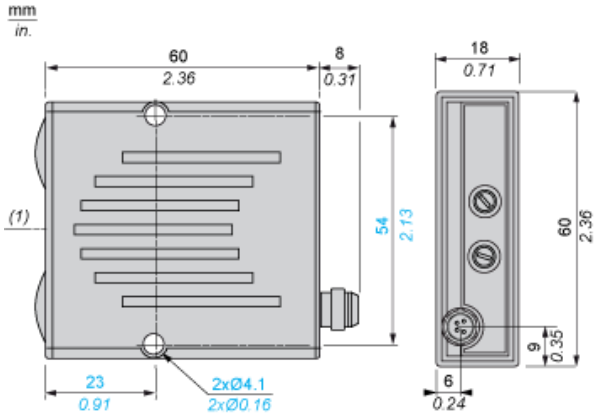
## Offer Sustainability

| | |
|---|---|
| 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 www.P65Warnings.ca.gov |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |

## Contractual warranty

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

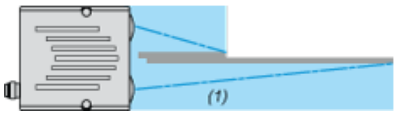
## Dimensions




(1) Optical axis

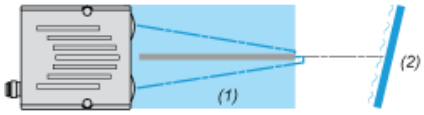
## Mounting and Clearance

### Two independent sensors with triangulation: A, B



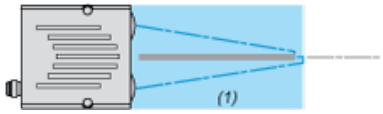

(1) Detected zones

### Immunity to reflection: A and B



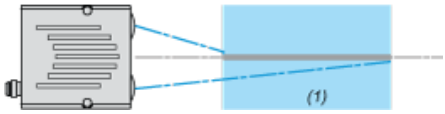

(1) Detected zones
(2) Mirror

### Detection of contrasting objects: A or B




(1) Detected zones

### Monitoring of distance: A xor B

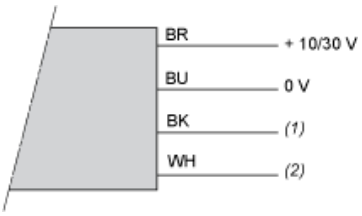



(1) Detected zones

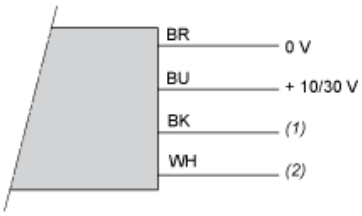
## Wiring Schemes and Outputs

### Two Independent Sensors with Triangulation: A, B

NO Output




NC Output

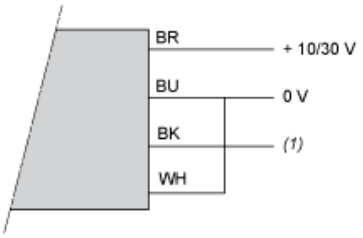



BN : Brown
BU : Blue
BK : Black
WH : White
(1) Zone A output
(2) Zone B output

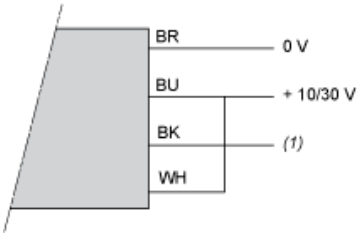
### Immunity to Reflection: A and B

Without Time Delay

NO Output



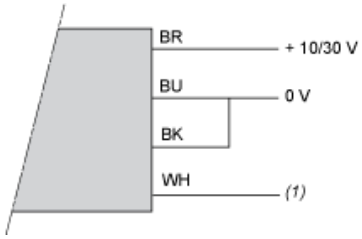

NC Output



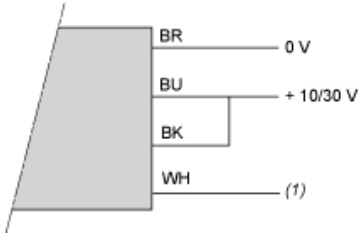

BN : Brown
BU : Blue
BK : Black
WH : White
(1) Output

With 40 ms Time Delay

NO Output



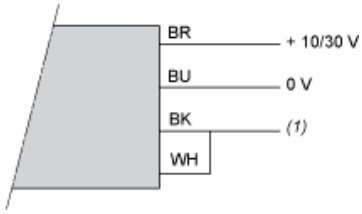

NC Output



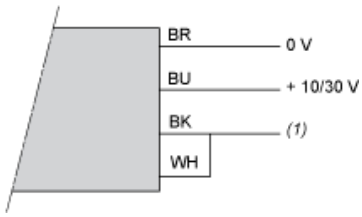

BN : Brown
BU : Blue
BK : Black
WH : White
(1) Output

## Detection of Contrasting Objects: A or B

NO Output




NC Output

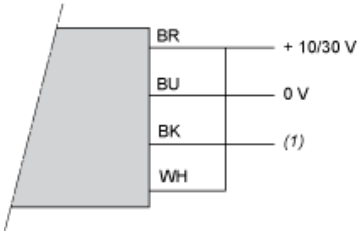



BN : Brown
BU : Blue
BK : Black
WH : White
(1) Output

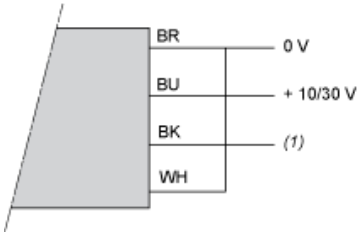
## Monitoring of Distance: A or B

Without Time Delay

NO Output



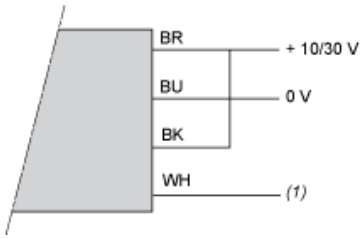
NC Output



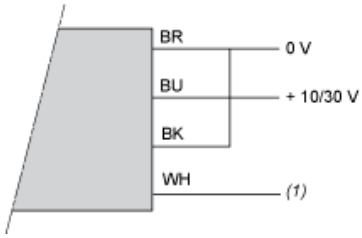

BN : Brown
BU : Blue
BK : Black
WH : White
(1) Output

With 40 ms Time Delay

NO Output

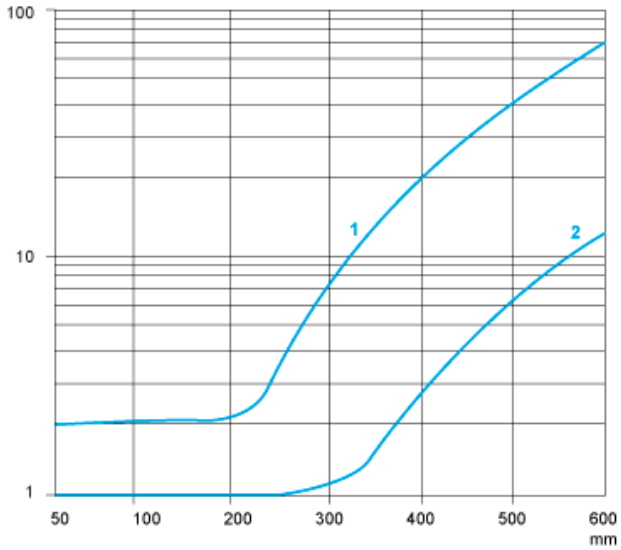



NC Output




BN : Brown
BU : Blue
BK : Black
WH : White
(1) Output

## Detection Curves




1 : Black 6%
2 : Grey 18% - Distance (mm) set on 92% (Kodak 1527795)