



## 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 2 channels triangulation 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 1300 lux incandescent bulb
IP degree of protection	IP65 IEC 60529

## Ordering and shipping details

Category	22481-SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389119007269
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.42 in (3.6 cm)
Package 1 Width	2.80 in (7.1 cm)
Package 1 Length	5.12 in (13.0 cm)
Package 1 Weight	2.79 oz (79.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	15
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	3.08 lb(US) (1.398 kg)

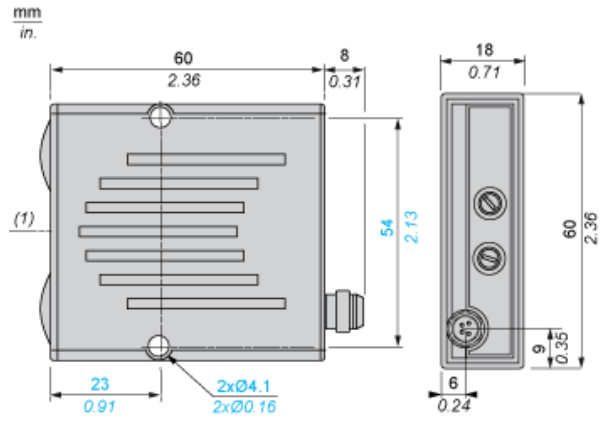
## Offer Sustainability

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
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Dimensions



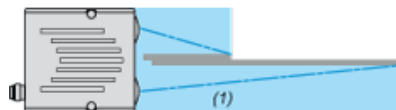
(1) Optical axis

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Mounting and Clearance

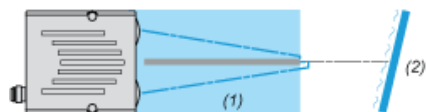
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Two independent sensors with triangulation: A, B



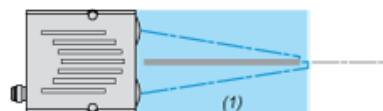
(1) Detected zones

Immunity to reflection: A and B



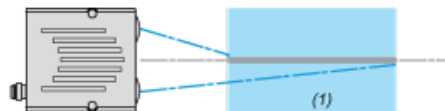
(1) Detected zones  
(2) Mirror

Detection of contrasting objects: A or B



(1) Detected zones

Monitoring of distance: A xor B

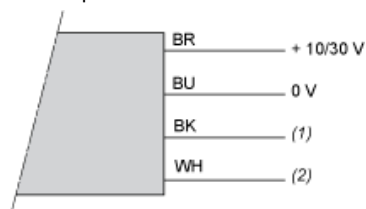


(1) Detected zones

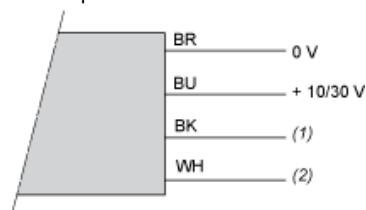
## Wiring Schemes and Outputs

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

NO Output



NC Output



BN : Brown

BU : Blue

BK : Black

WH : White

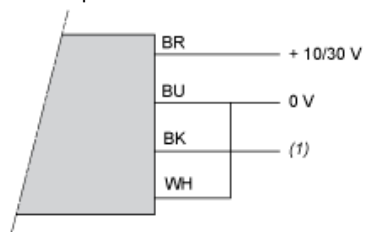
(1) Zone A output

(2) Zone B output

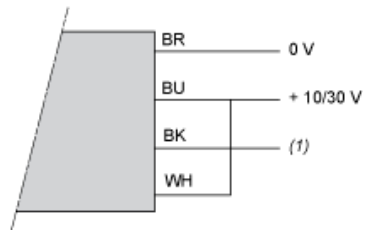
### Immunity to Reflection: A and B

Without Time Delay

NO Output



NC Output



BN : Brown

BU : Blue

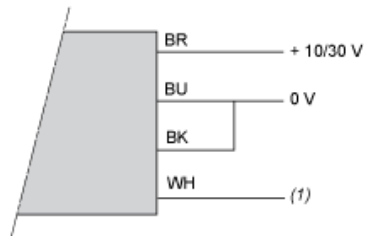
BK : Black

WH : White

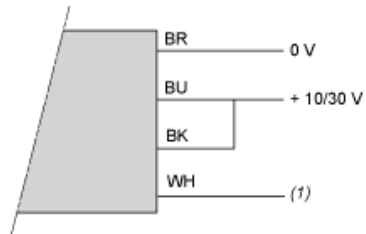
(1) Output

With 40 ms Time Delay

NO Output



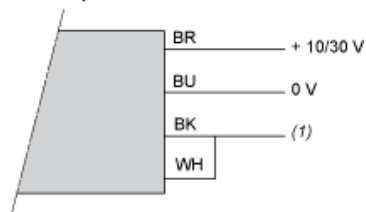
NC Output



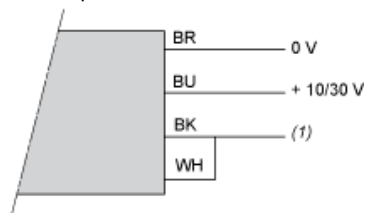
BN : Brown  
BU : Blue  
BK : Black  
WH : White  
(1) Output

### Detection of Contrasting Objects: A or B

NO Output



NC Output

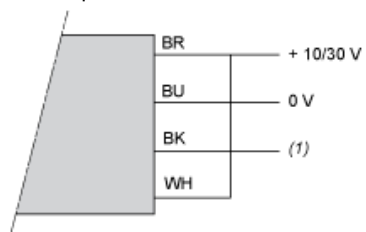


BN : Brown  
BU : Blue  
BK : Black  
WH : White  
(1) Output

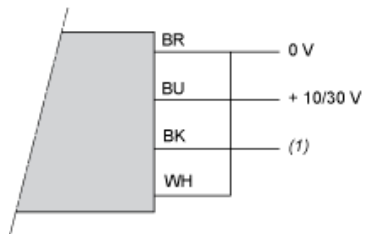
### Monitoring of Distance: A or B

Without Time Delay

NO Output



NC Output



BN : Brown

BU : Blue

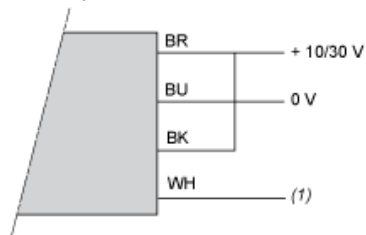
BK : Black

WH : White

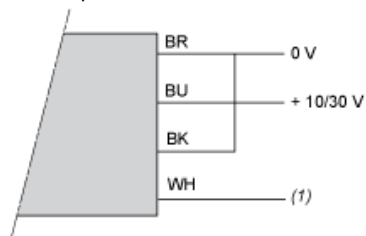
(1) Output

With 40 ms Time Delay

NO Output



NC Output



BN : Brown

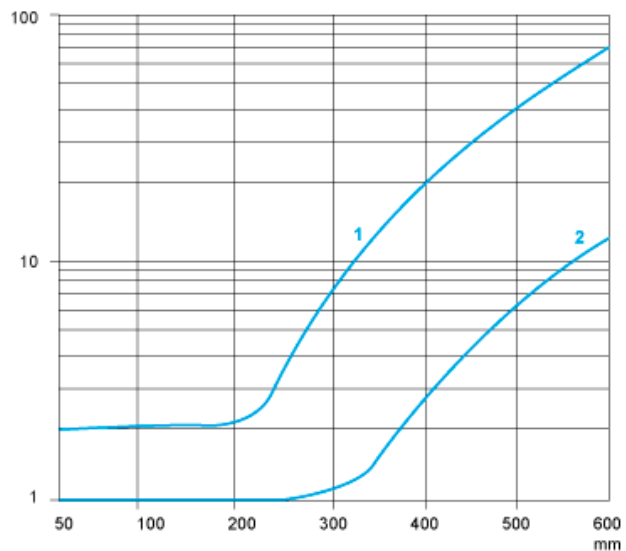
BU : Blue

BK : Black

WH : White

(1) Output

Detection Curves



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