

Photoelectric sensors XU, XUB, thru beam,  
laser, Sn 100 m, 12...24 VDC, M12



## Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application material handling
Electronic sensor type	Photo-electric sensor
Sensor name	XUB
Sensor design	Cylindrical M18
Detection system	Thru beam
Material	Plastic
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M12
Emission	Red laser class 1 670 nm conforming to IEC 825-1
[Sn] nominal sensing distance	100 m

## Complementary

Enclosure material	PBT
Lens material	PMMA
Blind zone	0 mm
Output type	Solid state
Status LED	Supply on and teaching: 1 LED (green) Stability: 1 LED (red) Output state and alignment aid: 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	1500 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	25 mA no-load
Maximum power consumption in W	1 W
Maximum delay first up	80 ms
Maximum delay response	0.4 ms
Maximum delay recovery	0.4 ms
Setting-up	With sensitivity adjustment
Net weight	0.078 kg
Kit composition	Transmitter + receiver XUBLAKCNM12T + XUBLAPCNM12R

## Environment

Product certifications	CE[RETURN]CSA[RETURN]UL
Ambient air temperature for operation	-10...45 °C
Ambient air temperature for storage	-40...70 °C
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	IP67 conforming to IEC 60529 (double insulation)

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.4 cm
Package 1 Width	7.0 cm
Package 1 Length	12.8 cm
Package 1 Weight	63.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	35
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.509 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
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 Diisodecyl 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>

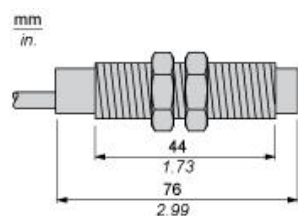
## Contractual warranty

Warranty	18 months
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Dimensions

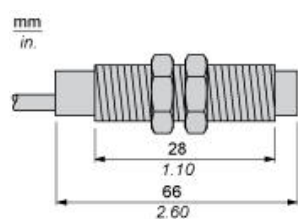
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Dimensions

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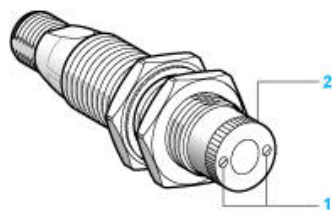


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## Mounting

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### Adjustment



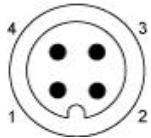
- (1) Adjust the focusing point of the laser beam by rotating the serrated sleeve
- (2) Located on the face of the sensor. Re-tighten fixing screws

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## Wiring Schemes

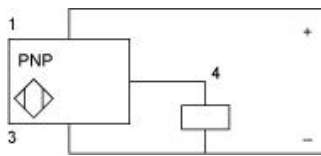
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### M12 Connector



- 1 : (+)
- 2 : Beam break input
- 3 : (-)
- 4 : OUT/Output

### PNP



### Transmitter



BN : Brown

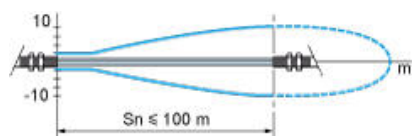
BU : Blue

Input Not connected: beam made, connected to (-): beam broken

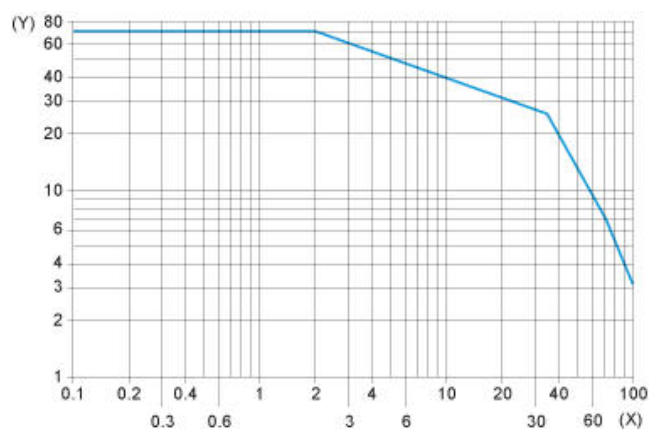
2/VI :

## Curves

### Detection Curve (Set to Infinity)



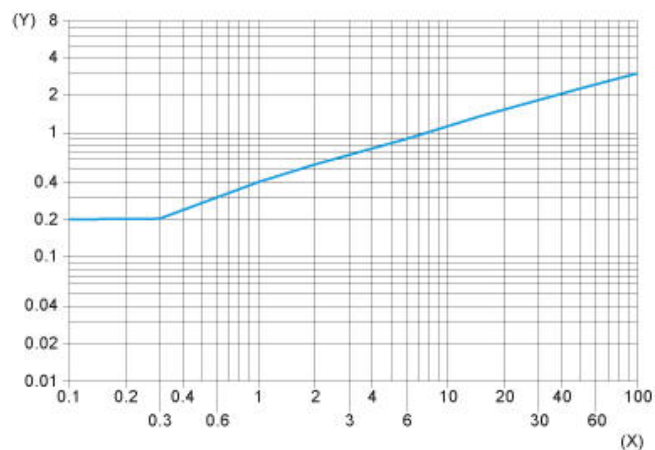
### Excess Gain Curve



(X) Distance (m)

(Y) Gain

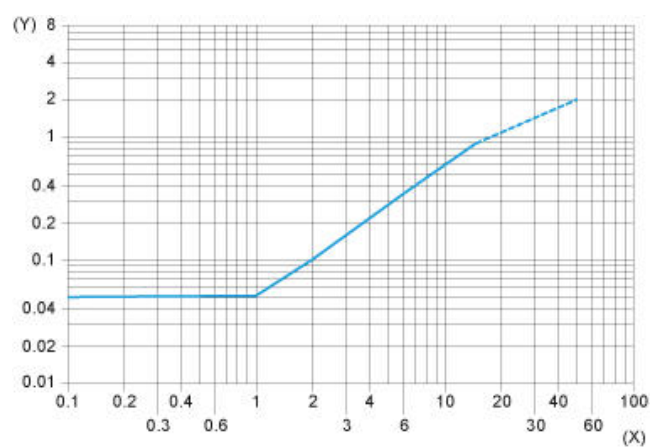
### Standard Curve



(X) Distance focusing point (m)

(Y) Minimum size of the object to be detected (mm)

## Detection Limit Curve



(X) Distance focusing point (m)

(Y) Minimum size of the object to be detected (mm)