

# XU2N18NP341WD

Photoelectric sensors XU, XU2, thru beam,  
90°, Sn 15 m, 12...24 VDC, M12



## Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application food and beverage
Electronic sensor type	Photo-electric sensor
Sensor name	XU2
Sensor design	Cylindrical M18
Detection system	Thru beam
Material	Stainless steel
Line of sight type	90° lateral
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	NPN
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M12, 4 pins
Product specific application	-
Emission	Infrared thru beam
[Sn] nominal sensing distance	15 m thru beam

## Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	20 m
Output type	Solid state
Add on output	Without
Add on input	Breaking test + programming
Status LED	1 LED (green) for supply on 1 LED (yellow) for output state
[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	<= 500 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 50 mA no-load
Maximum delay first up	15 ms
Maximum delay response	1 ms
Maximum delay recovery	1 ms
Setting-up	Without sensitivity adjustment
Diameter	18 mm
Length	88 mm
Net weight	0.13 kg
Kit composition	Transmitter + receiver

## Environment

Product certifications	CE[RETURN]CSA[RETURN]UL
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	25 gn, amplitude = +/- 1.5 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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	8.2 cm
Package 1 Length	13.3 cm
Package 1 Weight	121.0 g

## Offer Sustainability

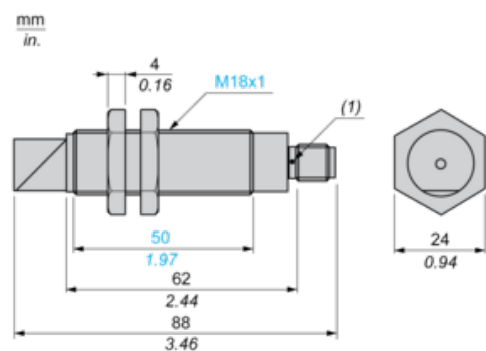
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to 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
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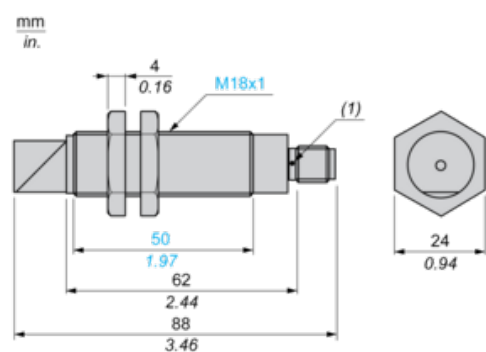
## Dimensions

### Transmitter's Dimensions



(1) LED

### Receiver's Dimensions



(1) LED

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Mounting and Clearance

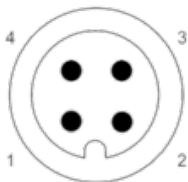
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Fixing nut tightening torque: < 15 N.m

Connector tightening torque: 2 N.m

## Wiring Schemes

### M12 Connector



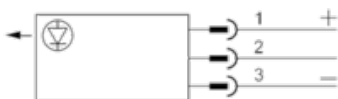
3 : (-)

1 : (+)

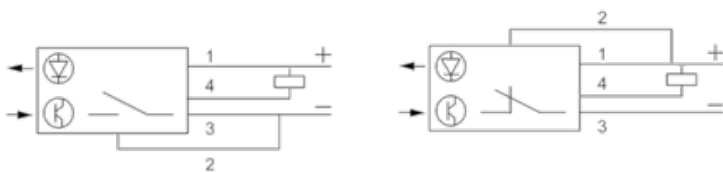
4 : OUT/Output

2 : Prog or beam break input (transmitter only)

### Transmitter



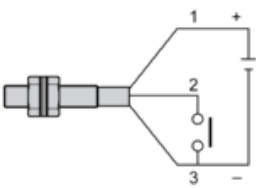
### 3-wire, NPN NO or NC Programmable Function



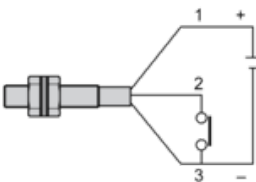
## Wiring Schemes

### Beam Break Input on Thru-beam Transmitter

Beam made



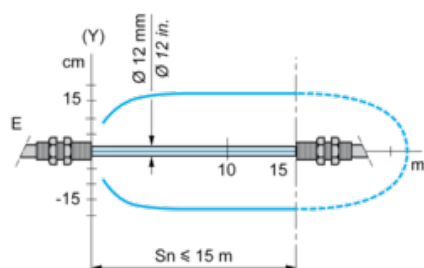
Beam broken



2 : Beam break input

## Detection Curves

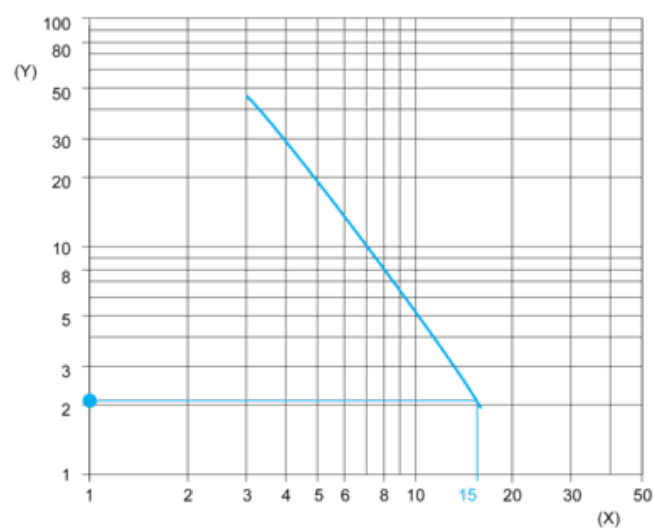
### Thru-beam System



(y)  $\varnothing$  of beam

### Excess Gain Curves (Ambient Temperature: + 25° C)

#### Thru-beam System



(y) Gain

(x) Distance (m)