

# Product datasheet

Specifications



## Photoelectric sensors XU, XU5, diffuse, Sn 0.10 m, 12...24 VDC, M12

XU5N18PP341D

### Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application food and beverage
Electronic sensor type	Photo-electric sensor
Sensor name	XU5
Sensor design	Cylindrical M18
Detection system	Diffuse
Material	Stainless steel
Line of sight type	Axial
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, 4 pins
Product specific application	-
Emission	Infrared diffuse
[Sn] nominal sensing distance	0.1 m diffuse

### Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	0.15 m
Output type	Solid state
Add on output	Without
Add on input	Programmation
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	<= 30 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	72 mm
Net weight	0.065 kg

## Environment

Product certifications	CE CSA 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 Weight	68.0 g
Package 1 Height	6.6 cm
Package 1 width	9.4 cm
Package 1 Length	4.2 cm
Unit Type of Package 2	S01
Number of Units in Package 2	11
Package 2 Weight	977.0 g
Package 2 Height	15 cm
Package 2 width	15 cm
Package 2 Length	40 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
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>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

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### Contractual warranty

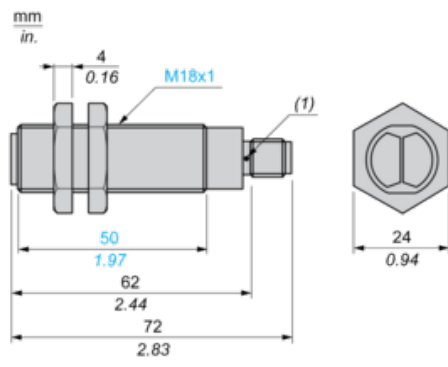
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Warranty	18 months
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## Dimensions

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(1) LED

**Mounting and Clearance**

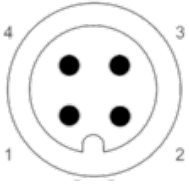
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Fixing nut tightening torque: < 15 N.m  
Connector tightening torque: 2 N.m

**Wiring Schemes**

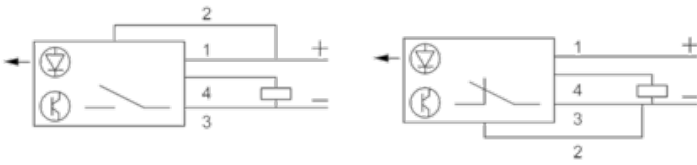
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**M12 Connector**



- 3 : (-)
- 1 : (+)
- 4 : OUT/Output
- 2 : Prog

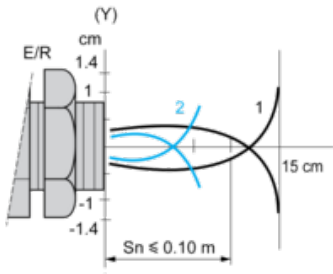
**3-wire, PNP NO or NC Programmable Function**



**Detection Curves**

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**Diffuse System**



(y)  $\emptyset$  of beam

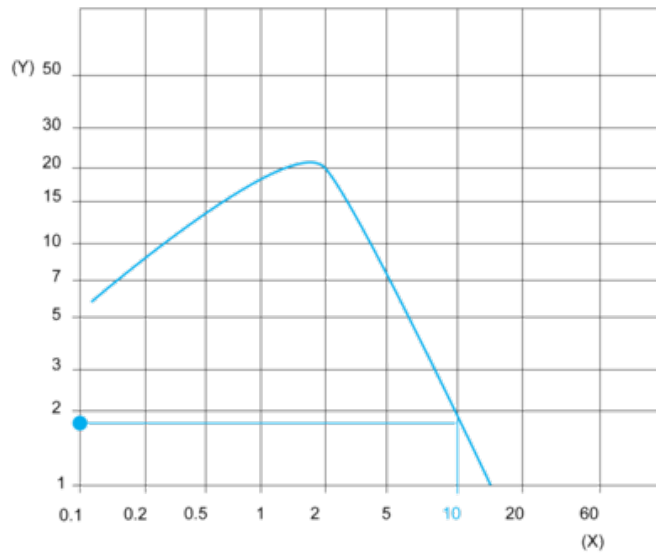
1 : White 90%

2 : Grey 18%

Object 10 x 10 cm

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

Diffuse System



(y) Gain

(x) Distance (m)

Object 10 x 10 cm

White 90%