

# XU5M18U1D

Photoelectric sensors XU, photo electric sensor, XU5, diffuse, luminescence, Sn 80 mm, 12...24 VDC, M12



## Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application packaging
Electronic sensor type	Photo-electric sensor
Product specific application	Luminescence
Sensor name	XU5
Sensor design	M18
Detection system	Diffuse
[Sn] nominal sensing distance	0...80 mm in diffuse mode 20 mm spot Ø 3 x 1 mm for colour mark reading
Material	Metal
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO
Electrical connection	1 male connector M12, 4 pins
Emission	Ultra-violet (transmission frequency = 370 nm)

## Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Output type	Solid state
Output function governance	Light
Add on output	Without
Status LED	Output state: 1 LED (green)

[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 (reverse polarity, overload and short-circuit protection)
Switching frequency	<= 1000 Hz
Maximum voltage drop	<1.5 V (closed state), PNP
Current consumption	<= 20 mA no-load
Time delay range	20 ms off-delay activation/deactivation by cabling method delay
Maximum delay first up	100 ms
Maximum delay response	0.5 ms
Maximum delay recovery	0.5 ms
Setting-up	Sensitivity adjustment with potentiometer
Diameter	18 mm
Length	95 mm
Net weight	0.075 kg

## Environment

Product certifications	CE UL CSA
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	7 gn, amplitude = +/- 0.6 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	88 g
Package 1 Height	7.1 cm
Package 1 width	9.6 cm
Package 1 Length	4.3 cm
Unit Type of Package 2	S01
Number of Units in Package 2	11
Package 2 Weight	1.193 kg
Package 2 Height	15 cm
Package 2 width	15 cm
Package 2 Length	40 cm

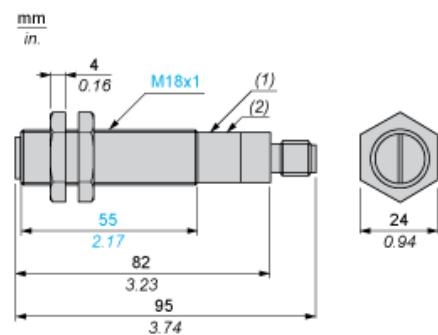
## Offer Sustainability

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>
Circularity Profile	<a href="#">End of Life Information</a>
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>

Contractual warranty

Warranty	18 months
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## Dimensions



- (1) Potentiometer  
(2) Green LED

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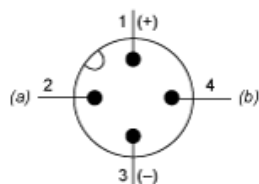
Mounting and Clearance

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Fixing nut tightening torque: < 15 N.m

## Wiring Schemes

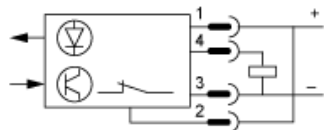
### Connector Scheme



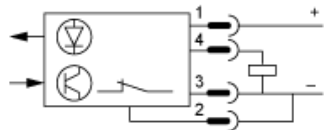
- (a) Time delay: "OFF delay" of output signal: - no time delay: connect contact 2 to (+), - 20 ms time delay: connect contact 2 to (-)  
(b) Output

### PNP Output ( 3-wire Discontinue Current)

Without output signal time delay

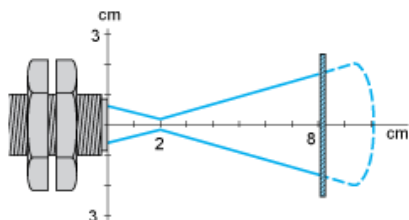


With output signal time delay (20 ms)



## Curves

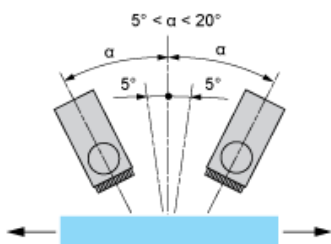
### Detection Curves



Object 5 x 5 cm, white 90 %

Object 5 x 5 cm, white 90 %

### Vertical Inclination



An angle of 5 to 10° from vertical is recommended for reflective or transparent surfaces Maximum vertical inclination: 20°