

# XU5M18U1D

photo-electric sensor - XU5 - diffuse -  
luminescence - Sn 80mm - 12..24VDC - M12



## Main

Range of product	OsiSense 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	20 mm spot Ø 3 x 1 mm for colour mark reading 0...80 mm in diffuse mode
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	1 LED (green) 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 (reverse polarity, overload and short-circuit protection)
Switching frequency	<= 1000 Hz
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
Delay first up	<= 100 ms
Delay response	<= 0.5 ms
Delay recovery	<= 0.5 ms
Setting-up	Sensitivity adjustment with potentiometer
Diameter	18 mm
Length	95 mm
Product weight	0.075 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	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

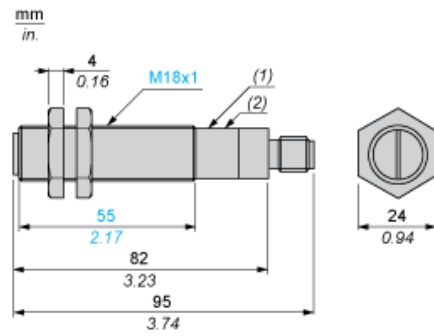
## Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 1149 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold

## Contractual warranty

Warranty period	18 months
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## Dimensions



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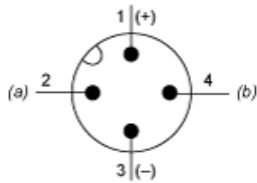
Mounting and Clearance

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Fixing nut tightening torque: < 15 N.m

## Wiring Schemes

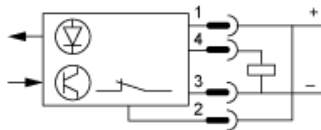
### Connector Scheme



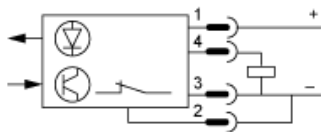
- (a) Time delay: "OFF delay" of output signal: - no time delay: connect contact 2 to (+), - 20 ms time delay: connect contact 2 to (-)
- (b) Output

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

Without output signal time delay

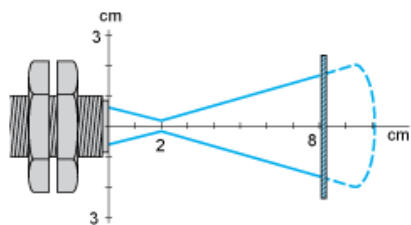


With output signal time delay (20 ms)



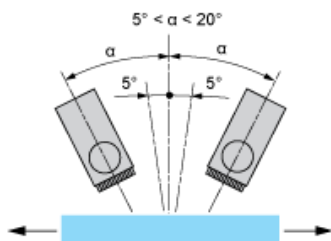
## Curves

### 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°