XU5M18U1D

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

Green Premium™ Product

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

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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	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	18 months

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Dimensions
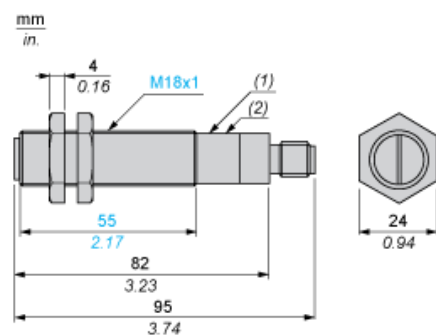
(1) Potentiometer
(2) Green LED

Mounting and Clearance

Fixing nut tightening torque: < 15 N.m

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Wiring Schemes

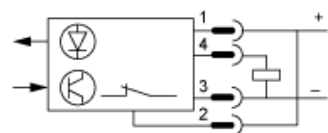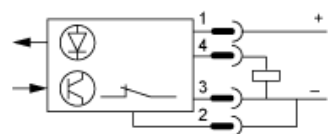### Connector Scheme
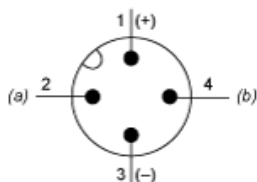
(a)   Time delay: "OFF delay" of output signal: - no time delay: connect contact 2 to (+), - 20 ms time delay: connect contact 2 to (-)

(b)   Output

PNP Output (3-wire Discontinue Current)
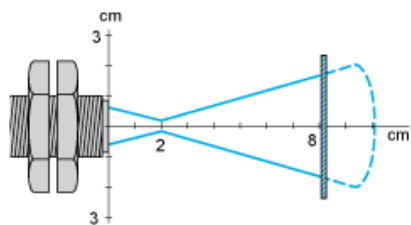
Without output signal time delay

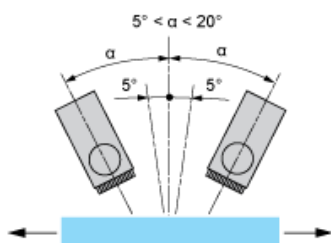With output signal time delay (20 ms)

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°

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