Product data sheet Characteristics

XU5M18U1D

Photoelectric sensors XU, 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	0.003.15 In (080 mm) in diffuse mode 0.79 in (20 mm) 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

Complementary	
Enclosure Material	Nickel Plated Brass
Lens material	РММА
Output Type	Solid state
Output function governance	Light
Add on output	Without
Status LED	Output state 1 LED green)
[Us] rated supply voltage	1224 V DC reverse polarity protection
Supply voltage limits	1030 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
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	0.71 in (18 mm)
Length	3.74 in (95 mm)
Net Weight	0.17 lb(US) (0.075 kg)

Environment

Environment		
Product Certifications	CE UL CSA	
Ambient Air Temperature for Operation	-13131 °F (-2555 °C)	
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)	
Vibration resistance	7 gn +/- 0.6 mm 1055 Hz) IEC 60068-2-6	
Shock resistance	30 gn 11 ms) IEC 60068-2-27	
IP degree of protection	IP67 IEC 60529	

Ordering and shipping details

0 11 0	
Category	22481-SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389110178265
Nbr. of units in pkg.	1
Package weight(Lbs)	3.10 oz (88.0 g)
Returnability	No
Country of origin	FR

Packing Units

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Unit Type of Package 1	PCE
Package 1 Height	2.80 in (7.1 cm)
Package 1 width	3.78 in (9.6 cm)
Package 1 Length	1.69 in (4.3 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	11
Package 2 Weight	2.63 lb(US) (1.193 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

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 www.P65Warnings.ca.gov
REACh Regulation	☐ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EEU RoHS Declaration
Mercury free	Yes
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☑ End Of Life Information

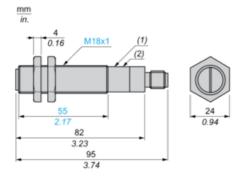
Contractual warranty

Warranty	18 months

Product data sheet Dimensions Drawings

XU5M18U1D

Dimensions



- (1) Potentiometer
- (2) Green LED

Product data sheet Mounting and Clearance

XU5M18U1D

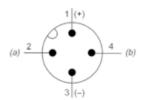
Mounting and Clearance

Fixing nut tightening torque: < 15 N.m

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Wiring Schemes

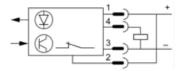
Connector Scheme



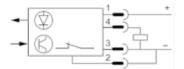
- (a) Time delay: "OFF delay" of output signal: no time delay: connect contact 2 to (+), 20 ms time delay: connect contact 2 to (-)
- (b) Output

PNP Output (3-wire Discontinue Current)

Without output signal time delay



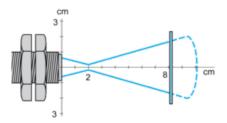
With output signal time delay (20 ms)



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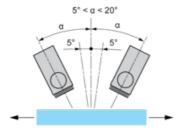
Curves

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°