XU2M18AP20D

Photoelectric sensors XU, XU2, thru beam, high gain, Sn 50 m, 12...24 VDC, M12





Main

Range of Product	Telemecanique Photoelectric sensors XU	
Series name	Application material handling	
Electronic sensor type	Photo-electric sensor	
Sensor name	XU2	
Sensor design	Cylindrical M18	
Detection system	Thru beam	
Material	Metal	
Line of sight type	Axial	
Type of output signal	Discrete Analogue	
Supply circuit type	DC	
Wiring Technique	3-wire	
Discrete output type	PNP	
Discrete output function	1 NO	
Analogue output range	420 mA	
Electrical connection	1 male connector M12, 4 pins	
Product Specific Application	-	
Emission	Infrared thru beam	
[Sn] nominal sensing distance	164.04 ft (50 m) thru beam	

Complementary

- Complementary	
Enclosure Material	Nickel Plated Brass
Lens material	PMMA
Maximum sensing distance	229.66 ft (70 m)
Output Type	Solid state
Add on output	With analogue output
Add on input	Breaking test (transmitter)
Status LED	1 LED green)supply on 1 LED yellow)operation
[Us] rated supply voltage	1224 V DC reverse polarity protection
Supply voltage limits	1030 V DC
Switching capacity in mA	<= 100 mA overload and short-circuit protection)
Switching frequency	<= 30 Hz
Maximum voltage drop	<1.5 V closed state)
Current consumption	<= 55 mA no-load
Maximum delay first up	50 ms
Maximum delay response	15 ms
Maximum delay recovery	15 ms
Setting-up	Sensitivity adjustment
Diameter	0.71 in (18 mm)
Length	3.74 in (95 mm)
Net Weight	0.34 lb(US) (0.155 kg)
Kit composition	Transmitter + receiver

Environment

Product Certifications	CSA CE UL	
Ambient air temperature for operation	-13131 °F (-2555 °C)	
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)	
Vibration resistance	25 gn +/- 2 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

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389110077254
Nbr. of units in pkg.	1
Package weight(Lbs)	5.64 oz (160 g)
Returnability	Yes
Country of origin	FR

Packing Units

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Unit Type of Package 1	PCE
Package 1 Height	1.61 in (4.1 cm)
Package 1 width	3.70 in (9.4 cm)
Package 1 Length	5.12 in (13 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Weight	8.60 lb(US) (3.902 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 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)
Mercury free	Yes
RoHS exemption information	€Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

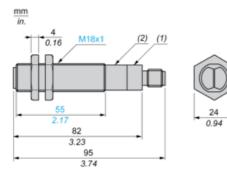
Contractual warranty

Warranty	18 months

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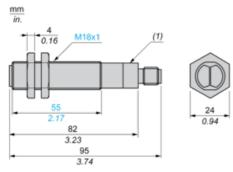
Dimensions

Receiver dimensions



- (1) LEDs
- (2) Potentiometer

Transmitter dimensions



(1) LEDs

Product data sheet Mounting and Clearance

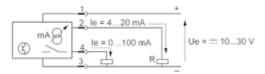
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Mounting and Clearance

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

Wiring Schemes

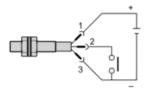
Receiver



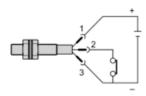
R max. < 800 Ω (Ue = 24 V), < 300 Ω (Ue = 12 V)

Beam Break Test (only on Transmitter)

Beam made

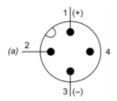


Beam broken



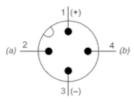
Sensor Connector Pin View

Transmitter



(a) Test

Receiver

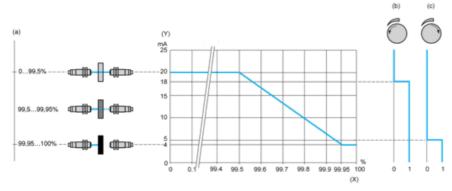


- (a) Analogue output
- (b) Solid-state output

Performance Curves

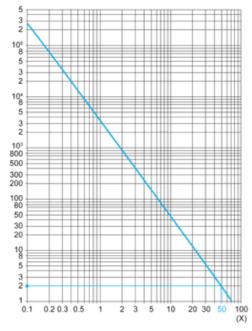
Operation, Settings

Type, opacity of objectAnalogue output curveSwitching level of digital solid-statePNP output



- (a) Degree of opacity of object
- (b) Potentiometer set at minimum
- (c) Potentiometer set at maximum
- (y) Output current
- (x) Degree of opacity of object

Type, opacity of objectAnalogue output curveSwitching level of digital solid-statePNP output



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