

XU2M18AP20D

photo-electric sensor - XU2 - thru beam - high gain -
Sn 50m - 12..24VDC - M12



Main

Range of product	OsiSense 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	Analogue Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO
Analogue output range	4...20 mA
Electrical connection	1 male connector M12, 4 pins
Product specific application	-
Emission	Infrared thru beam
[Sn] nominal sensing distance	50 m thru beam

Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	70 m
Output type	Solid state
Add on output	With analogue output
Add on input	Breaking test (transmitter)
Status LED	1 LED (green) for supply on 1 LED (yellow) for operation
[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 (overload and short-circuit protection)
Switching frequency	<= 30 Hz
Voltage drop	<= 1.5 V (closed state)
Current consumption	<= 55 mA (no-load)
Delay first up	<= 50 ms
Delay response	<= 15 ms
Delay recovery	<= 15 ms
Setting-up	Sensitivity adjustment
Diameter	18 mm
Length	95 mm
Product weight	0.155 kg
Kit composition	Transmitter + receiver

Environment

product certifications	CE CSA UL
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The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

ambient air temperature for operation	-25...55 °C
ambient air temperature for storage	-40...70 °C
vibration resistance	25 gn, amplitude = +/- 2 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

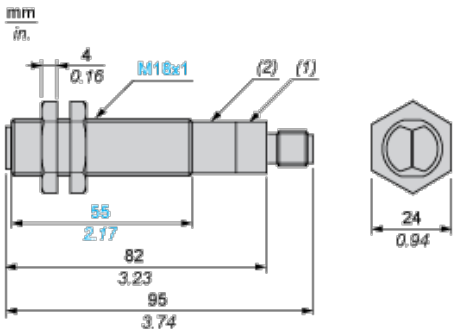
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0924 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

Contractual warranty

Warranty period	18 months
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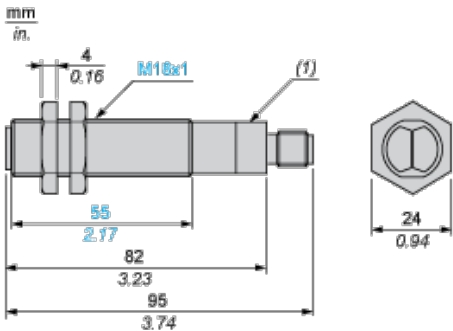
Dimensions

Receiver dimensions



- (1) LEDs
- (2) Potentiometer

Transmitter dimensions



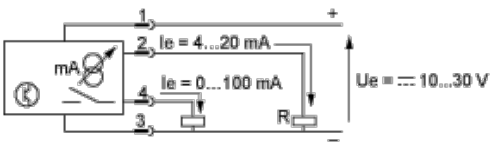
- (1) LEDs

Mounting and Clearance

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

Wiring Schemes

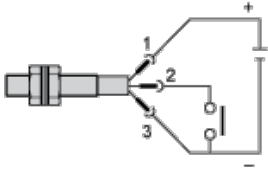
Receiver



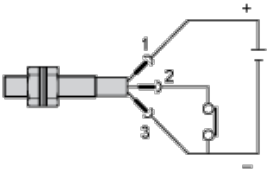
R max. < 800 Ω (Ue = 24 V), < 300 Ω (Ue = 12 V)

Beam Break Test (only on Transmitter)

Beam made

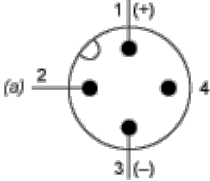


Beam broken



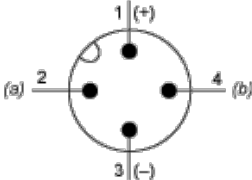
Sensor Connector Pin View

Transmitter



(a) Test

Receiver

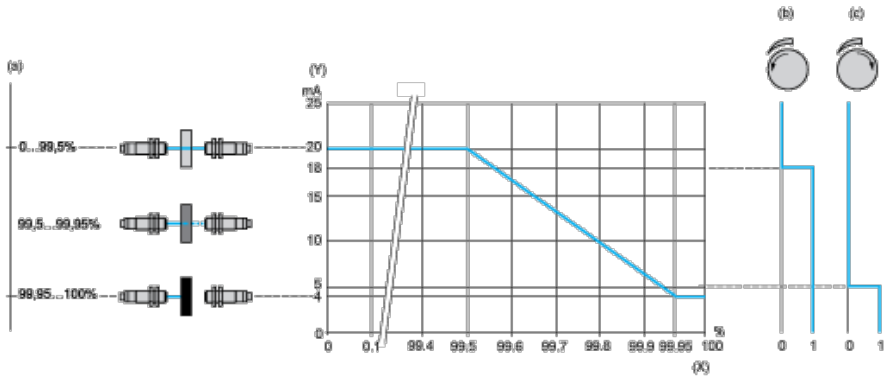


(a) Analogue output

(b) Solid-state output

Operation, Settings

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



(a) Degree of opacity of object

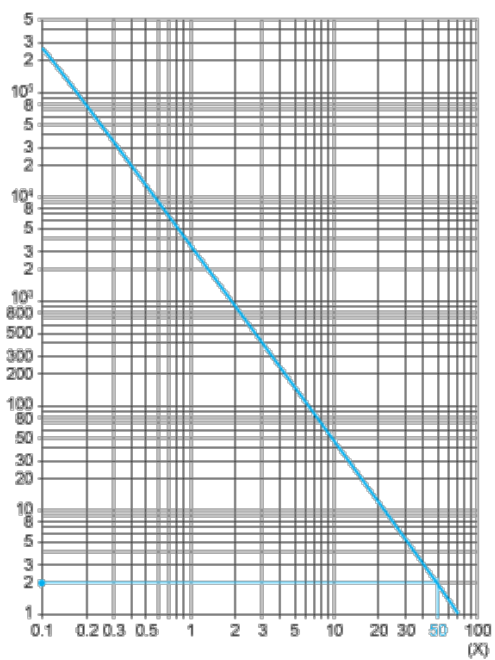
(b) Potentiometer set at minimum

(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



- (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