Product data sheet Characteristics

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	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	1224 V DC with 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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not interneted as a substitute for and is not to be used for determining suitability or reliability of these products with expect to the relevant specific application it is the douty of any sub 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 substitatives shall be responsible or liable for misuse of the information contained herein.

15 Ms
Sensitivity adjustment
18 Mm
95 Mm
0.155 Kg
Transmitter + receiver
_

Environment

Product certifications	CSA CE UL
Ambient air temperature for operation	-2555 °C
Ambient air temperature for storage	-4070 °C
Vibration resistance	25 gn, amplitude = +/- 2 mm (f = 1055 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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	160 G
Package 1 Height	4.1 Cm
Package 1 width	9.4 Cm
Package 1 Length	13 Cm
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Weight	3.902 Kg
Package 2 Height	15 Cm
Package 2 width	30 Cm
Package 2 Length	40 Cm

Offer Sustainability

Sustainable offer status	Green Premium product
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

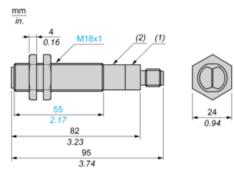


Product data sheet Dimensions Drawings

XU2M18AP20D

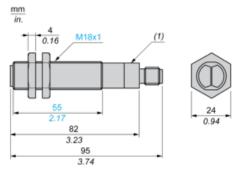
Dimensions

Receiver dimensions



- (1) LEDs
- (2) Potentiometer

Transmitter dimensions



(1) LEDs

Product data sheet Mounting and Clearance

XU2M18AP20D

Mounting and Clearance

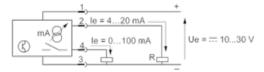
Fixing nut tightening torque: 15 N.m Connector tightening torque: 2 N.m

Product data sheet Connections and Schema

XU2M18AP20D

Wiring Schemes

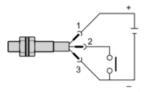
Receiver



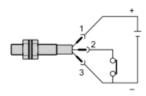
R max. < 800 Ω (Ue = 24 V), < 300 Ω (Ue = 12 V)

Beam Break Test (only on Transmitter)

Beam made

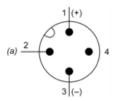


Beam broken



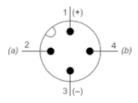
Sensor Connector Pin View

Transmitter



(a) Test

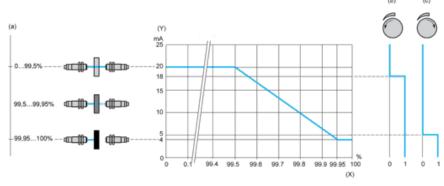
Receiver



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

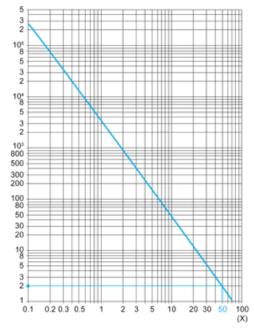
Operation, Settings

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

Product Life Status: Commercialised