

Product data sheet

XU2M18AP20D

Photoelectric sensor XU2, thru-beam, Sn 50 m, 12...24 VDC, M12

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application material handling
Sensor name	XU2
Electronic sensor type	Photo-electric sensor
Sensor design	Cylindrical M18
Kit composition	Transmitter + receiver
Product specific application	Not applicable
ETIM classification	ETIM 9 - EC002716 - Through beam photoelectric sensor
Material	Metal
Lens material	PMMA
Enclosure material	Nickel plated brass
[Sn] nominal sensing distance	50-50 m thru beam
Maximum sensing distance	70 m
Wiring technique	3-wire
Diameter	18 mm
Detection system	Thru beam
Line of sight type	Axial
Delay response	15 ms
Product certifications	CE CSA UL
Range compatibility	TE PHOTOELEC SSRS XU
Indivisible sale quantity	1

Complementary

Sensing range	> 30 m
Electrical connection	1 male connector M12, 4 pins
Supply voltage limits	10-30 V DC
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply circuit type	DC

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 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.
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Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 55 mA no-load
Emission	Infrared thru beam
Setting-up	Sensitivity adjustment
Output type	Solid state
Analogue output range	4...20 mA
Type of output signal	Analogue discrete
Add on output	With analogue output
Discrete output type	PNP
Discrete output function	1 NO
Switching frequency	<= 30 Hz
Status LED	1 LED (green) for supply on, 1 LED (yellow) for operation
Delay first up	50 ms
Delay recovery	15 ms
Length	95 mm
Product weight	0.155 kg

Environment

IP degree of protection	IP67 conforming to IEC 60529
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for operation	-25-55 °C
Ambient air temperature for storage	-40...70 °C
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
Vibration resistance	25 gn, amplitude = +/- 2 mm (f = 10-55 Hz) conforming to IEC 60068-2-6

Offer Sustainability

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

Warranty

Warranty	18 months

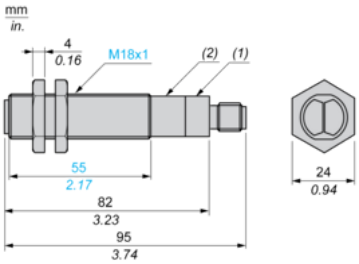
Packing Units

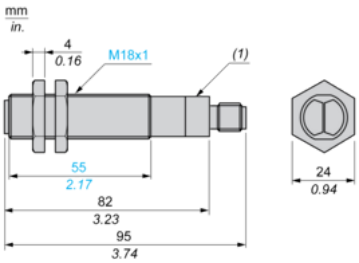
Country of origin	FR (France)
Unit type of package 1	PCE
Number of units in package 1	1

New Package 1 GTIN-13	3666916037300
Package 1 height	4.1 cm
Package 1 width	9.4 cm
Package 1 length	13 cm
Package 1 weight	0.16 kg
Unit type of package 2	S02
Number of units in package 2	22
New Package 2 GTIN 14	13666916037307
Package 2 height	15 cm
Package 2 width	30 cm
Package 2 length	40 cm
Package 2 weight	3.843 kg
Unit type of package 3	CAR
Number of units in package 3	1
New Package 3 GTIN 14	23666916037304
Package 3 height	13 cm
Package 3 width	4.1 cm
Package 3 length	9.4 cm
Package 3 weight	0.16 kg

Technical Drawings

Dimensions





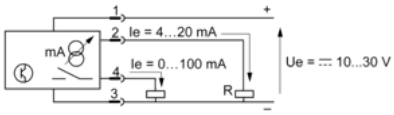
Receiver dimensions
(1)
(2)
Transmitter dimensions
(1)

Mounting and Clearance

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

Wiring Schemes

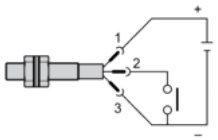
Receiver



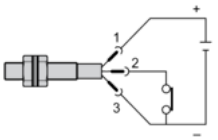
R max. < 800 Ω (Ue = 24 V), < 300 Ω (Ue = 12 V)

Wiring Schemes

Beam Break Test (only on Transmitter)



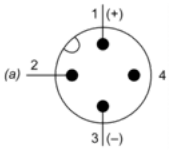
Beam Break Test (only on Transmitter)



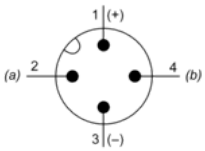
Beam made
Beam broken

Wiring Schemes

Sensor Connector Pin View

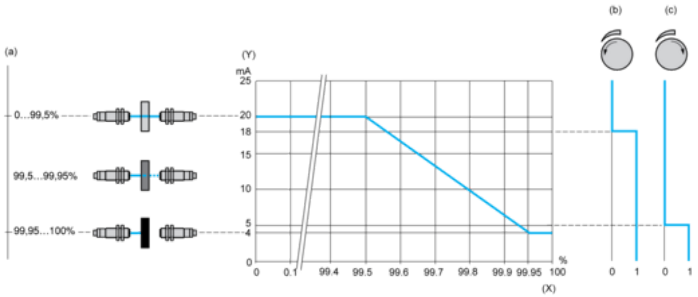


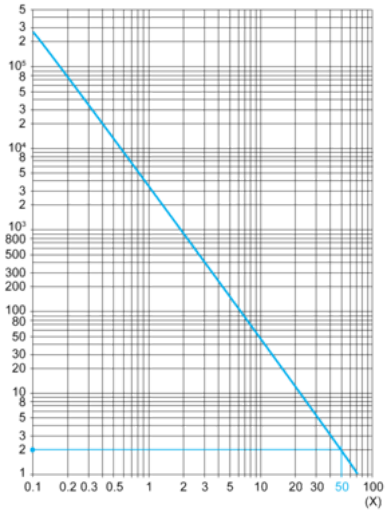
Sensor Connector Pin View



Transmitter
(a)
Receiver
(a)
(b)

Operation, Settings





Type, opacity of objectAnalogue output curveSwitching level of digital solid-statePNP output
(a)
(b)
(c)
(y)
(x)

Type, opacity of objectAnalogue output curveSwitching level of digital solid-statePNP output
(a)
(b)
(c)
(y)
(x)