

# XX7F1A2NAL01M12

Ultrasonic sensors XX, ultrasonic sensor  
parallelepipedic, Sn 0.1 m, NO, pre cabled M12  
0.15 m



## Main

Range of Product	Telemecanique Ultrasonic sensors XX
Sensor Type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX7
Sensor design	Flat form 33 x 19 x 7.6
Detection system	Diffuse
[Sn] nominal sensing distance	0.33 ft (0.1 m) fixed
Material	Plastic
Type of output signal	Discrete
Discrete output function	1 NO
Wiring Technique	3-wire
Discrete output type	NPN
[Us] rated supply voltage	12...24 V DC reverse polarity protection
Electrical connection	Remote male connector M12 4 pins, 0.49 ft (0.15 m)
[Sd] sensing range	0.02...0.33 ft (0.0064...0.102 m)
Beam angle	14 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure Material	ULTEM
Front material	Epoxy
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.02...0.33 ft (0.0064...0.102 m)
Maximum differential travel	0.03 in (0.7 mm)
Blind zone	0.00...0.25 in (0...6.4 mm)
Transmission frequency	500 kHz
Repeat accuracy	0.7 %
Minimum size of detected object	Cylinder diameter 2.5 mm Flat bar 1 mm wide
Status LED	Supply on 1 LED green) Output state 1 LED yellow)
Current Consumption	25 mA
Maximum switching current	100 mA
Maximum voltage drop	1 V
Switching frequency	<= 100 Hz
Maximum delay first up	20 ms
Maximum delay response	4 ms
Maximum delay recovery	4 ms
Marking	CE
Height	0.75 in (19 mm)
Width	0.31 in (8 mm)
Depth	1.30 in (33 mm)
Net Weight	0.09 lb(US) (0.04 kg)

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. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Standards	IEC 60947-5-2
Product Certifications	UL
Ambient Air Temperature for Operation	-4...149 °F (-20...65 °C)
Ambient Air Temperature for Storage	-40...176 °F (-40...80 °C)
Vibration resistance	+/-1 mm 10...55 Hz)IEC 60068-2-6
Shock resistance	30 gn in all 3 axes 11 ms IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

## Ordering and shipping details

Category	22490-SENSORS-ULTRASONIC (XX5,6)
Discount Schedule	DS2
GTIN	3389110704150
Nbr. of units in pkg.	1
Package weight(Lbs)	1.09 oz (31.0 g)
Returnability	No
Country of origin	US

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.42 in (3.6 cm)
Package 1 width	2.80 in (7.1 cm)
Package 1 Length	3.74 in (9.5 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Weight	24.34 oz (690.0 g)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

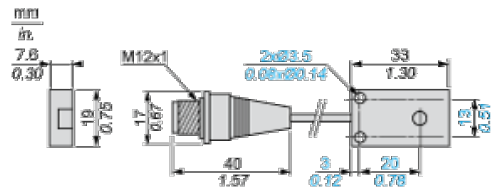
## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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Dimensions

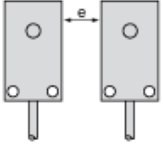


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Minimum Mounting Distances

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Side by side



e : respect the distances indicated on the detection curves

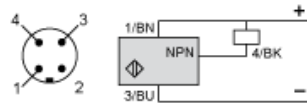
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Wiring Diagram

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3-Wire Type

NO outputs, NPN

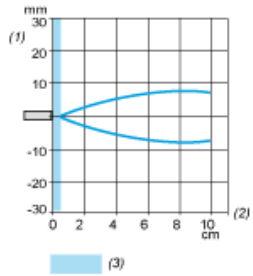


- (1) (+)
- (3) (-)
- (4) Output
- BN Brown
- BU Blue
- BK Black

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Curves

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- (1) Parallel movement
- (2) Distance
- (3) Blind zone for diffuse sensors.