

# XX512A2NAM8

Ultrasonic sensors XX, ultrasonic sensor cylindrical M12, Sn 0.1 m, NO, M8 connector



## Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX5
Sensor design	Cylindrical M12
Detection system	Diffuse
[Sn] nominal sensing distance	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 with reverse polarity protection
Electrical connection	Male connector M8 3 pins
[Sd] sensing range	0.0064...0.102 m
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure material	ULTEM
Front material	Epoxy
Thread type	M12 x 1
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.0064...0.102 m
Maximum differential travel	0.7 mm
Blind zone	0...6.4 mm
Transmission frequency	500 kHz
Repeat accuracy	0.7 %
Deviation angle from 90° of object to be detected	-10...10 °
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 with overload and short-circuit protection
Maximum voltage drop	1 V
Switching frequency	<= 125 Hz
Maximum delay first up	20 ms
Maximum delay response	3 ms
Maximum delay recovery	3 ms
Marking	CE
Threaded length	38 mm
Height	12 mm
Width	12 mm
Depth	50 mm
Net weight	0.011 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 TWSS Holding 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	-20...65 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 10...55 Hz)
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 conforming to IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 conforming to IEC 61000-4-3
Resistance to fast transients	1 kV level 3 conforming to IEC 61000-4-4

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.6 cm
Package 1 Width	3.6 cm
Package 1 Length	9.5 cm
Package 1 Weight	23.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	915.0 g

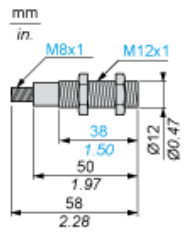
## Offer Sustainability

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>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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## Dimensions

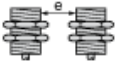


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Minimum Mounting Distances

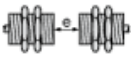
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Side by side



e : respect the distances indicated on the detection curves

Face to face

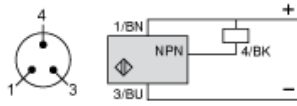


$e > 4 \times S_n$

## Wiring Diagram

### 3-Wire Type

NO outputs, NPN



(1) (+)

(3) (-)

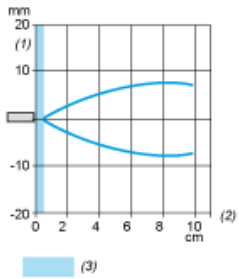
(4) Output

BN Brown

BU Blue

BK Black

## Curves



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