

# XX7V1A1PAM12

Ultrasonic sensors XX, ultrasonic sensor  
parallelepipedic, Sn 0.5 m, NO, M12 connector



## Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX7
Sensor design	Flat form 18 x 33 x 60 + cylindrical M18
Detection system	Diffuse
[Sn] nominal sensing distance	0.5 m adjustable with remote teach push-button
Material	Plastic
Type of output signal	Discrete
Discrete output function	1 NO
Wiring technique	3-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0.051...0.508 m
Beam angle	12 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure material	Valox
Front material	Epoxy
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.051...0.508 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	0...51 mm
Transmission frequency	300 kHz
Repeat accuracy	1.27 %
Minimum size of detected object	Cylinder diameter 2.5 mm at 0.15 m Flat bar 1 mm wide at 0.15 m
Status LED	Supply on: 1 LED (green) Output state: 1 LED (yellow)
Current consumption	40 mA
Maximum switching current	100 mA
Maximum voltage drop	1 V
Switching frequency	<= 40 Hz
Maximum delay first up	100 ms
Maximum delay response	10 ms
Maximum delay recovery	10 ms
Marking	CE
Height	44 mm
Width	18 mm
Depth	60 mm

## 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	4.0 cm
Package 1 Width	8.5 cm
Package 1 Length	8.7 cm
Package 1 Weight	60.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	1.17 kg
Unit Type of Package 3	S02
Number of Units in Package 3	30
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	2.238 kg

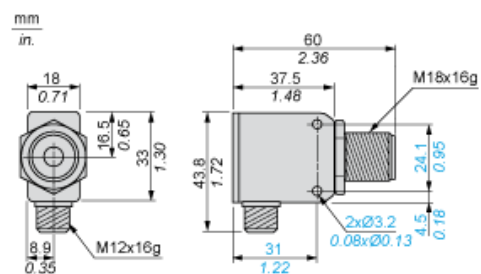
## Offer Sustainability

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

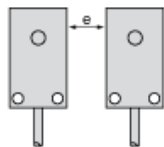


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## Minimum Mounting Distances

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### Side by side

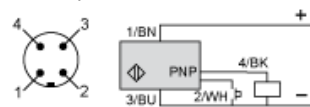


e :    respect the distances indicated on the detection curves

## Wiring Diagram

### 3-Wire Type

NO outputs, PNP

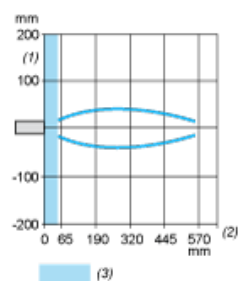


- (1) (+)
- (2) Teach input (WH)
- (3) (-)
- (4) Output
- BN Brown
- WH White
- BU Blue
- BK Black

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## Curves

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