

# XX218A3PHM12

Ultrasonic sensors XX, ultrasonic sensor cylindrical M18, 2 emptying levels, Sn 0.5 m, NO, M12



## Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	Application
Sensor name	XX2
Sensor design	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
Product specific application	For 2 emptying levels monitoring
[Sd] sensing range	0.051...0.508 m
Beam angle	6 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure material	Valox
Front material	Epoxy
Thread type	M18 x 1
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 %
Deviation angle from 90° of object to be detected	-7...7 °
Minimum size of detected object	Cylinder diameter 2.5 mm at 0.15 m
Status LED	Setting-up assistance: 1 LED (dual colour) Supply on: 1 LED (green) Output state: 1 LED (yellow)
Current consumption	40 mA
Maximum switching current	100 mA with overload and short-circuit protection
Maximum voltage drop	1 V
Maximum delay first up	100 ms
Maximum delay response	15 ms
Maximum delay recovery	1000 ms
Marking	CE
Threaded length	43 mm
Height	18 mm
Width	18 mm

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Depth	79 mm
Net weight	0.033 kg

## Environment

Standards	IEC 60947-5-2
Product certifications	cCSAus[RETURN]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 cm
Package 1 Width	8.5 cm
Package 1 Length	8.4 cm
Package 1 Weight	45 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	991 g

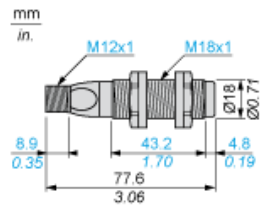
## Offer Sustainability

Sustainable offer status	Green Premium product
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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

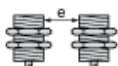


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## Minimum Mounting Distances

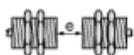
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### Side by side



e : respect the distances indicated on the detection curves

### Face to face

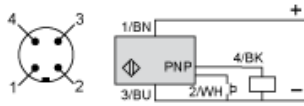


$e > 4 \times S_n$

## Wiring Diagram

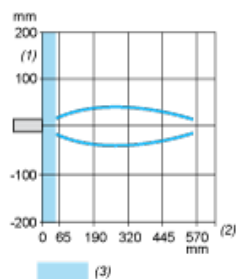
### 3-Wire Type

NO outputs, PNP



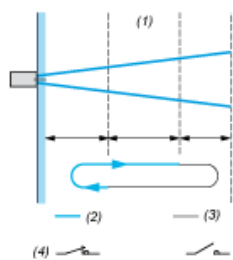
- (1) (+)
- (2) Teach input (WH)
- (3) (-)
- (4) Output
- BN Brown
- WH White
- BU Blue
- BK Black

## Curves



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

## Operating Curves



- (1) Adjustable detection zone
- (2) Output activated
- (3) Output deactivated
- (4) NO output