

# XX218A3PFM12

Ultrasonic sensors XX, ultrasonic sensor cylindrical M18, 2 filling 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	1.64 ft (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 reverse polarity protection
Electrical connection	Male connector M12 4 pins
Product Specific Application	For 2 filling levels monitoring
[Sd] sensing range	0.17...1.67 ft (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	0.17...1.67 ft (0.051...0.508 m) teach mode)
Maximum differential travel	0.10 in (2.5 mm)
Blind zone	0.00...2.01 in (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 0.49 ft (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 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	1.69 in (43 mm)
Height	0.71 in (18 mm)

Width	0.71 in (18 mm)
Depth	3.11 in (79 mm)
Net Weight	0.07 lb(US) (0.033 kg)

## Environment

Standards	IEC 60947-5-2
Product Certifications	UL cCSAus
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	785901636984
Nbr. of units in pkg.	1
Package weight(Lbs)	8.00 oz (226.796 g)
Returnability	No
Country of origin	US

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.50 in (3.8 cm)
Package 1 width	3.31 in (8.4 cm)
Package 1 Length	3.31 in (8.4 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Weight	7.94 lb(US) (3.602 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

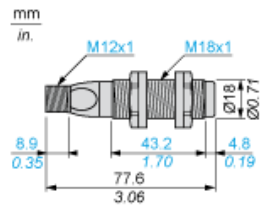
## Offer Sustainability

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

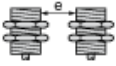


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## Minimum Mounting Distances

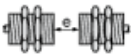
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### Side by side



e : respect the distances indicated on the detection curves

### Face to face

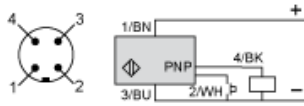


$e > 4 \times S_n$

## Wiring Diagram

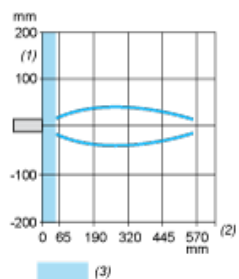
### 3-Wire Type

NO outputs, PNP



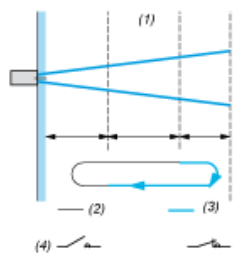
- (1) (+)
- (2) Teach input (WH)
- (3) (-)
- (4) Output
- BN Brown
- WH White
- BU Blue
- BK Black

## Curves



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

## Operating Curves



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