Product datasheet

Specifications



ultrasonic sensor cylindrical M18 - 2 emptying levels - Sn 0.5 m - NO - M12

XX218A3PHM12

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 %

Disclaimer: 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

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
Depth	79 mm
Net weight	0.033 kg

Environment

Standards	IEC 60947-5-2
Product certifications	cCSAus 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 Weight	48.988 g
Package 1 Height	4 cm
Package 1 width	8.5 cm
Package 1 Length	8.5 cm
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Weight	960.0 g
Package 2 Height	15 cm
Package 2 width	15 cm

Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

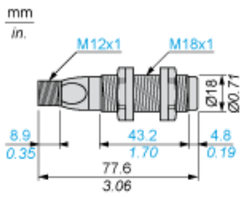
Contractual warranty

Warranty	18 months

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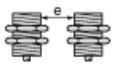
Dimensions Drawings

Dimensions



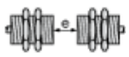
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face

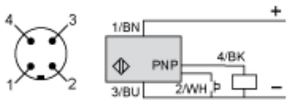


e > 4 x Sn

Wiring Diagram

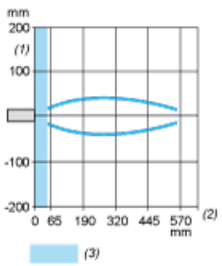
3-Wire Type

NO outputs, PNP



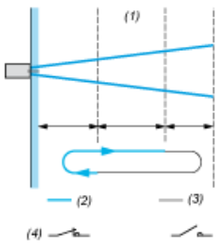
(1) (+)
(2) Teach input (WH)
(3) (-)
(4) Output
BN Brown
WH White
BU Blue
BK Black

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