Product datasheet

Specifications



ultrasonic sensor cylindrical M18 - Sn 0.5 m - 4..20 mA - M12 connector

XX918A3C2M12

Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX9
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	Analogue
Wiring technique	4-wire
Analogue output function	4...20 mA
[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	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)
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 1.6 mm

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

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 capacity	10...500 Ohm overload and short-circuit protection
Maximum voltage drop	1 V
Setting-up	Slope selection using teach button
Maximum delay first up	100 ms
Maximum delay response	25 ms
Maximum delay recovery	25 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	226.796 g
Package 1 Height	1.801 cm
Package 1 width	7.838 cm
Package 1 Length	1.801 cm
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Weight	3.602 kg
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

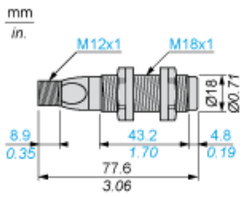
Contractual warranty

Warranty	18 months

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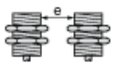
Dimensions Drawings

Dimensions



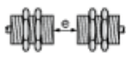
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face



e > 4 x Sn

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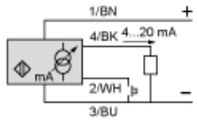
Connections and Schema

Wiring Diagram

4-Wire Type



(1) (+)
(2) Return signal or teach
(3) (-)
(4) Output signal

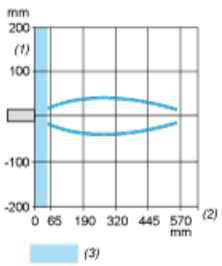


BN Brown
WH White
BU Blue
BK Black

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Performance Curves

Curves



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