

# XX9D1A1C2M12

Ultrasonic sensors XX, ultrasonic sensor  
80x80, Sn 1 m, 4...20 mA, M12 connector



## Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX9
Sensor design	Flat form 80 x 80 x 34
Detection system	Diffuse
[Sn] nominal sensing distance	1 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	15...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0.1...1 m
Beam angle	7 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure material	Valox
Front material	Epoxy
Thread type	M30 x 1.5
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.1...1 m (teach mode)
Blind zone	0...100 mm
Transmission frequency	180 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-5...5 °
Minimum size of detected object	Cylinder diameter 50.8 mm at 1 m
Status LED	Setting-up assistance: 1 LED (dual colour) Supply on: 1 LED (green) Output state: 1 LED (yellow)
Current consumption	60 mA
Maximum switching capacity	350 Ohm overload and short-circuit protection
Setting-up	Slope selection using teach button
Maximum delay first up	1200 ms
Maximum delay response	250 ms
Maximum delay recovery	250 ms
Marking	CE
Net weight	0.3 kg

## Environment

Standards	IEC 60947-5-2
Product certifications	cCSAus[RETURN]UL
Ambient air temperature for operation	0...70 °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	0.4 cm
Package 1 Width	9.5 cm
Package 1 Length	13.2 cm
Package 1 Weight	318 g
Unit Type of Package 2	S01
Number of Units in Package 2	13
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	4.125 kg
Unit Type of Package 3	S02
Number of Units in Package 3	13
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	4.589 kg

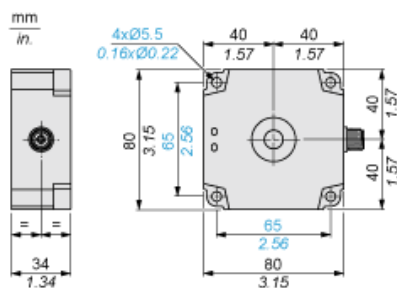
## Offer Sustainability

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

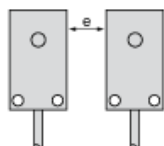


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## Minimum Mounting Distances

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### Side by side



e :    respect the distances indicated on the detection curves

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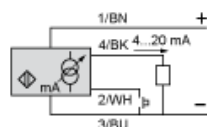
## Wiring Diagram

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### 4-Wire Type



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

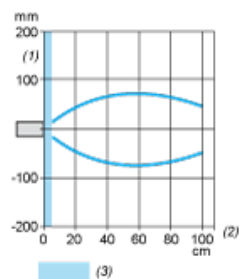


BN Brown  
WH White  
BU Blue  
BK Black

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## Curves

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