## Product data sheet Characteristics

## 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	420 mA
[Us] rated supply voltage	1524 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0.11 m
Beam angle	7 °
IP degree of protection	IP67 conforming to IEC 60529

#### Complementary

Enclosure material	Valox
Front material	Ероху
Thread type	M30 x 1.5
Supply voltage limits	1028 V DC
[Sa] assured operating distance	0.11 m (teach mode)
Blind zone	0100 mm
Transmission frequency	180 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-55 °
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 UL
Ambient air temperature for operation	070 °C
Ambient air temperature for storage	-4080 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 1055 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

PCE	
1	
318 g	
0.4 cm	
9.5 cm	
13.2 cm	
	1 318 g 0.4 cm 9.5 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
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
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 www.P65Warnings.ca.gov

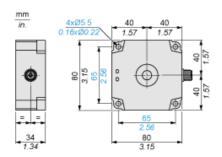
### Contractual warranty

Warranty	18 months

# Product data sheet **Dimensions Drawings**

# XX9D1A1C2M12

### **Dimensions**



# Product data sheet **Mounting and Clearance**

# XX9D1A1C2M12

### Minimum Mounting Distances

### Side by side



e: respect the distances indicated on the detection curves

## Product data sheet Connections and Schema

# XX9D1A1C2M12

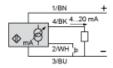
### Wiring Diagram

### 4-Wire Type



(1) (2) (3) Return signal or teach

(4) Output signal



BN Brown

WH White

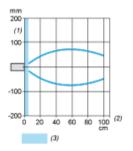
BU Blue

BK Black

#### XX9D1A1C2M12 Product data sheet

## **Performance Curves**

### Curves



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