

XX9V1A1F1M12

Ultrasonic sensors XX, ultrasonic sensor
parallelepipedic, Sn 0.5 m, 0...10 V, 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 18 x 33 x 60 + 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	0...10 V
[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 2.5 mm at 0.15 m Flat bar 1 mm wide 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 capacity	>= 1 kOhm overload and short-circuit protection
Setting-up	Slope selection using teach button
Maximum delay first up	100 ms
Maximum delay response	15 ms
Maximum delay recovery	10 ms
Marking	CE
Threaded length	20 mm
Height	65 mm
Width	44 mm
Depth	18 mm
Net weight	0.09 kg

Environment

Standards	IEC 60947-5-2
Product certifications	UL cCSAus
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	58 g
Package 1 Height	3.8 cm
Package 1 width	8.6 cm
Package 1 Length	8.6 cm
Unit Type of Package 2	CAR
Number of Units in Package 2	1
Package 2 Weight	130 g
Package 2 Height	7.7 cm
Package 2 width	7.7 cm
Package 2 Length	15.5 cm
Unit Type of Package 3	S03
Number of Units in Package 3	18
Package 3 Weight	1.687 kg
Package 3 Height	30 cm
Package 3 width	30 cm
Package 3 Length	40 cm

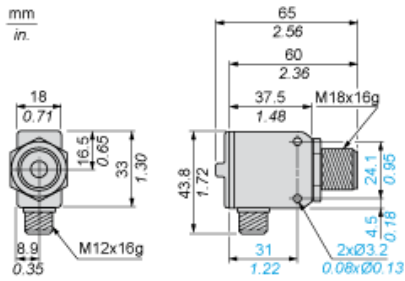
Offer Sustainability

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

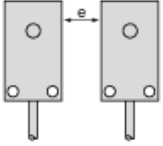
Warranty	18 months
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Dimensions



Minimum Mounting Distances

Side by side



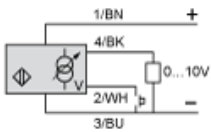
e : respect the distances indicated on the detection curves

Wiring Diagram

4-Wire Type

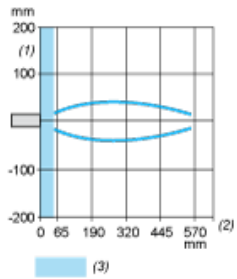


- (1) (+)
- (2) Return signal or teach
- (3) (-)
- (4) Output signal



- BN Brown
- WH White
- BU Blue
- BK Black

Curves



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