

Product data sheet

Specifications



Ultrasonic sensors XX, ultrasonic sensor cylindrical M18, Sn 0.5 m, 0...10 V, M12 connector

XX918A3F1M12

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 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 1.6 mm

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
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	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

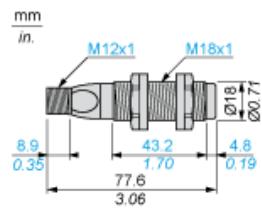
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.0 cm
Package 1 Width	8.5 cm
Package 1 Length	8.5 cm
Package 1 Weight	48.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	15
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.643 kg

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
California proposition 65	WARNING: This product can expose you to chemicals including: Diisonyl 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

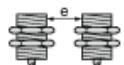
Contractual warranty

Warranty	18 months
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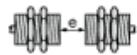
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face



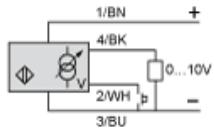
e > 4 x Sn

Wiring Diagram

4-Wire Type



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



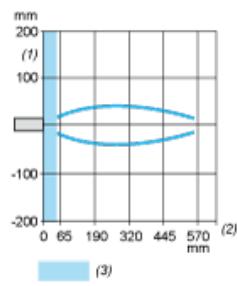
BN Brown

WH White

BU Blue

BK Black

Curves



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

Recommended replacement(s)