

Product datasheet

Specifications



ultrasonic sensor cylindrical M18 - Sn 0.5 m - 0..10 V - M12 connector

XX918A3F1M12

Main

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|-------------------------------|--|
| 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

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|---|------------------------------|
| 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

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|---------------------------------------|--|
| 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

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|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 48.0 g |
| Package 1 Height | 4 cm |
| Package 1 width | 8.5 cm |
| Package 1 Length | 8.5 cm |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 15 |
| Package 2 Weight | 5.643 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 15 cm |
| Package 2 Length | 40 cm |

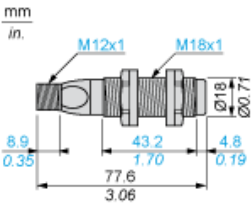
Offer Sustainability

| | |
|----------------------------|---|
| 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

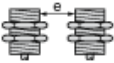
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|----------|-----------|
| Warranty | 18 months |
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Dimensions



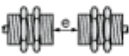
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face



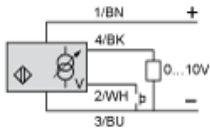
e > 4 x Sn

Wiring Diagram

4-Wire Type

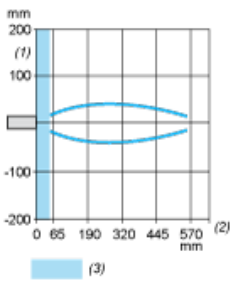


- (1) (+)
- (2) Return signal or teach
- (3) (-)
- (4) Output signal



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

Curves



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