

## XX9V1A1F1M12

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



### Main

|                               |                                                |
|-------------------------------|------------------------------------------------|
| Range of product              | OsiSense 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<br>Flat bar 1 mm wide at 0.15 m                                              |
| Status LED                                        | 1 LED (dual colour) for setting-up assistance<br>1 LED (green) for supply on<br>1 LED (yellow) for output state |
| Current consumption                               | 40 mA                                                                                                           |
| Maximum switching capacity                        | >= 1 kOhm overload and short-circuit protection                                                                 |
| Setting-up                                        | Slope selection using teach button                                                                              |
| Delay first up                                    | 100 ms                                                                                                          |
| Delay response                                    | 15 ms                                                                                                           |
| Delay recovery                                    | 10 ms                                                                                                           |
| Marking                                           | CE                                                                                                              |
| Threaded length                                   | 20 mm                                                                                                           |
| Height                                            | 65 mm                                                                                                           |
| Width                                             | 44 mm                                                                                                           |
| Depth                                             | 18 mm                                                                                                           |
| Product weight                                    | 0.09 kg                                                                                                         |

### Environment

|           |               |
|-----------|---------------|
| standards | IEC 60947-5-2 |
|-----------|---------------|

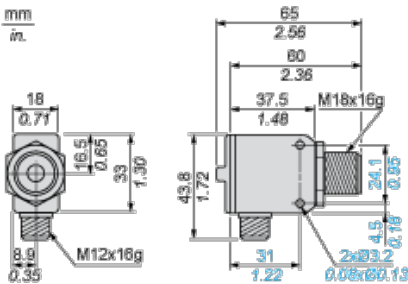
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|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| product certifications                | CCSAus<br>UL                                               |
| 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 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                   |

### Offer Sustainability

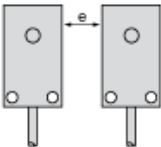
|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Sustainable offer status         | Not Green Premium product                                             |
| RoHS (date code: YYWW)           | Compliant - since 1140 - Schneider Electric declaration of conformity |
| REACH                            | Reference contains SVHC above the threshold                           |
| Product end of life instructions | Available                                                             |

### Dimensions



### Minimum Mounting Distances

#### Side by side



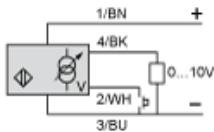
e : respect the distances indicated on the detection curves

### Wiring Diagram

#### 4-Wire Type

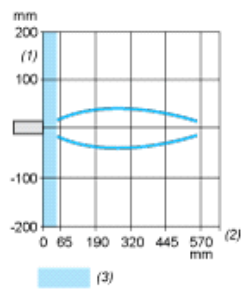


- (1) (+)
- (2) Return signal or teach
- (3) (-)
- (4) Output signal



BN Brown  
WH White  
BU Blue  
BK Black

## Curves



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