

Product data sheet

Specifications



Ultrasonic sensors XX, ultrasonic sensor cylindrical M30, Sn 1 m, NO, M12 connector

XX6V3A1PAM12

❗ Discontinued on: 25 May 2023

❗ Discontinued

Main

| | |
|-------------------------------|---|
| Range of product | Telemecanique Ultrasonic sensors XX |
| Sensor type | Ultrasonic sensor |
| Series name | General purpose |
| Sensor name | XX6 |
| Sensor design | Cylindrical M30 |
| Detection system | Diffuse |
| [Sn] nominal sensing distance | 1 m adjustable with remote teach push-button |
| Material | Plastic |
| Type of output signal | Discrete |
| Discrete output function | 1 NO |
| Wiring technique | 3-wire |
| Discrete output type | PNP |
| [Us] rated supply voltage | 12...24 V DC with reverse polarity protection |
| Electrical connection | Male connector M12 4 pins |
| [Sd] sensing range | 0.1...1 m |
| Beam angle | 7 ° |
| IP degree of protection | IP67 conforming to IEC 60529 |

Complementary

| | |
|---------------------------------|------------------------|
| Enclosure material | Valox |
| Front material | Epoxy |
| Thread type | M30 x 1.5 |
| Supply voltage limits | 10...28 V DC |
| [Sa] assured operating distance | 0.1...1 m (teach mode) |
| Maximum differential travel | 2.5 mm |
| Blind zone | 0...100 mm |
| Transmission frequency | 180 kHz |
| Repeat accuracy | 0.9 % |

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| Deviation angle from 90° of object to be detected | -7...7 ° |
| 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 current | 100 mA with overload and short-circuit protection |
| Maximum voltage drop | 1.5 V |
| Switching frequency | <= 70 Hz |
| Maximum delay first up | 75 ms |
| Maximum delay response | 15 ms |
| Maximum delay recovery | 75 ms |
| Marking | CE |
| Threaded length | 37 mm |
| Height | 96 mm |
| Width | 30 mm |
| Net weight | 0.09 kg |

Environment

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|---------------------------------------|--|
| Standards | IEC 60947-5-2 |
| Product certifications | UL cCSAus |
| Ambient air temperature for operation | 0...70 °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 Height | 3.0 cm |
| Package 1 Width | 9.525 cm |
| Package 1 Length | 3.0 cm |
| Package 1 Weight | 104.326 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 18 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |

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| Package 2 Weight | 2.348 kg |
|------------------|----------|

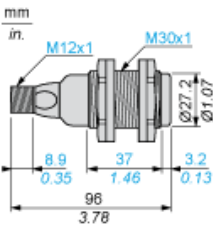
Offer Sustainability

| | |
|----------------------------|---|
| 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: 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

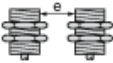
| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



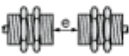
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face

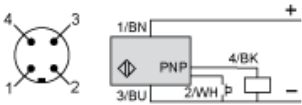


e > 4 x Sn

Wiring Diagram

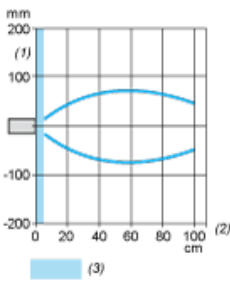
3-Wire Type

NO outputs, PNP



- | | |
|-----|------------------|
| (1) | (+) |
| (2) | Teach input (WH) |
| (3) | (-) |
| (4) | Output |
| BN | Brown |
| WH | White |
| BU | Blue |
| BK | Black |

Curves



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

Recommended replacement(s)

XX6V3A1PAM12 is replaced by:

1x



Ultrasonic sensors XX, ultrasonic sensor, plastic, cylindrical M30, straight, 1 m, PNP
XXS30P1PM12