## Product data sheet Characteristics

# XX518A3NAM12

ultrasonic sensor cylindrical M18 - Sn 0.5 m - NO - M12 connector

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|----|------|---|---|---|
| -1 | VΙ   | а | п |   |

| Commercial Status   | Commercialised   |
|---|--|
| Range of product  | OsiSense XX  |
| Sensor type   | Ultrasonic sensor  |
| Series name   | General purpose  |
| Sensor name   | XX5  |
| Sensor design   | Cylindrical M18  |
| Detection system  | Diffuse  |
| [Sn] nominal sensing distance   | 0.5 m adjustable with remote teach pushbutton  |
| Material  | Plastic  |
| Type of output signal   | Discrete   |
| Discrete output function  | 1 NO   |
| Wiring technique  | 3-wire   |
| 0 1   | 3-WIIE   |
| Discrete output type  | NPN  |
|   |  |
| Discrete output type [Us] rated supply volt-  | NPN  |
| Discrete output type [Us] rated supply voltage  | NPN 1224 V DC with reverse polarity protection   |
| Discrete output type [Us] rated supply voltage Electrical connection                    | NPN  1224 V DC with reverse polarity protection  Male connector M12 4 pins               |
| Discrete output type [Us] rated supply voltage Electrical connection [Sd] sensing range | NPN  1224 V DC with reverse polarity protection  Male connector M12 4 pins  0.0510.508 m |

#### Complementary

| Complementary                                     |   |
|---|---|
| Enclosure material                                | Valox   |
| Front material                                    | Ероху   |
| ISO thread  | M18 x 1   |
| Supply voltage limits                             | 1028 V DC   |
| [Sa] assured operating distance                   | 0.0510.508 m (teach mode)                                   |
| Maximum differential travel                       | 2.5 mm  |
| Blind zone  | 051 mm  |
| Transmission frequency                            | 300 kHz   |
| Repeat accuracy                                   | 1.27 %  |
| Deviation angle from 90° of object to be detected | -77 °   |
| Minimum size of detected object                   | Cylinder diameter 2.5 mm up to 150 mm sensing distance      |
| Status LED  | 1 LED (yellow) for output state 1 LED (green) for supply on |
| Current consumption                               | 40 mA   |
| Maximum switching current                         | 100 mA with overload and short-circuit protection           |
| Voltage drop                                      | <1V   |
| Switching frequency                               | <= 40 Hz  |
| Delay first up                                    | 100 ms  |
| Delay response                                    | 10 ms   |
| Delay recovery                                    | 10 ms   |
| Marking   | CE  |
| Threaded length                                   | 43 mm   |
| CAD overall height                                | 18 mm   |
| CAD overall width                                 | 18 mm   |
| CAD overall depth                                 | 79 mm   |
| Product weight                                    | 0.033 kg  |
|   |   |

#### Environment

| Standards                             | IEC 60947-5-2  |
|---------------------------------------|--|
| Ambient air temperature for operation | -2065 °C   |
| Ambient air temperature for storage   | -4080 °C   |
| Vibration resistance                  | +/-1 mm conforming to IEC 60068-2-6 1055 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                   |

### RoHS compliance

| RoHS EUR status                | Compliant |
|--------------------------------|-----------|
| RoHS EUR conformity date(YYWW) | 1140      |

#### Contractual warranty

| Period | 18 months |
|--------|-----------|

