



### Main

|                              |   |
|------------------------------|---|
| Range of product             | Telemecanique Ultrasonic sensors XX           |
| Sensor type                  | Ultrasonic sensor                             |
| Sensor name                  | XX9   |
| Material                     | PBT (polybutylene terephthalate)              |
| Sensor design                | Ø 30 mm                                       |
| Product specific application | Analog output                                 |
| Type of output signal        | Analogue                                      |
| Wiring technique             | 4-wire  |
| [Us] rated supply voltage    | 15...24 V DC with reverse polarity protection |
| Electrical connection        | 1 male connector M12 4 pins                   |
| [Sd] sensing range           | 0.12...2 m                                    |
| Beam angle                   | 10 °  |
| IP degree of protection      | IP67 conforming to IEC 60529                  |

### Complementary

|   |   |
|---|---|
| Enclosure material                                | ULTEM   |
| Front material                                    | Silicone  |
| ISO thread  | M30 x 1.5   |
| Supply voltage limits                             | 10...28 V DC  |
| Analogue output range                             | 4...20 mA   |
| [Sn] nominal sensing distance                     | 2 m   |
| Type of sensing window                            | Adjustable  |
| [Sa] assured operating distance                   | 0.12...2 m (teach mode)   |
| Maximum differential travel                       | 2.5 mm  |
| Blind zone  | 51 mm   |
| Transmission frequency                            | 200 kHz   |
| Repeat accuracy                                   | 0.9 %   |
| Deviation angle from 90° of object to be detected | -10...10 °  |
| Minimum size of detected object                   | Cylinder diameter 1.6 mm - up to 635 mm sensing distance  |
| Status LED  | Output state: 2 LEDs (green/red (flashing))<br>Setting-up assistance: 2 LEDs (green/red (flashing))<br>Distance indication: 2 LEDs (yellow) |
| Current consumption                               | 100 mA  |
| Maximum switching current                         | 100 mA with overload and short-circuit protection   |
| Maximum switching capacity                        | 10...500 Ohm with overload and short-circuit protection   |
| Maximum delay first up                            | 1200 ms   |
| Maximum delay response                            | 35 ms   |
| Maximum delay recovery                            | 1000 ms   |
| Marking   | CE  |
| Height  | 30 mm   |
| Width   | 30 mm   |
| Depth   | 30 mm   |
| Length  | 96 mm   |
| CAD overall height                                | 95.99 mm  |
| CAD overall width                                 | 34.17 mm  |
| CAD overall depth                                 | 34.17 mm  |
| Net weight  | 0.09 kg   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TWSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | IEC 60947-5-2  |
| Product certifications                | UL   |
| NEMA degree of protection             | NEMA 4X (indoor use only)                                  |
| Ambient air temperature for operation | 0...50 °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   |

## Offer Sustainability

|  |   |
|--|---|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>  |

## Contractual warranty

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