

Ultrasonic sensors XX, ultrasonic sensor, M18  
metal, Sn 50 mm, NPN NC, cable 5 m



#### Main

|                               |   |
|-------------------------------|---|
| Range of product              | Telemecanique Ultrasonic sensors XX           |
| Sensor type                   | Ultrasonic sensor                             |
| Series name                   | General purpose                               |
| Sensor name                   | XXV   |
| Sensor design                 | Cylindrical M18                               |
| Detection system              | Diffuse                                       |
| [Sn] nominal sensing distance | 0.05 m fixed                                  |
| Material                      | Metal   |
| Type of output signal         | Discrete                                      |
| Discrete output function      | 1 NC  |
| Wiring technique              | 3-wire  |
| Discrete output type          | NPN   |
| [Us] rated supply voltage     | 12...24 V DC with reverse polarity protection |
| Electrical connection         | Cable, 5 m cable length                       |
| [Sd] sensing range            | 0.003...0.05 m                                |
| Beam angle                    | 10 °  |
| IP degree of protection       | IP67 conforming to IEC 60529                  |

#### Complementary

|   |   |
|---|---|
| Enclosure material                                | Brass   |
| Front material                                    | Epoxy   |
| Thread type                                       | M18 x 1   |
| Supply voltage limits                             | 10...36 V DC                                      |
| [Sa] assured operating distance                   | 0.003...0.05 m                                    |
| Maximum differential travel                       | 3 mm  |
| Blind zone  | 0...3 mm  |
| Transmission frequency                            | 360 kHz   |
| Repeat accuracy                                   | 1.5 %   |
| Deviation angle from 90° of object to be detected | -8...8 °  |
| Minimum size of detected object                   | Cylinder diameter 2 mm at 0.02 m                  |
| Status LED  | Output state: 1 LED (yellow)                      |
| Current consumption                               | 15 mA   |
| Maximum switching current                         | 200 mA with overload and short-circuit protection |
| Maximum voltage drop                              | 2 V   |
| Switching frequency                               | <= 80 Hz  |
| Maximum delay first up                            | 5 ms  |
| Maximum delay response                            | 4 ms  |
| Maximum delay recovery                            | 4 ms  |
| Marking   | CE  |
| Threaded length                                   | 51 mm   |
| Height  | 18 mm   |
| Width   | 18 mm   |
| Depth   | 65 mm   |
| Net weight  | 0.2 kg  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | IEC 60947-5-2  |
| Product certifications                | cULus  |
| Ambient air temperature for operation | 0...60 °C  |
| Ambient air temperature for storage   | -40...80 °C  |
| Vibration resistance                  | +/- 2 mm conforming to IEC 60068-2-6 (f = 10...55 Hz)      |
| Shock resistance                      | 50 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         |
| Package 1 Height             | 6.6 cm    |
| Package 1 Width              | 13.0 cm   |
| Package 1 Length             | 9.4 cm    |
| Package 1 Weight             | 199.581 g |

## Offer Sustainability

|  |   |
|--|---|
| California proposition 65                  | WARNING: This product can expose you to chemicals including: Diisobutyl 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>  |

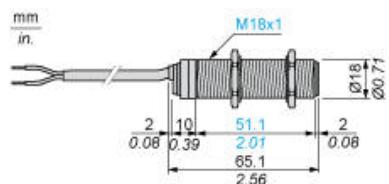
## Contractual warranty

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

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Minimum Mounting Distances

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e(1) 25 mm

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e(2) 700 mm

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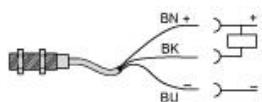
e(3) 60 mm

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Wiring Diagram

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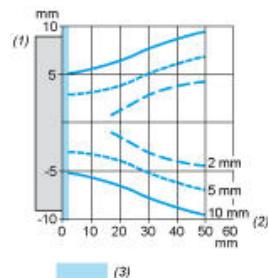
BN Brown  
BU Blue  
BK Black

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## Curves

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### Square Object



### Cylindrical Object

