



## 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 teach push-button         |
| Material                      | Metal                                         |
| Type of output signal         | Discrete                                      |
| Discrete output function      | 1 NC + 1 NO                                   |
| Wiring technique              | 4-wire                                        |
| Discrete output type          | NPN                                           |
| [Us] rated supply voltage     | 12...24 V DC with reverse polarity protection |
| Electrical connection         | Male connector M12 4 pins                     |
| [Sd] sensing range            | 0.051...0.991 m                               |
| Beam angle                    | 10 °                                          |
| IP degree of protection       | IP65 conforming to IEC 60529                  |

## Complementary

|                                                   |                                                     |
|---------------------------------------------------|-----------------------------------------------------|
| Enclosure material                                | Stainless steel 303                                 |
| Front material                                    | Silicone                                            |
| Thread type                                       | M30 x 1.5                                           |
| Supply voltage limits                             | 10...28 V DC                                        |
| Function available                                | Without synchronisation mode                        |
| [Sa] assured operating distance                   | 0.051...0.991 m (teach mode)                        |
| Maximum differential travel                       | 2.5 mm                                              |
| Blind zone                                        | 0...51 mm                                           |
| Transmission frequency                            | 200 kHz                                             |
| Repeat accuracy                                   | 0.9 %                                               |
| Deviation angle from 90° of object to be detected | -7...7 °                                            |
| Minimum size of detected object                   | Cylinder diameter 1.6 mm at 0.635 m                 |
| Status LED                                        | Setting-up assistance: 1 LED (green/red (flashing)) |
| Current consumption                               | 50 mA                                               |
| Maximum switching current                         | 100 mA with overload and short-circuit protection   |
| Maximum voltage drop                              | 1 V                                                 |
| Switching frequency                               | <= 10 Hz                                            |
| Maximum delay first up                            | 720 ms                                              |
| Maximum delay response                            | 20 ms                                               |
| Maximum delay recovery                            | 20 ms                                               |
| Marking                                           | CE                                                  |
| Threaded length                                   | 45 mm                                               |
| Height                                            | 35 mm                                               |
| Width                                             | 35 mm                                               |
| Depth                                             | 85 mm                                               |
| Net weight                                        | 0.091 kg                                            |

## Environment

|                                       |                                                            |
|---------------------------------------|------------------------------------------------------------|
| Standards                             | IEC 60947-5-2                                              |
| Product certifications                | CCSAus<br>UL                                               |
| Ambient air temperature for operation | 0...60 °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       |
| Package 1 Weight             | 150 g   |
| Package 1 Height             | 14.2 cm |
| Package 1 width              | 7.1 cm  |
| Package 1 Length             | 5.5 cm  |

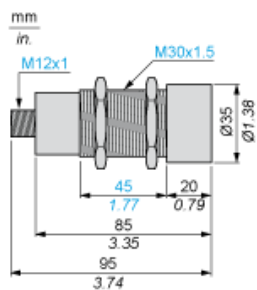
## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |
| Circularity Profile        |  <a href="#">End Of Life Information</a>                                                          |

## Contractual warranty

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

## Dimensions

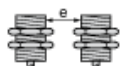


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## Minimum Mounting Distances

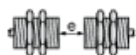
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### Side by side



e :    respect the distances indicated on the detection curves

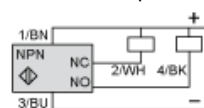
### Face to face



$e > 4 \times S_n$

## Wiring Diagram

NO + NC Outputs, NPN

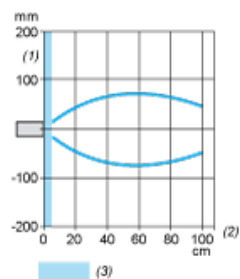


BN Brown  
WH White  
BU Blue  
BK Black

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## Curves

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