

# XS512B1MAL2

Inductive proximity sensors XS, inductive sensor XS5 M12, L53mm, brass, Sn2mm, 24...240VAC/DC, cable 2 m



## Main

|                                    |                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------|
| Range of product                   | Telemecanique Inductive proximity sensors XS                                    |
| Series name                        | General purpose                                                                 |
| Sensor type                        | Inductive proximity sensor                                                      |
| Device application                 | -                                                                               |
| Sensor name                        | XS5                                                                             |
| Sensor design                      | Cylindrical M12                                                                 |
| Size                               | 54 mm                                                                           |
| Body type                          | Fixed                                                                           |
| Detector flush mounting acceptance | Flush mountable                                                                 |
| Material                           | Metal                                                                           |
| Type of output signal              | Discrete                                                                        |
| Wiring technique                   | 2-wire                                                                          |
| [Sn] nominal sensing distance      | 2 mm                                                                            |
| Discrete output function           | 1 NO                                                                            |
| Output circuit type                | AC/DC                                                                           |
| Electrical connection              | Cable                                                                           |
| Cable length                       | 2 m                                                                             |
| [Us] rated supply voltage          | 24...240 V AC/DC with reverse polarity protection                               |
| Switching capacity in mA           | 5...200 mA AC/DC                                                                |
| IP degree of protection            | IP68 double insulation conforming to IEC 60529<br>IP69K conforming to DIN 40050 |

## Complementary

|                          |                              |
|--------------------------|------------------------------|
| Thread type              | M12 x 1                      |
| Detection face           | Frontal                      |
| Front material           | PPS                          |
| Enclosure material       | Nickel plated brass          |
| Operating zone           | 0...1.6 mm                   |
| Differential travel      | 1...15% of Sr                |
| Cable composition        | 2 x 0.34 mm <sup>2</sup>     |
| Wire insulation material | PVC                          |
| Status LED               | Output state: 1 LED (yellow) |
| Supply voltage limits    | 20...264 V AC/DC             |
| Maximum residual current | 0.8 mA open state            |
| Switching frequency      | <= 1000 Hz DC<br><= 25 Hz AC |
| Maximum voltage drop     | <5.5 V (closed)              |
| Maximum delay first up   | 20 ms                        |
| Maximum delay response   | 0.5 ms                       |
| Maximum delay recovery   | 0.2 ms                       |
| Marking                  | CE                           |
| Threaded length          | 42 mm                        |
| Length                   | 53 mm                        |
| Net weight               | 0.075 kg                     |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA[RETURN]UL                                                           |
| Ambient air temperature for operation | -25...70 °C                                                             |
| Ambient air temperature for storage   | -40...85 °C                                                             |
| Vibration resistance                  | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| Shock resistance                      | 50 gn for 11 ms conforming to IEC 60068-2-27                            |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 13.000 cm |
| Package 1 Width              | 4.100 cm  |
| Package 1 Length             | 9.400 cm  |
| Package 1 Weight             | 74.000 g  |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 44        |
| Package 2 Height             | 30 cm     |
| Package 2 Width              | 30 cm     |
| Package 2 Length             | 40 cm     |
| Package 2 Weight             | 3.778 kg  |

## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| Circularity Profile                        |  <a href="#">End of Life Information</a>                                                                                                                                                                                                                                                       |
| 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 |
|----------|-----------|

Dimensions



### Minimum Mounting Distances

Side by side



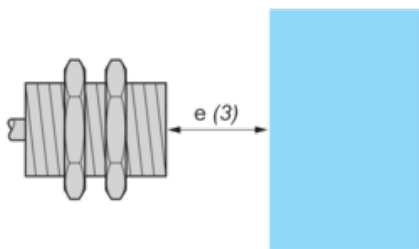
$e (1) \geq 8 \text{ mm}/0.31 \text{ in.}$

Face to face



$e (2) \geq 48 \text{ mm}/1.89 \text{ in.}$

Facing a metal object



$e (3) \geq 12 \text{ mm}/0.47 \text{ in.}$

### Mounting

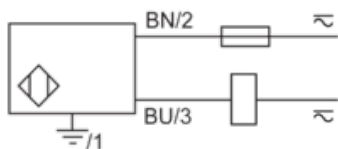


(1) Bending cable: 4 x external cable diameter

## Wiring Schemes

### 2-Wire AC or DC

NO output



BU : Blue

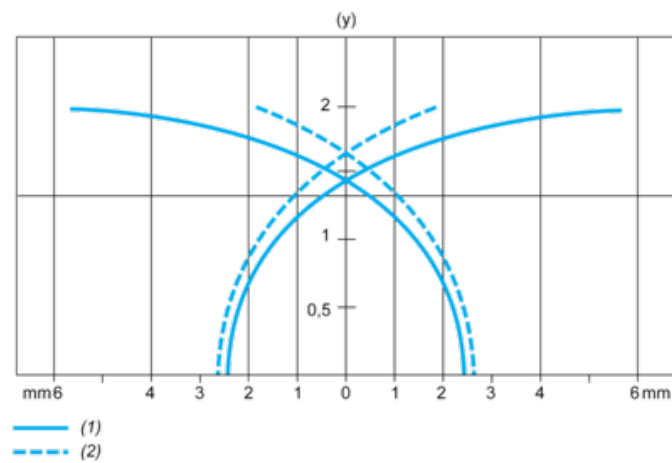
BN : Brown

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Performance Curves

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Standard Steel Target : 12x12x1 mm



(1) Pick-up points

(2) Drop-out points (object approaching from the side)

(y) Sensing distance in mm