## Product data sheet Characteristics

## XS1M12MA250

Inductive proximity sensors XS, inductive sensor XS1 M12, L55mm, brass, Sn2mm, 24...240VAC/DC, cable 2 m





#### Main

| Trial I                            |  |
|------------------------------------|--|
| Range of product                   | Telemecanique Inductive proximity sensors XS             |
| Series name                        | General purpose  |
| Sensor type                        | Inductive proximity sensor                               |
| Wiring configuration               | 2-wire   |
| Output circuit type                | AC/DC  |
| Protection type                    | Short-circuit protection multi voltage                   |
| Device application                 | 2-wire DC short-circuit protection                       |
| Sensor name                        | XS1  |
| Sensor design                      | Cylindrical M12  |
| Size                               | 55 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   |
| Electrical connection              | Cable  |
| Cable length                       | 2 M  |
| [Us] rated supply voltage          | 24210 V DC<br>24240 V AC 50/60 Hz                        |
| Switching capacity in mA           | 5200 mA AC/DC with overload and short-circuit protection |
| IP degree of protection            | IP68 double insulation conforming to IEC 60529           |
|                                    |  |

#### Complementary

| Thread type              | M12 x 1                      |  |
|--------------------------|------------------------------|--|
| Detection face           | Frontal                      |  |
| Front material           | PPS                          |  |
| Enclosure material       | Nickel plated brass          |  |
| Operating zone           | 01.6 Mm                      |  |
| Differential travel      | 115% of Sr                   |  |
| Cable composition        | 2 x 0.34 mm²                 |  |
| Wire insulation material | PvR                          |  |
| Status LED               | Output state: 1 LED (yellow) |  |

| Supply voltage limits    | 20264 V AC/DC                |
|--------------------------|------------------------------|
| Maximum residual current | 1.5 MA open state            |
| Switching frequency      | <= 4000 Hz DC<br><= 25 Hz AC |
| Maximum voltage drop     | <5.5 V (closed state)        |
| Maximum delay first up   | 70 Ms                        |
| Maximum delay response   | 0.2 Ms                       |
| Maximum delay recovery   | 0.2 Ms                       |
| Marking                  | CE                           |
| Threaded length          | 42 Mm                        |
| Length                   | 57 Mm                        |
| Net weight               | 0.075 Kg                     |
|                          |                              |

## Environment

| Product certifications                | CCC  |
|---------------------------------------|--|
|                                       | UL   |
|                                       | CSA  |
| Ambient air temperature for operation | -2570 °C   |
| Ambient air temperature for storage   | -4085 °C   |
| Vibration resistance                  | 25 gn amplitude = +/- 2 mm (f = 1055 Hz) conforming to IEC 60068-2-6 |
| Shock resistance                      | 50 gn for 11 ms conforming to IEC 60068-2-7                          |

## Packing Units

| 3                            |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 94 G     |
| Package 1 Height             | 4.2 Cm   |
| Package 1 width              | 9.6 Cm   |
| Package 1 Length             | 13 Cm    |
| Unit Type of Package 2       | BAG      |
| Number of Units in Package 2 | 1        |
| Package 2 Weight             | 94 G     |
| Package 2 Height             | 2.5 Cm   |
| Package 2 width              | 20 Cm    |
| Package 2 Length             | 15 Cm    |
| Unit Type of Package 3       | S02      |
| Number of Units in Package 3 | 22       |
| Package 3 Weight             | 2.384 Kg |
| Package 3 Height             | 15 Cm    |
| Package 3 width              | 30 Cm    |
| Package 3 Length             | 40 Cm    |
|                              |          |

## Offer Sustainability

| Sustainable offer status   | Green Premium product                                      |
|----------------------------|--|
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free               | Yes  |
| RoHS exemption information | ₽¥Yes  |
| Environmental Disclosure   | Product Environmental Profile                              |
| Circularity Profile        | End Of Life Information                                    |

## Contractual warranty

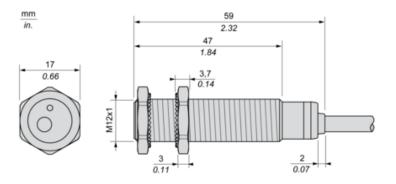
| Warranty | 18 months |
|----------|-----------|



# Product data sheet Dimensions Drawings

## XS1M12MA250

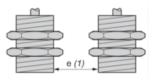
## Dimensions



## XS1M12MA250

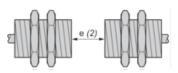
## Minimum Mounting Distances

#### Side by side

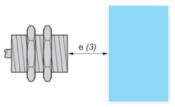


e (1)  $\geq$  4 mm/0.16 in.

Face to face

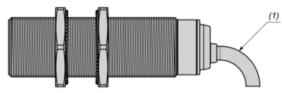


e (2) ≥ 24 mm/0.94 in. Facing a metal object



e (3) ≥ 6 mm/0.24 in.

## Mounting



(1) Bending cable: 4 x external cable diameter

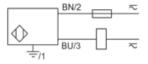
## Product data sheet Connections and Schema

## XS1M12MA250

## Wiring Schemes

## 2-Wire AC or DC

NO output

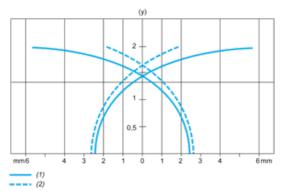


BU : Blue BN : Brown

## XS1M12MA250

## **Performance Curves**

Standard Steel Target: 12x12x1 mm



- (1) Pick-up points
- (2) Drop-out points (object approaching from the side)
- (y) Sensing distance in mm

Product Life Status: Commercialised