

## Product data sheet Characteristics

## XS108B3PAM12

inductive sensor XS1 M8 - L45mm - brass - Sn2mm - 12..24VDC - M12





#### Main

| Range of product                   | Telemecanique Inductive proximity sensors XS                 |
|------------------------------------|--|
| Series name                        | General purpose  |
| Sensor type                        | Inductive proximity sensor                                   |
| Sensor name                        | XS1  |
| Sensor design                      | Cylindrical M8   |
| Size                               | 45 mm  |
| Body type                          | Fixed  |
| Detector flush mounting acceptance | Flush mountable  |
| Material                           | Metal  |
| Type of output signal              | Discrete   |
| Wiring technique                   | 3-wire   |
| [Sn] nominal sensing distance      | 2.5 mm   |
| Discrete output function           | 1 NO   |
| Output circuit type                | DC   |
| Discrete output type               | PNP  |
| Electrical connection              | Male connector M12, 4 pins                                   |
| [Us] rated supply voltage          | 1224 V DC with reverse polarity protection                   |
| Switching capacity in mA           | <= 200 mA with overload and short-circuit protection         |
| IP degree of protection            | IP65 conforming to IEC 60529<br>IP67 conforming to IEC 60529 |

#### Complementary

| Complementary          |                              |
|------------------------|------------------------------|
| Thread type            | M8 x 1                       |
| Detection face         | Frontal                      |
| Front material         | PPS                          |
| Enclosure material     | Stainless steel 303          |
| Operating zone         | 02 mm                        |
| Differential travel    | 115% of Sr                   |
| Status LED             | Output state: 1 LED (yellow) |
| Supply voltage limits  | 1036 V DC                    |
| Switching frequency    | <= 2500 Hz                   |
| Maximum voltage drop   | <2 V (closed)                |
| Current consumption    | <= 10 mA no-load             |
| Maximum delay first up | 10 ms                        |
| Maximum delay response | 0.2 ms                       |
| Maximum delay recovery | 0.2 ms                       |
| Marking                | CE                           |
| Threaded length        | 24 mm                        |
| Length                 | 45 mm                        |
|                        |                              |

### Environment

| Product certifications                | UL[RETURN]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 60068-2-27                         |

## Packing Units

| Unit Type of Package 1       | PCE       |
|------------------------------|-----------|
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 4.200 cm  |
| Package 1 Width              | 6.500 cm  |
| Package 1 Length             | 9.500 cm  |
| Package 1 Weight             | 20.000 g  |
| Unit Type of Package 2       | S01       |
| Number of Units in Package 2 | 22        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 15.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 718.000 g |
|                              |           |

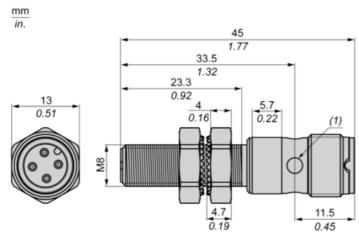
## Offer Sustainability

| Sustainable offer status   | Green Premium product                                      |
|----------------------------|--|
| REACh Regulation           | ☑ REACh Declaration  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free               | Yes  |
| RoHS exemption information | ₫Yes   |
| Circularity Profile        | End Of Life Information                                    |

## Contractual warranty

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

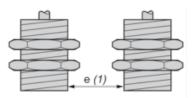
### **Dimensions**



(1) LED

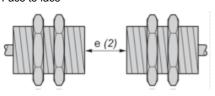
### Minimum Mounting Distances in mm

### Side by side

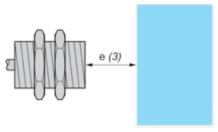


e (1)  $\geq$  5 mm/0.20 in.

Face to face



e (2) ≥ 30 mm/1.18 in. Facing a metal object



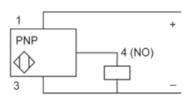
e (3)  $\geq$  8 mm/0.31 in.

### Wiring Schemes

#### M12 connector



#### PNP



1:(+)

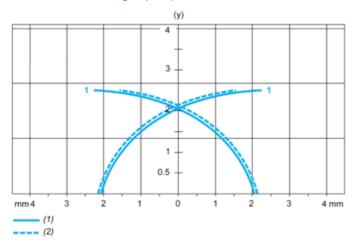
2 : Not connected

3:(-)

4 : NO Output

### **Performance Curves**

### Standard Steel Target (mm): 8x8x1



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