# Product datasheet
## Characteristics

# XS212B4PAM12
Inductive proximity sensors XS, inductive sensor XS2 M12, L51mm, brass, Sn8mm, 12...24 VDC, M12



## Main

| | |
|---|---|
| Range of product | Telemecanique Inductive proximity sensors XS |
| Series name | General purpose |
| Sensor type | Inductive proximity sensor |
| Device application | Mobile equipment |
| Sensor name | XS2 |
| Sensor design | Cylindrical M12 |
| Size | 51 mm |
| Body type | Fixed |
| Detector flush mounting acceptance | Non flush mountable |
| Material | Metal |
| Type of output signal | Discrete |
| Wiring technique | 3-wire |
| [Sn] nominal sensing distance | 8 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 | 12...24 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 DIN 40050<br>IP69K |

## Complementary

| | |
|---|---|
| Thread type | M12 x 1 |
| Detection face | Frontal |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| Front material | PPS |
| Enclosure material | Nickel plated brass |
| Sensing range | > 4...8 mm |
| Operating zone | 0…6.4 mm |
| Differential travel | 1...15% of Sr |
| Status LED | Output state: 1 LED (yellow) |
| Supply voltage limits | 10…36 V DC |
| Switching frequency | <= 2000 Hz |
| Maximum voltage drop | <2 V (closed) |
| Current consumption | <= 10 mA no-load |
| Maximum delay first up | 15 ms |
| Maximum delay response | 0.2 ms |
| Maximum delay recovery | 0.2 ms |
| Marking | CE |
| Threaded length | 26 mm |
| Length | 51 mm |
| Net weight | 0.032 kg |

## Environment

| | |
|---|---|
| Product certifications | CSA<br>E2<br>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

| | |
|---|---|
| Package 1 Weight | 0.036 kg |
| Package 1 Height | 0.660 dm |
| Package 1 width | 0.410 dm |
| Package 1 Length | 0.950 dm |

## Offer Sustainability

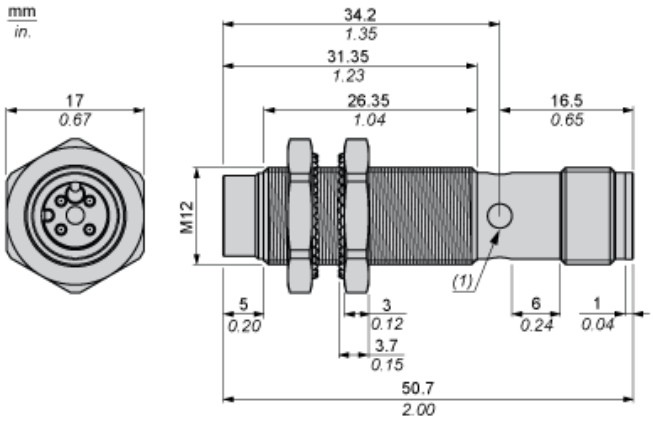
| | |
|---|---|
| Sustainable offer status | Green Premium product |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| Environmental Disclosure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

## Contractual warranty

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

## Dimensions

### With M12 Connector

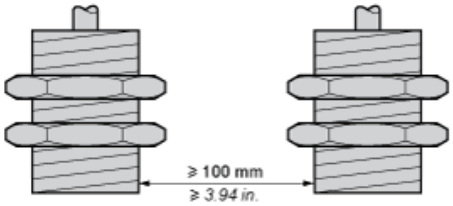



(1) Yellow LED (Output state indication)

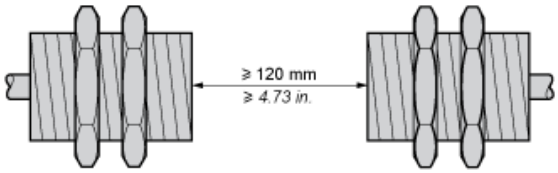
## Mounting and Clearance

### Minimum Mounting Distances

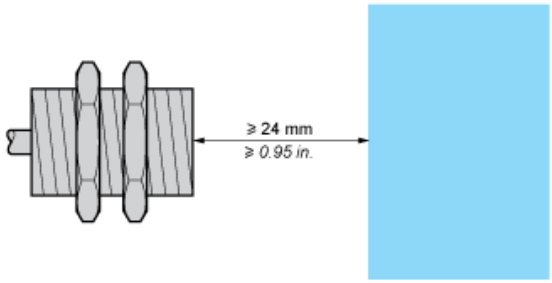
Side by Side



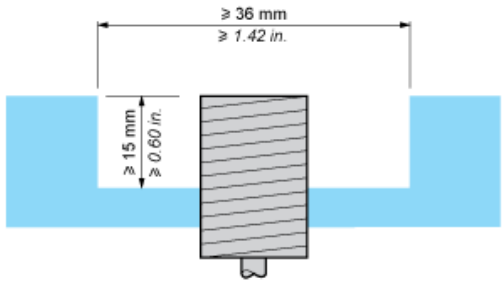

Face to Face




Facing a Metal Object



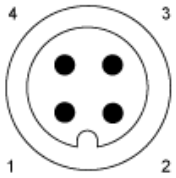

Mounted in a Metal Support



## Connection and Schema

### Wiring Schemes

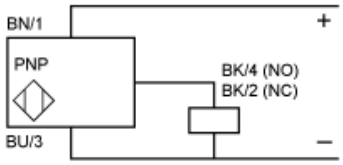
M12 connector



## Connection and Schema

### Wiring Schemes

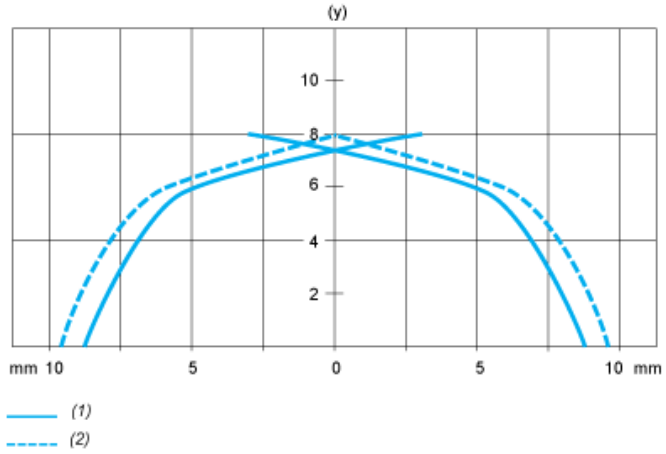
PNP 3-wire




BN : Brown
BK : Black
BU : Blue

## Performance Curves

Standard Steel Target: 12 x 12 x 1 mm
Operating zone: 0…6.4 mm




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