

# XS212B4PAL2

Inductive proximity sensors XS, inductive sensor XS2 M12, L37mm, brass, Sn8mm, 12...24 VDC, cable 2 m



## 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                               | 37 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              | Cable                                                                 |
| Cable length                       | 2 m                                                                   |
| [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                      |
| 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                |
| Cable composition        | 3 x 0.34 mm <sup>2</sup>     |
| Wire insulation material | PVC                          |
| 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          | 20 mm                        |

|            |          |
|------------|----------|
| Length     | 37 mm    |
| Net weight | 0.086 kg |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA[RETURN]E2[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

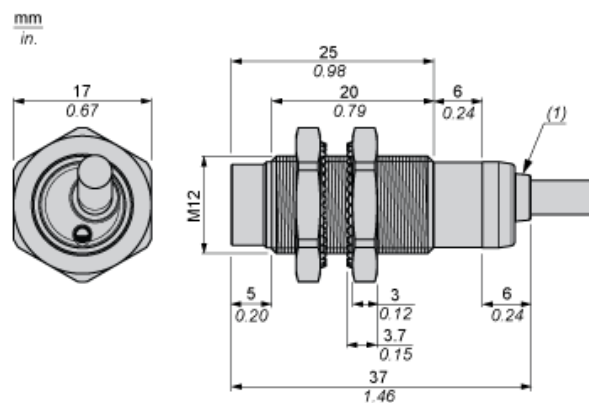
|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 13.46 cm  |
| Package 1 Width              | 10.16 cm  |
| Package 1 Length             | 5.08 cm   |
| Package 1 Weight             | 0.09 kg   |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 22        |
| Package 2 Height             | 15 cm     |
| Package 2 Width              | 30 cm     |
| Package 2 Length             | 40 cm     |
| Package 2 Weight             | 2.413 kg  |
| Unit Type of Package 3       | PAL       |
| Number of Units in Package 3 | 352       |
| Package 3 Height             | 60 cm     |
| Package 3 Width              | 80 cm     |
| Package 3 Length             | 77 cm     |
| Package 3 Weight             | 31.328 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>                                                                                                                                                                                                                                                                                                    |

## Dimensions

### Pre-cabled

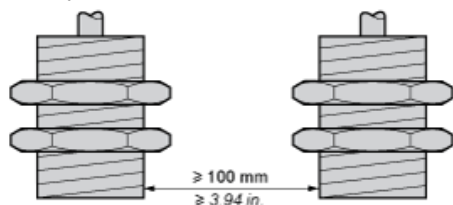


(1) Yellow LED (Output state indication)

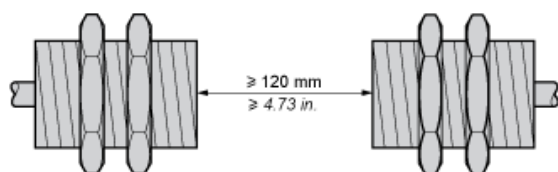
## Mounting and Clearance

### Minimum Mounting Distances

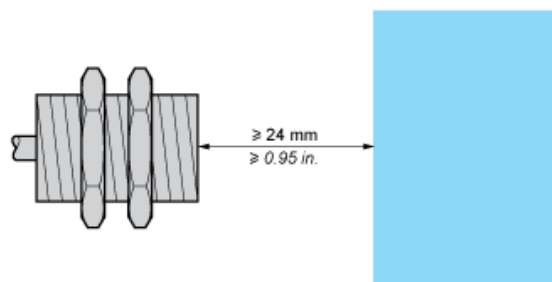
#### Side by Side



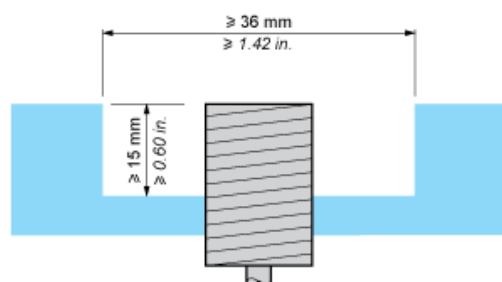
#### Face to Face



#### Facing a Metal Object



#### Mounted in a Metal Support



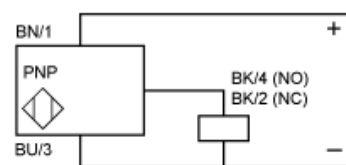
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## Connection and Schema

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### Wiring Schemes

PNP 3-wire



BN : Brown  
BK : Black  
BU : Blue

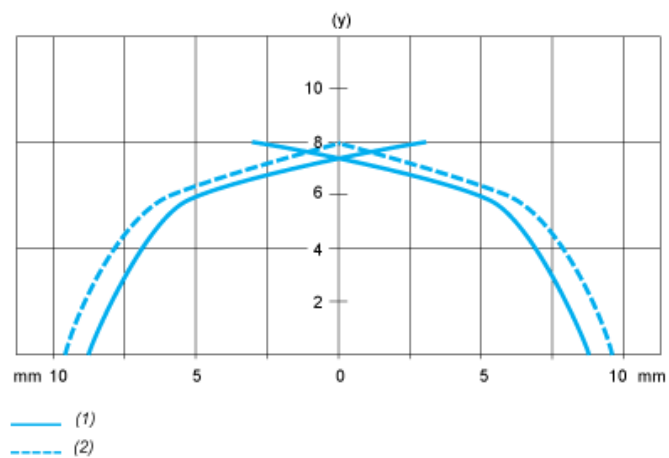
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## Performance Curves

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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)