

# XS512B1PAL10

Inductive proximity sensors XS, inductive sensor XS5 M12, L35mm, brass, Sn2mm, 12...24 VDC, cable 10 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                               | 37 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 mm                                                                            |
| Discrete output function           | 1 NO                                                                            |
| Output circuit type                | DC                                                                              |
| Discrete output type               | PNP                                                                             |
| Electrical connection              | cable                                                                           |
| Cable length                       | 10 m                                                                            |
| [Us] rated supply voltage          | 12...24 V DC with reverse polarity protection                                   |
| Switching capacity in mA           | <= 200 mA DC with overload and short-circuit protection                         |
| 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        | 3 x 0.34 mm <sup>2</sup>     |
| Wire insulation material | PvR                          |
| Status LED               | Output state: 1 LED (yellow) |
| Supply voltage limits    | 10...36 V DC                 |
| Switching frequency      | <= 5000 Hz                   |
| Maximum voltage drop     | <2 V (closed)                |
| Current consumption      | <= 10 mA no-load             |
| Maximum delay first up   | 10 ms                        |
| Maximum delay response   | 0.1 ms                       |
| Maximum delay recovery   | 0.1 ms                       |
| Marking                  | CE                           |
| Threaded length          | 25 mm                        |

|            |          |
|------------|----------|
| Height     | 12 mm    |
| Length     | 35 mm    |
| Net weight | 0.395 kg |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA<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

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 307 g   |
| Package 1 Height             | 6.8 cm  |
| Package 1 width              | 9.6 cm  |
| Package 1 Length             | 13.2 cm |

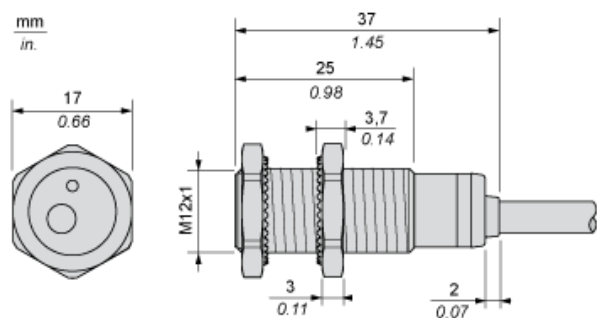
## Offer Sustainability

|                            |                                                                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                               |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                 |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                                                                                                                 |
| RoHS exemption information |  <a href="#">Yes</a>                                                                             |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                   |
| Circularity Profile        |  <a href="#">End Of Life Information</a>                                                         |

## Contractual warranty

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

## Dimensions



### Minimum Mounting Distances

Side by side



e (1) 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

## Wiring Schemes

PNP



BU : Blue  
BN : Brown  
BK : Black

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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