

# XS612B1PAL5

Inductive proximity sensors XS, inductive sensor XS6 M12, L54mm, brass, Sn4mm, 12...48 VDC, cable 5 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                        | XS6                                                                             |
| Sensor design                      | Cylindrical M12                                                                 |
| Size                               | 54 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      | 4 mm                                                                            |
| Discrete output function           | 1 NO                                                                            |
| Output circuit type                | DC                                                                              |
| Discrete output type               | PNP                                                                             |
| Electrical connection              | Cable                                                                           |
| Cable length                       | 5 m                                                                             |
| [Us] rated supply voltage          | 12...48 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          |
| Sensing range            | > 2.5...4 mm                 |
| Operating zone           | 0...3.2 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...58 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          | 42 mm                        |

|            |          |
|------------|----------|
| Length     | 54 mm    |
| Net weight | 0.195 kg |

## Environment

|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| Product certifications                | CSA[RETURN]UL[RETURN]E2                                                 |
| 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             | 4.000 cm  |
| Package 1 Width              | 9.500 cm  |
| Package 1 Length             | 13.200 cm |
| Package 1 Weight             | 159.000 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 22        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 4.111 kg  |

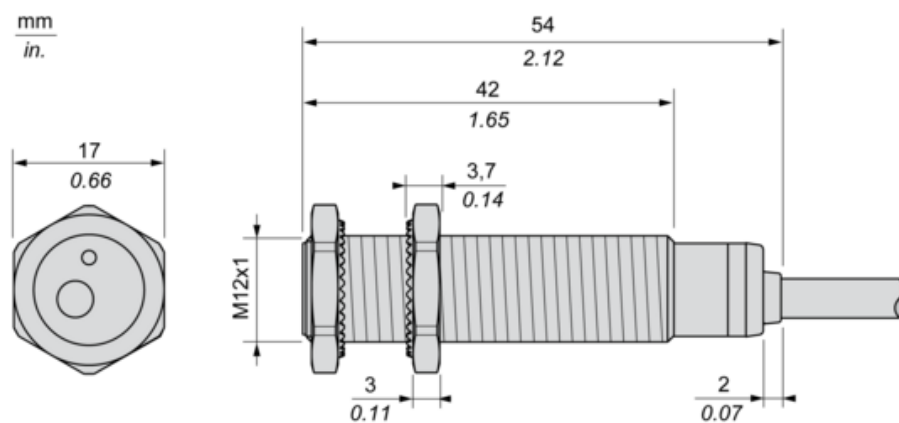
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>                                                                                                                                                                                                                                                                                                    |

## Contractual warranty

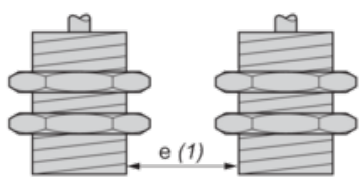
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



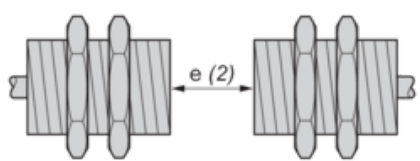
### Minimum Mounting Distances

Side by side



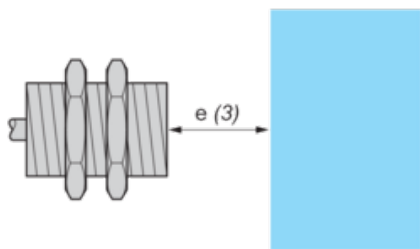
$e (1) \geq 8 \text{ mm}/0.31 \text{ in.}$

Face to face



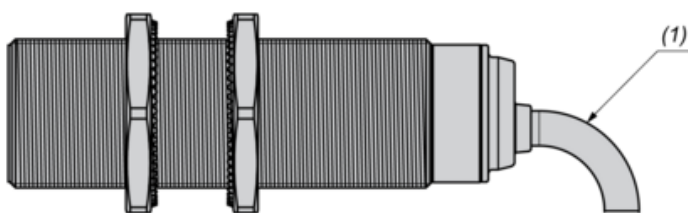
$e (2) \geq 48 \text{ mm}/1.89 \text{ in.}$

Facing a metal object



$e (3) \geq 12 \text{ mm}/0.47 \text{ in.}$

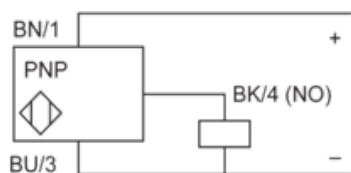
### Mounting



(1) Bending cable: 4 x external cable diameter

## Wiring Schemes

PNP



BU : Blue

BN : Brown

BK : Black