

# XS1N18PC410D

inductive sensor XS1 M18, L51mm, brass, Sn5mm, 12..24VDC, 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                        | XS1   |
| Sensor design                      | Cylindrical M18   |
| Size                               | 51 mm   |
| Body type                          | Fixed   |
| Detector flush mounting acceptance | Flush mountable   |
| Material                           | Metal   |
| Type of output signal              | Discrete  |
| Wiring technique                   | 4-wire  |
| [Sn] nominal sensing distance      | 5 mm  |
| Discrete output function           | 1 NO + 1 NC   |
| 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            | IP69K conforming to DIN 40050<br>IP65 conforming to IEC 60529<br>IP67 |

## Complementary

|                          |  |
|--------------------------|--|
| Safety level             | SIL 2 conforming to IEC 61508<br>PL = d conforming to ISO 13849-1<br>SILCL 2 conforming to IEC 62061   |
| Safety reliability data  | MTTFd = 1810 years<br>PFHd = 62.9E-9 1/h<br>SFF = 92 %<br>DC = 74 % with appropriate safety controller |
| Service life             | 20 year(s)   |
| Thread type              | M18 x 1  |
| Detection face           | Frontal  |
| Front material           | PPS  |
| Enclosure material       | Nickel plated brass  |
| Operating zone           | 0...4 mm   |
| Differential travel      | 1...15% of Sr  |
| Wire insulation material | PVC  |
| Status LED               | Output state: 1 LED (yellow)   |
| Supply voltage limits    | 9...36 V DC  |
| Switching frequency      | <= 2000 Hz   |
| Maximum voltage drop     | <2 V (closed)  |
| Current consumption      | 0...10 mA no-load  |
| Maximum delay first up   | 5 ms   |
| Maximum delay response   | 0.15 ms  |

|                        |         |
|------------------------|---------|
| Maximum delay recovery | 0.35 ms |
| Marking                | CE      |
| Threaded length        | 28 mm   |
| Length                 | 51 mm   |
| Net weight             | 0.04 kg |


## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | IEC 62061<br>ISO 13849-1  |
| Product certifications                | E2[RETURN]CSA[RETURN]TÜV[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             | 2.4 cm   |
| Package 1 Width              | 8.0 cm   |
| Package 1 Length             | 12.0 cm  |
| Package 1 Weight             | 58.0 g   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 44       |
| Package 2 Height             | 15 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 2.882 kg |

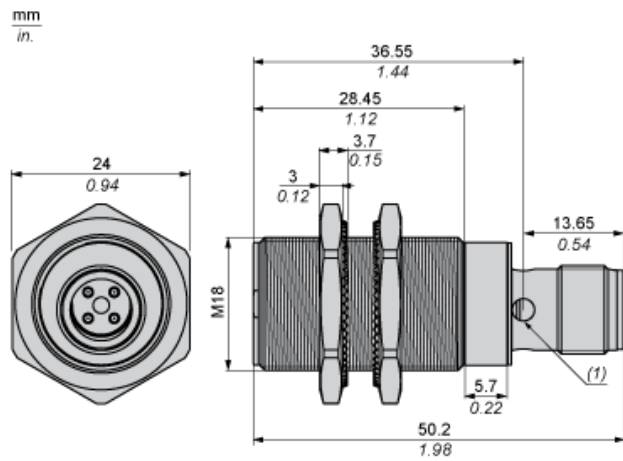
## Offer Sustainability

|  |   |
|--|---|
| 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



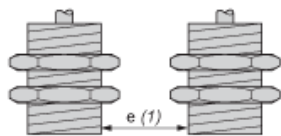
(1) LED

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Minimum Mounting Distances

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Side by side



e (1) 10 mm/0.39 in.

≥

Face to face



e (2) 60 mm/2.36 in.

≥

Facing a metal object



e (3) 15 mm/0.60 in.

≥

## Wiring Schemes

M12 connector

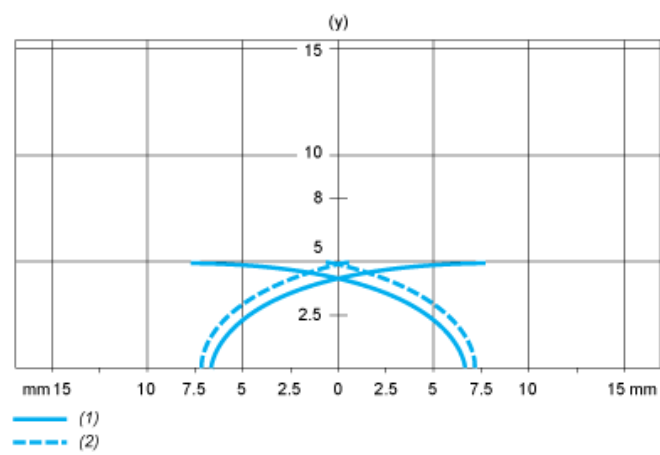


PNP 4-wire



## Performance Curves

Standard Steel Target : 18x18x1 mm



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