

# Product data sheet

Specifications



inductive sensor XS1 M18, L72mm, brass, Sn5mm, 12..24VDC, M12

XS1M18KP340D

## Main

|                                    |  |
|------------------------------------|--|
| Range of product                   | Telemecanique Inductive proximity sensors XS         |
| Series name                        | General purpose                                      |
| Sensor type                        | Inductive proximity sensor                           |
| Sensor name                        | XS1  |
| Sensor design                      | Cylindrical M18                                      |
| Size                               | 72 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 or 1 NC programmable                            |
| Output circuit type                | DC   |
| Discrete output type               | PNP and NPN  |
| 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            | IP67 conforming to IEC 60529                         |

## Complementary

|                     |                              |
|---------------------|------------------------------|
| 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                |
| Status LED          | Output state: 1 LED (yellow) |

|                               |                   |
|-------------------------------|-------------------|
| <b>Supply voltage limits</b>  | 10...36 V DC      |
| <b>Switching frequency</b>    | <= 2000 Hz        |
| <b>Maximum voltage drop</b>   | <2.6 V (closed)   |
| <b>Current consumption</b>    | 0...10 mA no-load |
| <b>Maximum delay first up</b> | 5 ms              |
| <b>Maximum delay response</b> | 0.15 ms           |
| <b>Maximum delay recovery</b> | 0.35 ms           |
| <b>Marking</b>                | CE                |
| <b>Threaded length</b>        | 51 mm             |
| <b>Length</b>                 | 72 mm             |

## Environment

|  |   |
|--|---|
| <b>Product certifications</b>                | CSA<br>UL   |
| <b>Ambient air temperature for operation</b> | -25...70 °C   |
| <b>Ambient air temperature for storage</b>   | -40...85 °C   |
| <b>Vibration resistance</b>                  | 25 gn amplitude = +/- 2 mm (f = 10...55 Hz) conforming to IEC 60068-2-6 |
| <b>Shock resistance</b>                      | 50 gn for 11 ms conforming to IEC 60068-2-27                            |

## Packing Units

|                                     |          |
|-------------------------------------|----------|
| <b>Unit Type of Package 1</b>       | PCE      |
| <b>Number of Units in Package 1</b> | 1        |
| <b>Package 1 Height</b>             | 6.4 cm   |
| <b>Package 1 Width</b>              | 9.4 cm   |
| <b>Package 1 Length</b>             | 4.1 cm   |
| <b>Package 1 Weight</b>             | 66.0 g   |
| <b>Unit Type of Package 2</b>       | S02      |
| <b>Number of Units in Package 2</b> | 44       |
| <b>Package 2 Height</b>             | 15 cm    |
| <b>Package 2 Width</b>              | 30 cm    |
| <b>Package 2 Length</b>             | 40 cm    |
| <b>Package 2 Weight</b>             | 3.237 kg |

## Offer Sustainability

|                                   |   |
|-----------------------------------|---|
| <b>Sustainable offer status</b>   | Green Premium product   |
| <b>REACh Regulation</b>           | <a href="#">REACh Declaration</a>   |
| <b>EU RoHS Directive</b>          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>   |
| <b>Mercury free</b>               | Yes   |
| <b>RoHS exemption information</b> | <a href="#">Yes</a>   |
| <b>Environmental Disclosure</b>   | <a href="#">Product Environmental Profile</a>   |
| <b>Circularity Profile</b>        | <a href="#">End of Life Information</a>   |
| <b>California proposition 65</b>  | WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known |

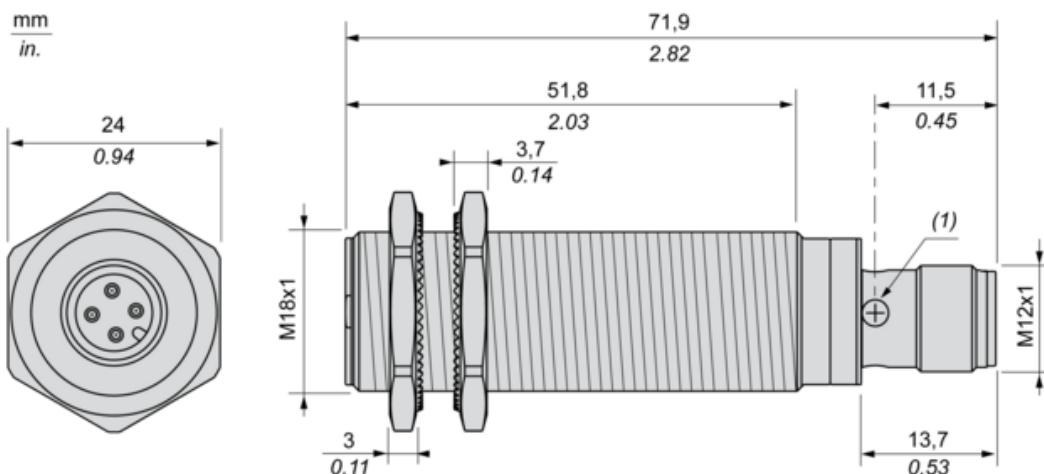
to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## **Contractual warranty**

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|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

### Dimensions

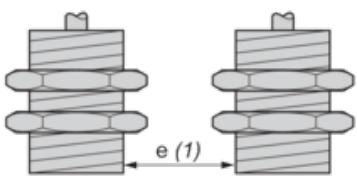


(1) : LED

### Minimum Mounting Distances

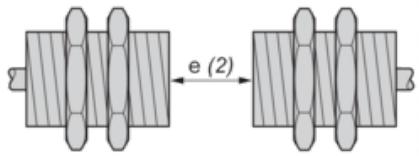
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Side by side



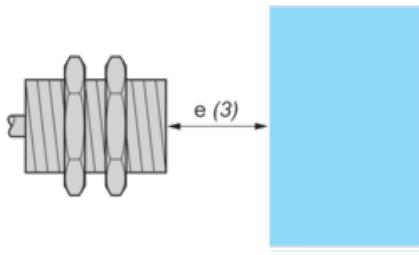
$e (1) \geq 10 \text{ mm/0.39 in.}$

Face to face



$e (2) \geq 60 \text{ mm/2.36 in.}$

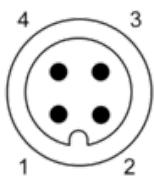
Facing a metal object



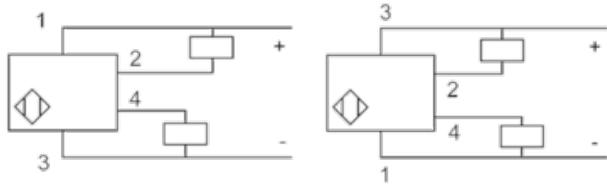
$e (3) \geq 15 \text{ mm/0.60 in}$

### Wiring Schemes

M12 Connector

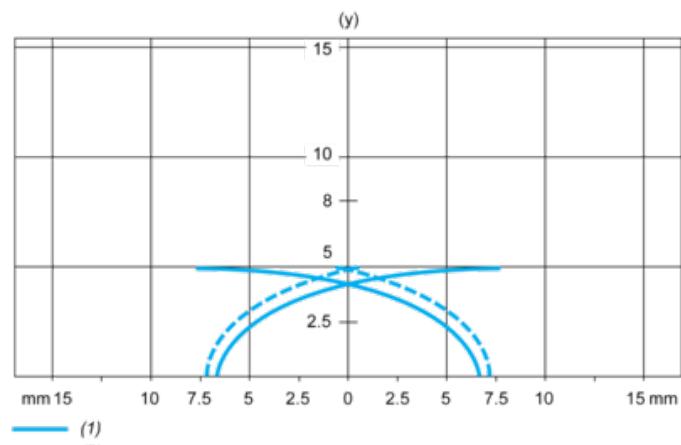


4-Wire DC, PNP/NPN, NO or NC output



### 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

### Recommended replacement(s)