

# Product data sheet

Specifications



Inductive proximity sensors XS, inductive sensor XS1 M30, L50mm, brass, Sn10mm, 12...24 VDC, cable 2 m

XS1M30AB120

## Main

|                                    |  |
|------------------------------------|--|
| Range of product                   | Telemecanique Inductive proximity sensors XS |
| Series name                        | Application                                  |
| Sensor type                        | Inductive proximity sensor                   |
| Electrical circuit type            | Analog output                                |
| Sensor name                        | XS1  |
| Sensor design                      | Cylindrical M30                              |
| Size                               | 54 mm  |
| Body type                          | Fixed  |
| Detector flush mounting acceptance | Flush mountable                              |
| Material                           | Metal  |
| Type of output signal              | Analogue                                     |
| Wiring technique                   | 2-wire                                       |
| [Sn] nominal sensing distance      | 10 mm  |
| Discrete output function           | 1 NC   |
| Output circuit type                | DC   |
| Analogue output range              | 4...20 mA                                    |
| Electrical connection              | Cable  |
| Cable length                       | 2 m  |
| [Us] rated supply voltage          | 12...24 V DC                                 |
| IP degree of protection            | IP67 conforming to IEC 60529                 |

## Complementary

|                    |                     |
|--------------------|---------------------|
| Thread type        | M30 x 1.5           |
| Detection face     | Frontal             |
| Front material     | PPS                 |
| Enclosure material | Nickel plated brass |
| Operating zone     | 1...10 mm           |
| Repeat accuracy    | <= 3% of Sr         |

|                              |                          |
|------------------------------|--------------------------|
| Linearity error              | +/- 2 mA                 |
| Cable composition            | 3 x 0.34 mm <sup>2</sup> |
| Wire insulation material     | PvR                      |
| Supply voltage limits        | 10...36 V DC             |
| Switching frequency          | <= 300 Hz                |
| Current consumption          | 4 mA no-load             |
| Maximum output current drift | 10 %                     |
| Marking                      | CE                       |
| Threaded length              | 42 mm                    |
| Height                       | 30 mm                    |
| Length                       | 50 mm                    |
| Net weight                   | 0.2 kg                   |

## Environment

|                                       |             |
|---------------------------------------|-------------|
| Product certifications                | CSA<br>UL   |
| Ambient air temperature for operation | -25...70 °C |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 5.0 cm   |
| Package 1 Width              | 9.2 cm   |
| Package 1 Length             | 13.1 cm  |
| Package 1 Weight             | 181.0 g  |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 12       |
| Package 2 Height             | 15 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 2.492 kg |

## 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)<br><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>  |
| 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 Diisodecyl 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> |

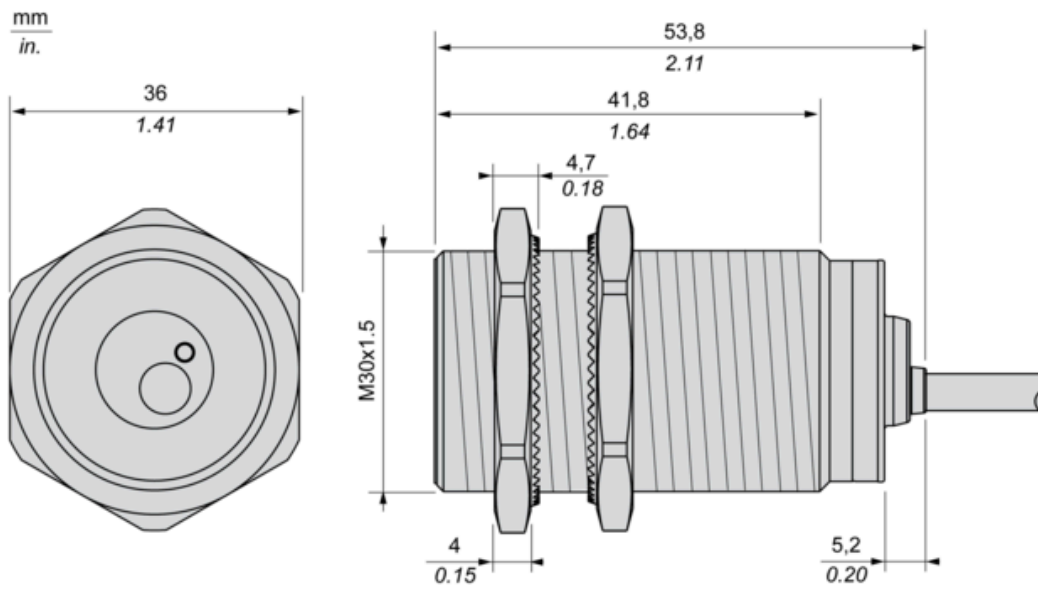
# Contractual warranty

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Warranty

18 months

Dimensions



**Minimum Mounting Distances**

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Side by side



$e (1) \geq 20 \text{ mm}/0.79 \text{ in}$

Face to face



$e (2) \geq 120 \text{ mm}/4.72 \text{ in}$

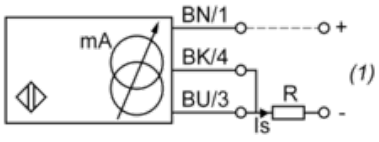
Facing a metal object



$e (3) \geq 30 \text{ mm}/1.18 \text{ in.}$

**Wiring Schemes**

2-Wire connection



(1) Output current

**BN** : Brown

**BK** : Black

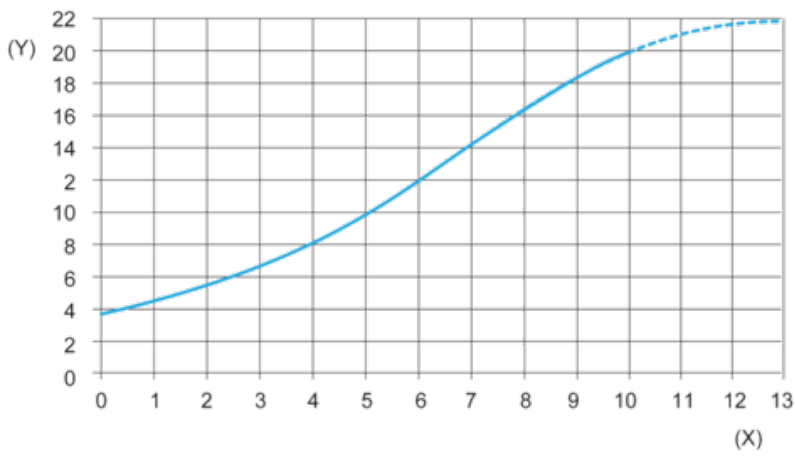
**BU** : Blue

|      | Output current | Load impedance value |
|------|----------------|----------------------|
| 12 V | 4...20 mA      | $R \leq 8.2 \Omega$  |
| 24 V | 4...20 mA      | $R \leq 470 \Omega$  |

Ensure a minimum of 10 V between the + and the - (terminal 3) of the sensor.

**Output Curves**

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(Y) Is (mA)

(X) Sensors - object distance (mm)

**Recommended replacement(s)**