

# Product datasheet

Specifications



## inductive sensor XS5 M12 - L50mm - brass - Sn2mm - 12..24VDC - M12

XS512B1PBM12

### 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	50 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 NC
Output circuit type	DC
Discrete output type	PNP
Electrical connection	4 pins M12 male connector
[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	IP67 conforming to IEC 60529 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

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	30 mm
Length	50 mm
Net weight	0.035 kg

## Environment

Product certifications	CSA 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	27.0 g
Package 1 Height	4.2 cm
Package 1 width	9.6 cm
Package 1 Length	6.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	44
Package 2 Weight	1.505 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 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>

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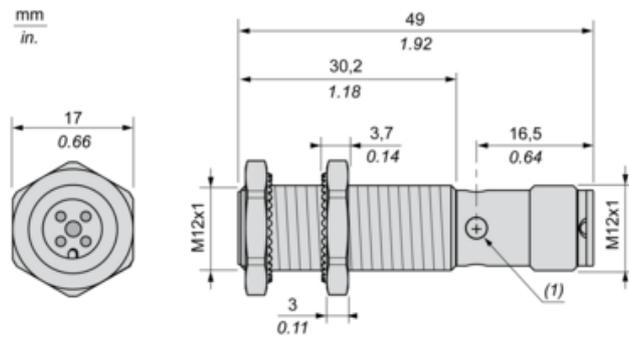
### Contractual warranty

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Warranty	18 months
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Dimensions

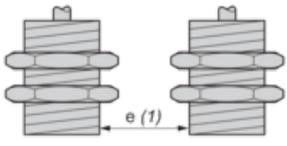


(1) : LED

**Minimum Mounting Distances**

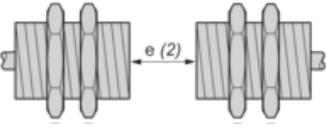
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Side by side



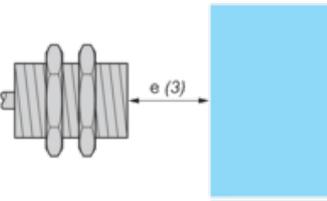
$e (1) \geq 4 \text{ mm}/0.16 \text{ in.}$

Face to face



$e (2) \geq 24 \text{ mm}/0.94 \text{ in.}$

Facing a metal object

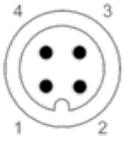


$e (3) \geq 6 \text{ mm}/0.24 \text{ in.}$

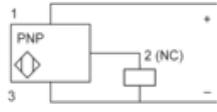
**Wiring Schemes**

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**M12 connector**



**PNP**



1 : (+)

2 : NC Output

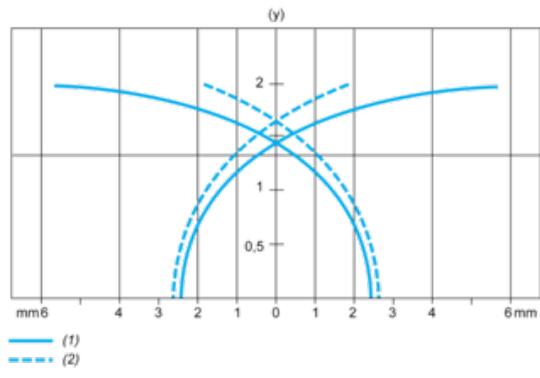
3 : (-)

4 : Not connected

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