

# XS512B1PAM12

Inductive proximity sensors XS, inductive sensor XS5 M12, L50mm, brass, Sn2mm, 12...24 VDC, M12



## 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 NO
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 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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither TWSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Product certifications	UL[RETURN]CSA
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	4.500 cm
Package 1 Width	9.700 cm
Package 1 Length	6.500 cm
Package 1 Weight	262.000 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	1.590 kg

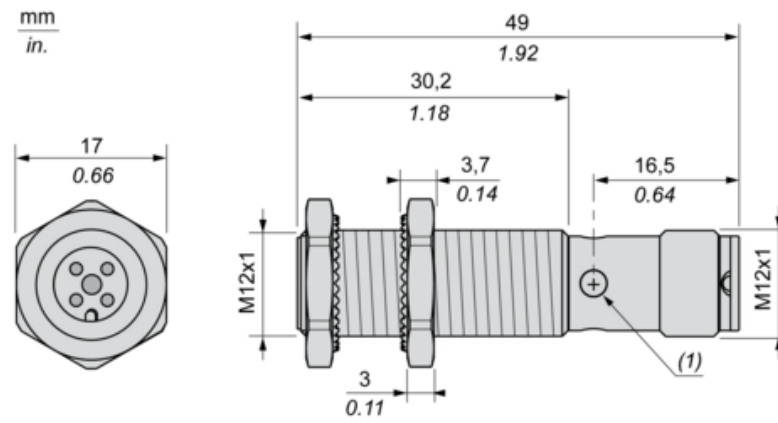
## Offer Sustainability

Sustainable offer status	Green Premium product
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 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
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Dimensions



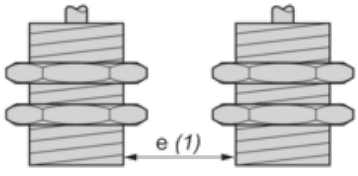
(1) : LED

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Minimum Mounting Distances

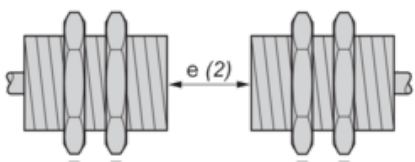
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Side by side



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

Face to face



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

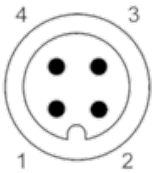
Facing a metal object



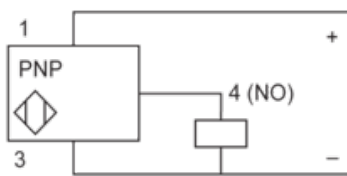
$e (3) \geq 6 \text{ mm} / 0.24 \text{ in.}$

## Wiring Schemes

M12 connector



PNP



1 : (+)

2 : Not connected

3 : (-)

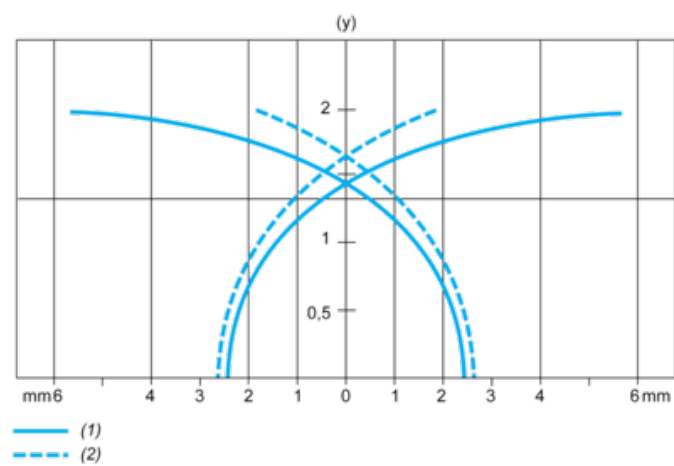
4 : NO Output

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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