

# XXV18B1PAM12

Ultrasonic sensors XX, ultrasonic sensor, M18 metal, Sn 50 mm, PNP NO, M12



## Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XXV
Sensor design	Cylindrical M18
Detection system	Diffuse
[Sn] nominal sensing distance	0.05 m fixed
Material	Metal
Type of output signal	Discrete
Discrete output function	1 NO
Wiring technique	3-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
[Sd] sensing range	0.003...0.05 m
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

## Complementary

Enclosure material	Brass
Front material	Epoxy
Thread type	M18 x 1
Supply voltage limits	10...36 V DC
[Sa] assured operating distance	0.003...0.05 m
Maximum differential travel	3 mm
Blind zone	0...3 mm
Transmission frequency	360 kHz
Repeat accuracy	1.5 %
Deviation angle from 90° of object to be detected	-8...8 °
Minimum size of detected object	Cylinder diameter 2 mm at 0.02 m
Status LED	Output state: 1 LED (yellow)
Current consumption	15 mA
Maximum switching current	200 mA with overload and short-circuit protection
Maximum voltage drop	2 V
Switching frequency	<= 80 Hz
Maximum delay first up	5 ms
Maximum delay response	4 ms
Maximum delay recovery	4 ms
Marking	CE
Threaded length	51 mm
Height	18 mm
Width	18 mm
Depth	75 mm
Net weight	0.05 kg

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## Environment

Standards	IEC 60947-5-2
Product certifications	cULus
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/- 2 mm conforming to IEC 60068-2-6 (f = 10...55 Hz)
Shock resistance	50 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 conforming to IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 conforming to IEC 61000-4-3
Resistance to fast transients	1 kV level 3 conforming to IEC 61000-4-4

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.636 cm
Package 1 Width	4.064 cm
Package 1 Length	8.636 cm
Package 1 Weight	77.111 g
Unit Type of Package 2	S03
Number of Units in Package 2	94
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.582 kg

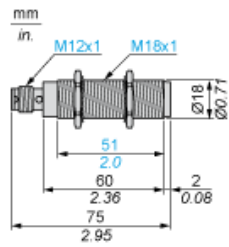
## Offer Sustainability

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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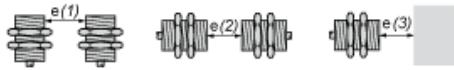
## Dimensions



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## Minimum Mounting Distances

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- e(1) 25 mm
- >
- e(2) 700 mm
- >
- e(3) 60 mm
- >

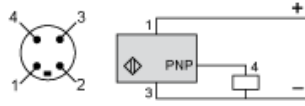
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## Wiring Diagram

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### 3-Wire Type

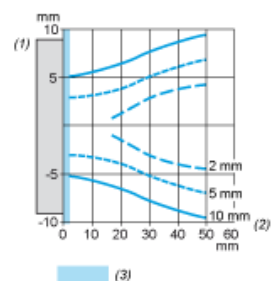
NO outputs, PNP



- (1) (+)
- (3) (-)

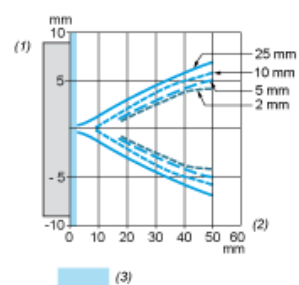
## Curves

### Square Object



- (1) Parallel movement
- (2) Distance
- (3) Blind zone for diffuse sensors.

### Cylindrical Object



- (1) Parallel movement
- (2) Distance
- (3) Blind zone for diffuse sensors.