

# XXV18B1NAM12

Ultrasonic sensor - M18 metal - Sn 50mm -  
NPN NO - M12



## Main

Range of product	OsiSense 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	NPN
[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

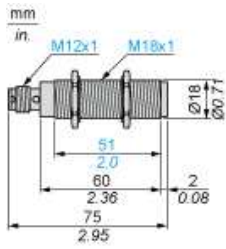
Enclosure material	Brass
Front material	Epoxy
Thread type	M18 x 1
Supply voltage limits	10...36 V DC
[Sa] assured operating distance	0.003...0.05 m
Maximum differential travel	3 mm
Blind zone	0...3 mm
Transmission frequency	360 kHz
Repeat accuracy	1.5 %
Deviation angle from 90° of object to be detected	-8...8 °
Minimum size of detected object	Cylinder diameter 2 mm 0.02 m
Status LED	1 LED (yellow) for output state
Current consumption	15 mA
Maximum switching current	200 mA with overload and short-circuit protection
Voltage drop	< 2 V
Switching frequency	<= 80 Hz
Delay first up	5 ms
Delay response	4 ms
Delay recovery	4 ms
Marking	CE
Threaded length	51 mm
Height	18 mm
Width	18 mm
Depth	75 mm
Product weight	0.05 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 Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Standards	IEC 60947-5-2
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 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

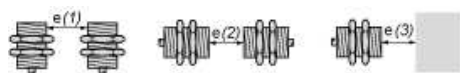
## Dimensions



---

Minimum Mounting Distances

---



e(1) 25 mm

>

e(2) 700 mm

>

e(3) 60 mm

>

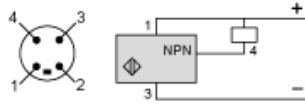
---

## Wiring Diagram

---

### 3-Wire Type

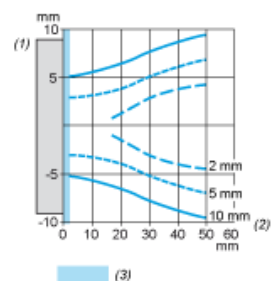
NO outputs, NPN



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

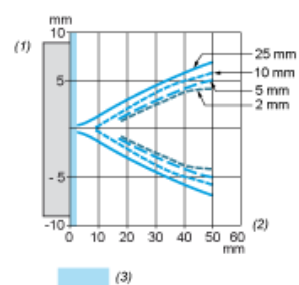
## Curves

### 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.