

# Product data sheet

## Characteristics

# XXV18B1PBL10

Ultrasonic sensor - M18 metal - Sn 50mm - PNP  
NC - cable 10m

Product availability : Non-Stock - Not normally stocked in distribution facility

Price\*\* : 115.00 USD



### 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 | 0.16 ft (0.05 m) fixed                        |
| Material                      | Metal   |
| Type of output signal         | Discrete                                      |
| Discrete output function      | 1 NC  |
| Wiring technique              | 3-wire  |
| Discrete output type          | PNP   |
| [Us] rated supply voltage     | 12...24 V DC with reverse polarity protection |
| Electrical connection         | Cable, 32.81 ft (10 m) cable length           |
| [Sd] sensing range            | 0.01...0.16 ft (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                   | 0.01...0.16 ft (0.003...0.05 m) |
| Maximum differential travel                       | 0.12 in (3 mm)                  |
| Blind zone  | 0...0.12 in (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                      | 1 LED (yellow) 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                 | 2.01 in (51 mm)                                   |
| Height                          | 0.71 in (18 mm)                                   |
| Width                           | 0.71 in (18 mm)                                   |
| Depth                           | 2.56 in (65 mm)                                   |
| Product weight                  | 0.75 lb(US) (0.34 kg)                             |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | IEC 60947-5-2  |
| Product certifications                | cULus  |
| Ambient air temperature for operation | 32...140 °F (0...60 °C)                                |
| Ambient air temperature for storage   | -40...176 °F (-40...80 °C)                             |
| Vibration resistance                  | +/- 2 mm conforming to IEC 60068-2-6 10...55 Hz        |
| Shock resistance                      | 50 gn in all 3 axes 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  | 9.14 V/yd (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               |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22490 - SENSORS-ULTRASONIC (XX5,6) |
| Discount Schedule     | DS2                                |
| GTIN                  | 003389119128148                    |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 0.75                               |
| Returnability         | N                                  |
| Country of origin     | US                                 |

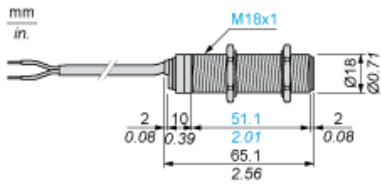
## Offer Sustainability

|                           |  |
|---------------------------|--|
| RoHS (date code: YYWW)    | Will not be compliant<br><a href="#">Will not be compliant</a>   |
| California proposition 65 | WARNING: This product can expose you to chemicals including:   |
| ----- Substance 1         | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                                |
| ----- Substance 2         | Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. |
| ----- More information    | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                              |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

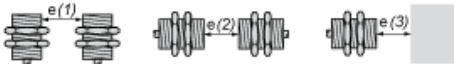
Dimensions



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Minimum Mounting Distances

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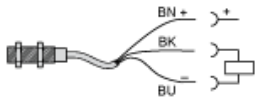


- e(1) > 25 mm
- e(2) > 700 mm
- e(3) > 60 mm

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Wiring Diagram

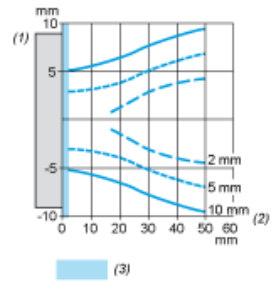
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|    |       |
|----|-------|
| BN | Brown |
| BU | Blue  |
| BK | Black |

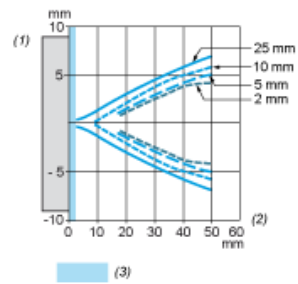
Curves

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.