

# Product data sheet

## Characteristics

# XXV18B1PBL2

Ultrasonic sensor - M18 metal - Sn 50mm - PNP  
NC - cable 2m



### 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, 6.56 ft (2 m)
[Sd] sensing range	0.01...0.16 ft (0.003...0.05 m)
Beam angle	10 °
IP degree of protection	IP67 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	0.00...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 0.07 ft (0.02 m)
Status LED	Output state: 1 LED (yellow)
Current consumption	15 mA
Maximum switching current	200 mA 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	2.01 in (51 mm)
Height	0.71 in (18 mm)
Width	0.71 in (18 mm)
Depth	2.56 in (65 mm)
Net weight	0.24 lb(US) (0.11 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 10...55 Hz)IEC 60068-2-6
Shock resistance	50 gn in all 3 axes 11 ms IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/yd (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

## Packing Units

Package 1 Weight	3.84 oz (108.862 g)
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## Offer Sustainability

RECh Regulation	<a href="#">RECh Declaration</a>
EU RoHS Directive	Not applicable, out of EU RoHS legal scope

## Contractual warranty

Warranty	18 months
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