

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	0.05 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, 2 m cable length
[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

Disclaimer: 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

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	65 mm
Product weight	0.11 kg

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 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

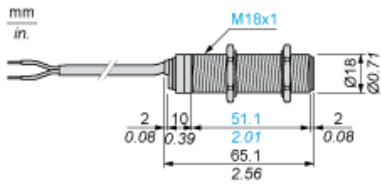
Offer Sustainability

RoHS (date code: YYWW)	Will not be compliant Will not be compliant
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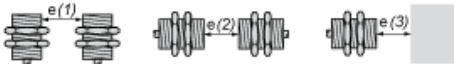
Contractual warranty

Warranty period	18 months
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Dimensions

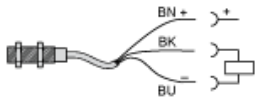


Minimum Mounting Distances



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

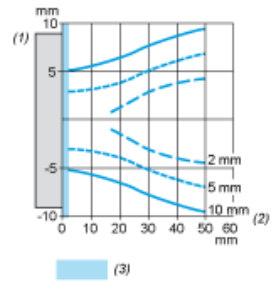
Wiring Diagram



BN	Brown
BU	Blue
BK	Black

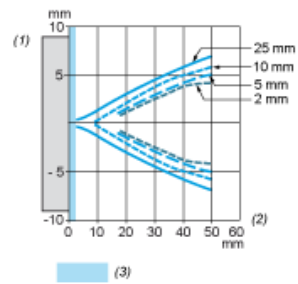
Curves

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.