

Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	Application
Sensor name	XX2
Sensor design	Cylindrical M18
Detection system	Diffuse
[Sn] nominal sensing distance	0.5 m adjustable with remote teach push-button
Material	Plastic
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
Product specific application	For 2 filling levels monitoring
[Sd] sensing range	0.051...0.508 m
Beam angle	6 °
IP degree of protection	IP67 conforming to IEC 60529

Complementary

Enclosure material	Valox
Front material	Epoxy
Thread type	M18 x 1
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.051...0.508 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	0...51 mm

Transmission frequency	300 kHz
Repeat accuracy	1.27 %
Deviation angle from 90° of object to be detected	-7...7 °
Minimum size of detected object	Cylinder diameter 2.5 mm 0.15 m
Status LED	1 LED (dual colour) for setting-up assistance 1 LED (green) for supply on 1 LED (yellow) for output state
Current consumption	40 mA
Maximum switching current	100 mA with overload and short-circuit protection
Voltage drop	< 1 V
Delay first up	100 ms
Delay response	15 ms
Delay recovery	1000 ms
Marking	CE
Threaded length	43 mm
Height	18 mm
Width	18 mm
Depth	79 mm
Product weight	0.033 kg

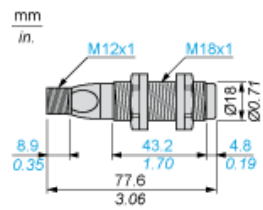
Environment

Standards	IEC 60947-5-2
Ambient air temperature for operation	-20...65 °C
Ambient air temperature for storage	-40...80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 10...55 Hz
Shock resistance	30 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

Contractual warranty

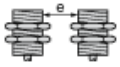
Warranty period	18 months
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Dimensions



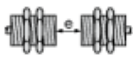
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face

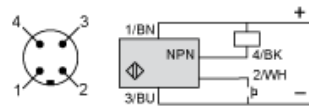


$e \geq 4 \times S_n$

Wiring Diagram

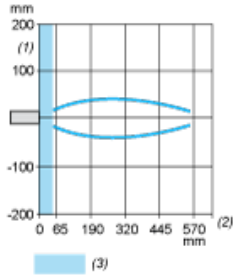
3-Wire Type

NO outputs, NPN



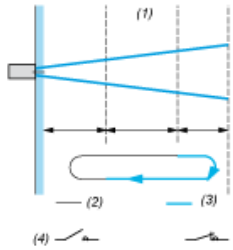
- (1) (+)
- (2) Teach input (WH)
- (3) (-)
- (4) Output
- BN Brown
- WH White
- BU Blue
- BK Black

Curves



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

Operating Curves



- (1) Adjustable detection zone
- (2) Output deactivated
- (3) Output activated
- (4) NO output