

XX230A12NA00M12
ultrasonic sensor cylindrical M30 - 2 levels - Sn 1
m - 2 NO - M12



Main

Range of product	OsiSense XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX2
Sensor design	Cylindrical M30
Detection system	Diffuse
[Sn] nominal sensing distance	1 m adjustable with teach push-button
Material	Plastic
Type of output signal	Discrete
Discrete output function	2 NO
Wiring technique	4-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 levels monitoring
[Sd] sensing range	0.051...0.991 m
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

Complementary

Enclosure material	ULTEM
Front material	Silicone
Thread type	M30 x 1.5
Supply voltage limits	10...28 V DC
Function available	Without synchronisation mode
[Sa] assured operating distance	0.051...0.991 m (teach mode)
Maximum differential travel	2.5 mm

Blind zone	0...51 mm
Transmission frequency	200 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-10...10 °
Minimum size of detected object	Cylinder diameter 1.6 mm 0.635 m
Status LED	1 LED (green/red (flashing)) for output state 1 LED (green/red (flashing)) for setting-up assistance 1 LED (yellow) for distance indication
Current consumption	100 mA
Maximum switching current	100 mA with overload and short-circuit protection
Voltage drop	<= 1 V
Delay first up	1000 ms
Delay response	150 ms
Delay recovery	1000 ms
Marking	CE
Threaded length	45 mm
Height	35 mm
Width	35 mm
Depth	85 mm
Product weight	0.091 kg

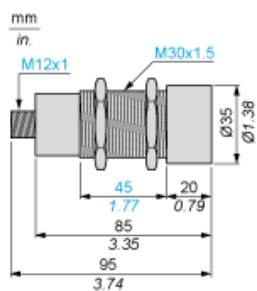
Environment

Standards	IEC 60947-5-2
Ambient air temperature for operation	0...50 °C
Ambient air temperature for storage	-10...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



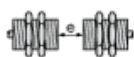
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

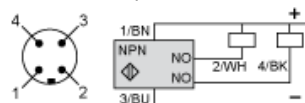
Face to face



$e \geq 4 \times S_n$

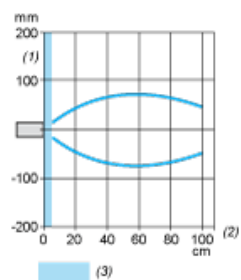
Wiring Diagram

NO + NO outputs, NPN



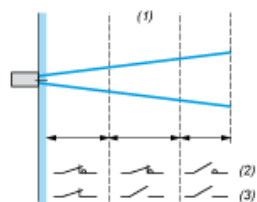
- (1) (+) Brown
- (2) NO output (White)
- (3) (-) Blue
- (4) NO output (Black)
- BN Brown
- WH White
- BU Blue
- BK Black

Curves



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

Operating Curves



- (1) Adjustable detection zone
- (2) Output pin 4 BK
- (3) Output pin 2 WH