### XX230A12NA00M12

Ultrasonic sensors XX, ultrasonic sensor cylindrical M30, 2 levels, Sn 1 m, 2 NO, M12



#### Main

Range of product	Telemecanique Ultrasonic sensors 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	1224 V DC with reverse polarity protection
Electrical connection	Male connector M12 4 pins
Product specific application	For 2 levels monitoring
[Sd] sensing range	0.0510.991 m
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

#### Complementary

Complementary	
Enclosure material	ULTEM
Front material	Silicone
Thread type	M30 x 1.5
Supply voltage limits	1028 V DC
Function available	Without synchronisation mode
[Sa] assured operating distance	0.0510.991 m (teach mode)
Maximum differential travel	2.5 mm
Blind zone	051 mm
Transmission frequency	200 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-1010 °
Minimum size of detected object	Cylinder diameter 1.6 mm at 0.635 m
Status LED	Output state: 1 LED (green/red (flashing)) Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)
Status LED  Current consumption	Setting-up assistance: 1 LED (green/red (flashing))
	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)
Current consumption	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA
Current consumption  Maximum switching current	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection
Current consumption  Maximum switching current  Maximum voltage drop	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection  1 V
Current consumption  Maximum switching current  Maximum voltage drop  Maximum delay first up	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection  1 V  1000 ms
Current consumption  Maximum switching current  Maximum voltage drop  Maximum delay first up  Maximum delay response	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection  1 V  1000 ms  150 ms
Current consumption  Maximum switching current  Maximum voltage drop  Maximum delay first up  Maximum delay response  Maximum delay recovery	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection  1 V  1000 ms  150 ms  1000 ms
Current consumption  Maximum switching current  Maximum voltage drop  Maximum delay first up  Maximum delay response  Maximum delay recovery  Marking	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection 1 V  1000 ms  150 ms  1000 ms  CE
Current consumption  Maximum switching current  Maximum voltage drop  Maximum delay first up  Maximum delay response  Maximum delay recovery  Marking  Threaded length	Setting-up assistance: 1 LED (green/red (flashing)) Distance indication: 1 LED (yellow)  100 mA  100 mA with overload and short-circuit protection  1 V  1000 ms  150 ms  1000 ms  CE  45 mm

Depth	85 mm
Net weight	0.091 kg
Environment	
Standards	IEC 60947-5-2
Product certifications	cCSAus[RETURN]UL
Ambient air temperature for operation	050 °C
Ambient air temperature for storage	-1080 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 1055 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
Packing Units Unit Type of Package 1	PCE
Number of Units in Package 1	1 PCE
Package 1 Height	7.6 cm
Package 1 Width	7.6 cm
Package 1 Length	15.2 cm
Package 1 Weight	89.993 g
i ackage i weight	09.995 g
Offer Sustainability	
Offer Sustainability Sustainable offer status	Green Premium product
	Green Premium product  WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

18 months

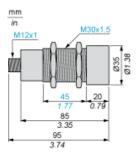
Contractual warranty

Warranty

# Product data sheet Dimensions Drawings

# XX230A12NA00M12

#### **Dimensions**



# Product data sheet Mounting and Clearance

## XX230A12NA00M12

#### Minimum Mounting Distances

#### Side by side



e: respect the distances indicated on the detection curves

#### Face to face



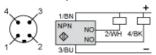
e > 4 x Sn

## Product data sheet Connections and Schema

## XX230A12NA00M12

#### Wiring Diagram

#### NO + NO outputs, NPN



(+) Brown

(1) (2) NO output (White)

(3)

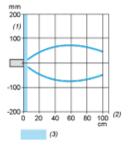
(-) Blue NO output (Black) (4)

BN Brown WH White BU Blue BK Black

## Product data sheet **Performance Curves**

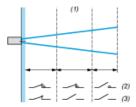
## XX230A12NA00M12

#### Curves



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

#### **Operating Curves**



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