### Product data sheet Characteristics

## XX7F1A2NAL01M12

Ultrasonic sensors XX, ultrasonic sensor parallelepipedic, Sn 0.1 m, NO, pre cabled M12 0.15 m





#### Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX7
Sensor design	Flat form 33 x 19 x 7.6
Detection system	Diffuse
[Sn] nominal sensing distance	0.1 m fixed
Material	Plastic
Type of output signal	Discrete
Discrete output function	1 NO
Wiring technique	3-wire
Discrete output type	NPN
[Us] rated supply voltage	1224 V DC with reverse polarity protection
Electrical connection	Remote male connector M12 4 pins, 0.15 m cable length
[Sd] sensing range	0.00640.102 m
Beam angle	14 °
IP degree of protection	IP67 conforming to IEC 60529

#### Complementary

Complementary	
Enclosure material	ULTEM
Front material	Ероху
Supply voltage limits	1028 V DC
[Sa] assured operating distance	0.00640.102 m
Maximum differential travel	0.7 mm
Blind zone	06.4 mm
Transmission frequency	500 kHz
Repeat accuracy	0.7 %
Minimum size of detected object	Cylinder diameter 2.5 mm Flat bar 1 mm wide
Status LED	Supply on: 1 LED (green) Output state: 1 LED (yellow)
Current consumption	25 mA
Maximum switching current	100 mA
Maximum voltage drop	1 V
Switching frequency	<= 100 Hz
Maximum delay first up	20 ms
Maximum delay response	4 ms
Maximum delay recovery	4 ms
Marking	CE
Height	19 mm
Width	8 mm
Depth	33 mm
Net weight	0.04 kg

### Environment

Standards	IEC 60947-5-2
Product certifications	UL
Ambient air temperature for operation	-2065 °C
Ambient air temperature for storage	-4080 °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**

1 doking Office		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	31 g	
Package 1 Height	3.6 cm	
Package 1 width	7.1 cm	
Package 1 Length	9.5 cm	
Unit Type of Package 2	S01	
Number of Units in Package 2	15	
Package 2 Weight	690 g	
Package 2 Height	15 cm	
Package 2 width	15 cm	
Package 2 Length	40 cm	

### Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☐ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEU RoHS  Declaration
Mercury free	Yes
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California proposition 65	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

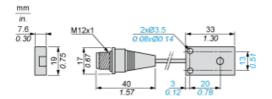
#### Contractual warranty

٧	Varranty	18 months		

## Product data sheet **Dimensions Drawings**

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### **Dimensions**



## Product data sheet **Mounting and Clearance**

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### Minimum Mounting Distances

### Side by side



e: respect the distances indicated on the detection curves

## Product data sheet Connections and Schema

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### Wiring Diagram

### 3-Wire Type

NO outputs, NPN





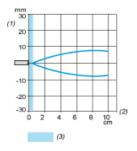
(3) (4) BN Output

Brown BU Blue BK Black

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## Product data sheet **Performance Curves**

#### Curves



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