# XXS30P4PM12

Ultrasonic sensors XX, ultrasonic sensor, plastic, cylindrical M30, straight, 4 m, PNP



#### Main

Range of product	Telemecanique Ultrasonic sensors XX	
Sensor type	Ultrasonic sensor	
Series name	General purpose	
Sensor name	XXS	
Sensor design	Cylindrical M30	
Detection system	Diffuse	
[Sn] nominal sensing distance	4 M adjustable with remote teach push-button 4 m software with kit	
Material	Plastic	
Type of output signal	Discrete	
Discrete output function	1 NO or 1 NC programmable	
Wiring technique	5-wire	
Discrete output type	PNP	
[Us] rated supply voltage	1224 V DC with reverse polarity protection	
Electrical connection	Male connector M12 5 pins	
[Sd] sensing range	0.4204 m	
IP degree of protection	IP65 conforming to IEC 60529 IP67	

#### Complementary

Complementary		
Enclosure material	PBT	
Front material	Epoxy Rubber Resin	
Supply voltage limits	1030 V DC	
Function available	With synchronisation mode Software configurable	
[Sa] assured operating distance	0.4204 m (teach mode)	
Blind zone	420 mm	
Transmission frequency	80 kHz	
Repeat accuracy	0.1 %	
Deviation angle from 90° of object to be detected	-1010 °	
Minimum size of detected object	Cylinder diameter 1 mm at 1.8 m	
Status LED	Output state: 1 LED (yellow) Echo state: 1 LED (green)	
Current consumption	65 mA	
Maximum switching current	100 mA with overload and short-circuit protection	
Maximum voltage drop	2 V	
Switching frequency	2.7 Hz	
Setting-up	Teach mode Configurator software	
Maximum delay first up	250 ms	
Maximum delay response	180 ms	
Maximum delay recovery	180 ms	
Marking	CE	
Threaded length	74.7 mm	
Height	30 mm	
Width	40 mm	

	119 mm	
Net weight	0.1 kg	
Environment		
Standards	IEC 60947-5-2 CSA C22.2 No 14 UL 508	
Product certifications	cULus[RETURN]E2[RETURN]RCM[RETURN]Ecolab	
Ambient air temperature for operation	-2570 °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 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	2 kV conforming to IEC 61000-4-4	
Dealine Heite		
Packing Units		
Unit Type of Package 1	PCE	
	PCE 1	
Unit Type of Package 1		
Unit Type of Package 1 Number of Units in Package 1	1	
Unit Type of Package 1 Number of Units in Package 1 Package 1 Height	1 4.2 cm	
Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width	1 4.2 cm 9.5 cm	
Unit Type of Package 1  Number of Units in Package 1  Package 1 Height  Package 1 Width  Package 1 Length  Package 1 Weight	1 4.2 cm 9.5 cm 13.0 cm	
Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length	1 4.2 cm 9.5 cm 13.0 cm	
Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Offer Sustainability	1 4.2 cm 9.5 cm 13.0 cm 156.0 g	

### Contractual warranty

For all Reach Rohs enquiries contact us at

Warranty	
Warranty	18 months

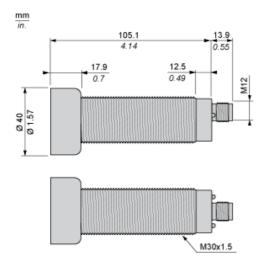
sustainability@tesensors.com



# Product data sheet Dimensions Drawings

# XXS30P4PM12

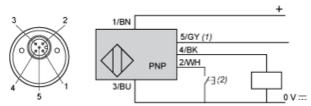
#### **Dimensions**



# XXS30P4PM12

#### Connections

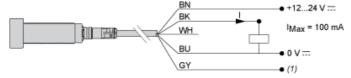
#### **Connector Wiring**



- (1): Synchronization
- (2): External setting pushbutton or XXZPB100 remote teach pushbutton.

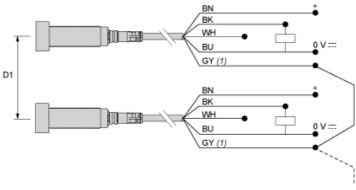
Pin number	Wire color	Description
1	BN: Brown	+1224VDC
2	WH: White	Input teach
3	BU: Blue	0 VDC
4	BK: Black	Output
5	GY: Grey	Synchronization

#### Wiring Scheme. Digital Output (NO or NC)



(1): Synchronization

#### Wiring for the Synchronization Function (Side by Side Application)



(1): Synchronization

D1: 1/8 Sn BN: Brown WH: White BU: Blue BK: Black GY: Grey

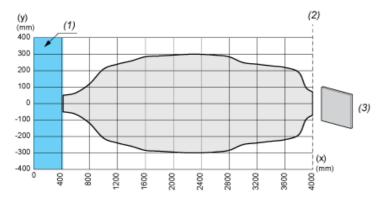
NOTE: Up to 8 sensors can be synchronized to operate side by side by electrically connecting all pin no.5 (grey) wires together.

To synchronize more than 8 sensors, a PLC output can be used (the pins no.5 must be simultaneously driven by the rising edge of a pulse).

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#### **Performance Curves**

#### Detection Curve with 100 x 100 mm / 3.94 x 3.94 inches Square Target



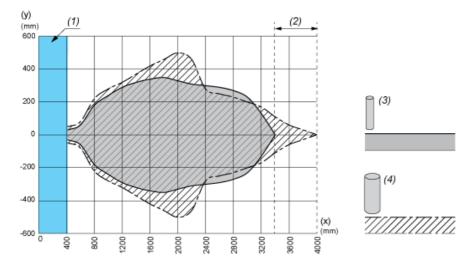
(X): Target distance

(Y): Detection limit

(1): Blind zone: 420 mm / 16.53 inches

(2): Sn max. (3): 100 x 100 mm / 3.94 x 3.94 inches stainless steel plate

#### **Detection Curve with Round Bar**



(X): Target distance

(Y): Detection limit

(1): Blind zone: 420 mm / 16.53 inches

(2): Sn max.

(3): Ø 10 mm / 0.394 inches stainless steel cylinder (4): Ø 25 mm / 0.984 inches stainless steel cylinder