## Product data sheet Characteristics

## XXS30P1VM12

Ultrasonic sensors XX, ultrasonic sensor, plastic, cylindrical M30, straight, 1 m, 0...10 V





#### Main

Main		Š
Range of product	Telemecanique Ultrasonic sensors XX	Š
Sensor type	Ultrasonic sensor	÷
Series name	General purpose	
Sensor name	XXS	
Sensor design	Cylindrical M30	
Material	Plastic	<u></u>
Type of output signal	Analogue	
Wiring technique	5-wire	
Analogue output function	010 V	
[Sd] sensing range	0.1051 m	

## Complementary

No. of Contract of		
Main		
Range of product	Telemecanique Ultrasonic sensors XX	
Sensor type	Ultrasonic sensor	
Series name	General purpose	
Sensor name	XXS	
Sensor design	Cylindrical M30	
Material	Plastic	
Type of output signal	Analogue	
Wiring technique	5-wire	
willing technique	••	
	010 V	
Analogue output function [Sd] sensing range		
Analogue output function	010 V	
Analogue output function [Sd] sensing range  Complementary	010 V 0.1051 m	
Analogue output function [Sd] sensing range  Complementary  Enclosure material	010 V 0.1051 m  PBT  Epoxy Rubber	
Analogue output function [Sd] sensing range  Complementary  Enclosure material  Front material  Function available	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode	
Analogue output function [Sd] sensing range  Complementary  Enclosure material  Front material  Function available  Blind zone	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode Software configurable	
Analogue output function [Sd] sensing range  Complementary  Enclosure material  Front material	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode Software configurable  105 mm	
Analogue output function [Sd] sensing range  Complementary Enclosure material Front material  Function available  Blind zone  Transmission frequency Repeat accuracy Deviation angle from 90° of object to	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode Software configurable  105 mm  200 kHz	
Analogue output function [Sd] sensing range  Complementary Enclosure material Front material  Function available  Blind zone Transmission frequency Repeat accuracy Deviation angle from 90° of object to be detected	010 V 0.1051 m  PBT Epoxy Rubber Resin With synchronisation mode Software configurable 105 mm 200 kHz 0.1 %	
Analogue output function [Sd] sensing range  Complementary  Enclosure material  Front material  Function available  Blind zone  Transmission frequency	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode Software configurable  105 mm  200 kHz  0.1 %  -1010 °	
Analogue output function [Sd] sensing range  Complementary  Enclosure material  Front material  Function available  Blind zone  Transmission frequency  Repeat accuracy  Deviation angle from 90° of object to be detected  Current consumption	010 V 0.1051 m  PBT  Epoxy Rubber Resin  With synchronisation mode Software configurable  105 mm  200 kHz  0.1 %  -1010 °  30 mA  Teach mode	

Marking	CE	
Threaded length	39.95 mm	
Height	30 mm	
Width	30 mm	
Depth	64.35 mm	
Product weight	0.05 kg	

## Environment

Standards	EN/IEC 60947-5-2 CSA C22.2 No 14 UL 508
Product certifications	cULus E2 EAC RCM Ecolab
Ambient air temperature for operation	-2570 °C
Ambient air temperature for storage	-4080 °C

## 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) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
Environmental Disclosure	Product Environmental Profile	
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	

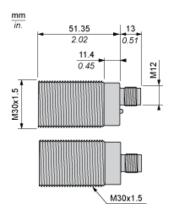
## Contractual warranty

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Warranty	18 months

# Product data sheet Dimensions Drawings

# XXS30P1VM12

## **Dimensions**

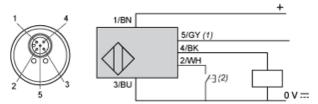


## Product data sheet Connections and Schema

## XXS30P1VM12

## Connections

#### **Connector Wiring**

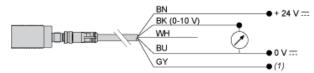


(1): Synchronization(2): External setting

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

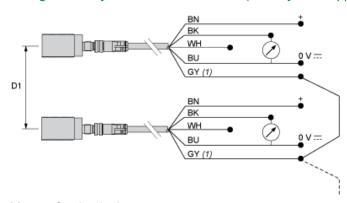
Pin number	Wire color	Description
1	BN: Brown	+ 24VDC
2	WH: White	Input teach
3	BU: Blue	0 VDC
4	BK: Black	Output
5	GY: Grey	Synchronization

## Wiring Scheme. Analog Output



 $\begin{array}{ll} \text{(1):} & \text{Synchronization} \\ \text{0-10 V:} & 1 \ k\Omega ... \infty \end{array}$ 

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



(1): Synchronization

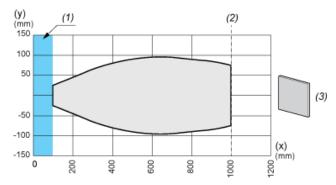
D1: 1/8 Sn
BN: Brown
WH: White
BU: Blue
BK: Black
GY: Grey

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).

#### **Performance Curves**

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



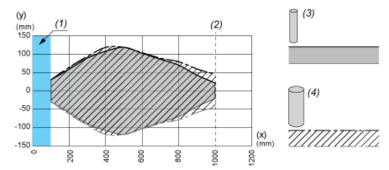
(X): Target distance (Y): Detection limit

(1): Blind zone: 105 mm / 4.13 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: 105 mm / 4.13 inches

(2): Sn max.

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