

XXS30P8VPM12

Ultrasonic sensor, plastic, cylindrical M30, straight, 8 m, 0...10 V+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	26.2 Ft (8 m) adjustable with teach push-button 26.2 ft (8 m) software with kit
Material	Plastic
Type of output signal	Analogue + discrete
Discrete output function	1 NO or 1 NC programmable
Wiring Technique	5-wire
Discrete output type	PNP
Analogue output function	0...10 V
[Us] rated supply voltage	24 V DC reverse polarity protection
Electrical connection	Male connector M12 5 pins
[Sd] sensing range	0.951...26.2 ft (0.290...8 m)
IP degree of protection	IP65 conforming to IEC 60529 IP67

Complementary

Enclosure Material	PBT
Front material	Epoxy Rubber Resin
Thread type	M30 x 1.5
Supply voltage limits	14...30 V DC
Function Available	With synchronisation mode Software configurable
[Sa] assured operating distance	0.951...26.2 ft (0.290...8 m) teach mode)
Blind zone	11.4 in (290 mm)
Transmission frequency	75 kHz
Repeat accuracy	0.1 %
Deviation angle from 90° of object to be detected	-4...12 °
Minimum size of detected object	Cylinder diameter 12 mm 5.9 ft (1.8 m)
Status LED	Output state 1 LED green/yellow) Output state 1 LED multi-colour) Echo state 1 LED green)
Current Consumption	50 mA
Maximum switching current	100 mA overload and short-circuit protection
Maximum switching capacity	>= 1 kOhm overload and short-circuit protection
Maximum voltage drop	2 V
Switching frequency	<= 2 Hz
Setting-up	Teach mode Configurator software
Maximum delay first up	600 ms
Maximum delay recovery	500 ms

Marking	CE CULus
Threaded length	1.7 in (43.2 mm)
Height	1.2 in (30 mm)
Width	1.7 in (43.2 mm)
Depth	4.6 in (116.3 mm)
Net Weight	0.31 lb(US) (0.14 kg)

Environment

Standards	IEC 60947-5-2 CSA C22.2 No 14 UL 508
Product Certifications	cULus[RETURN]E2[RETURN]Ecolab
Ambient Air Temperature for Operation	-13...158 °F (-25...70 °C)
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Vibration resistance	+/-1 mm 10...55 Hz)IEC 60068-2-6
Shock resistance	30 gn in all 3 axes 11 ms IEC 60068-2-27
Resistance to electrostatic discharge	8 kV IEC 61000-4-2
Resistance to electromagnetic fields	9.1 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	2 kV IEC 61000-4-4

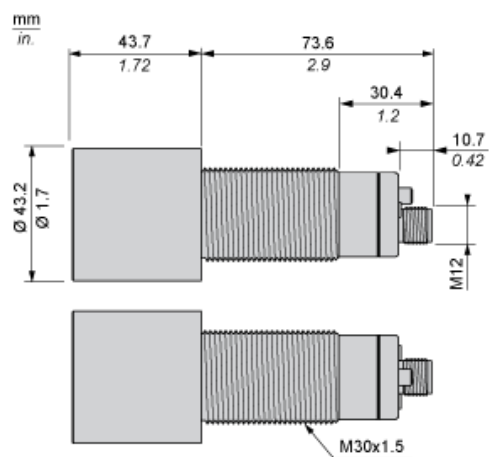
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.80 in (7.11 cm)
Package 1 Width	3.90 in (9.91 cm)
Package 1 Length	5.30 in (13.46 cm)
Package 1 Weight	0.42 lb(US) (0.19 kg)

Offer Sustainability

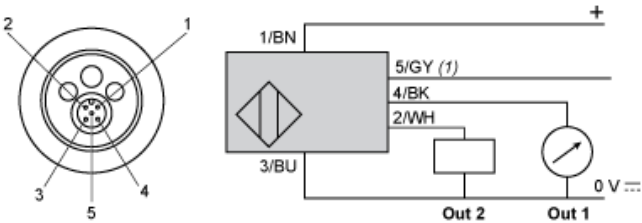
EU RoHS Directive	Not applicable, out of EU RoHS legal scope
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions



Connections

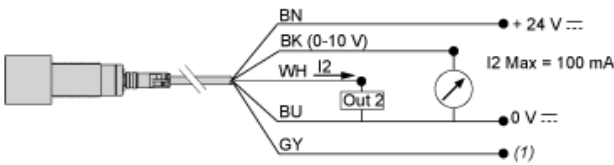
Connector Wiring



(1) : Synchronization

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

Wiring Scheme. Analog Output

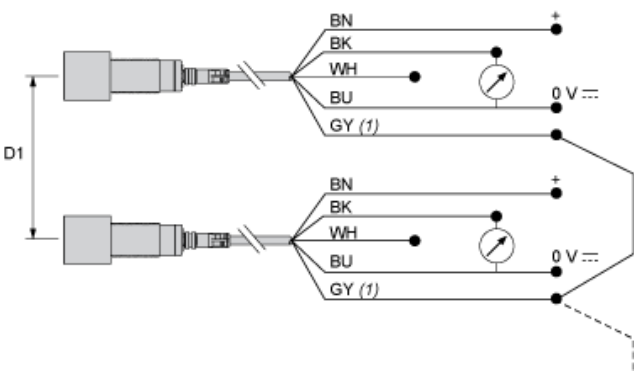


(1) : Synchronization

0-10 1 kΩ...∞

V:

Wiring for the Synchronization Function (Side by Side Application)



(1) : Synchronization

D1 : 1/8 Sn

BN : Brown

WH : White

BU : Blue

BK : Black

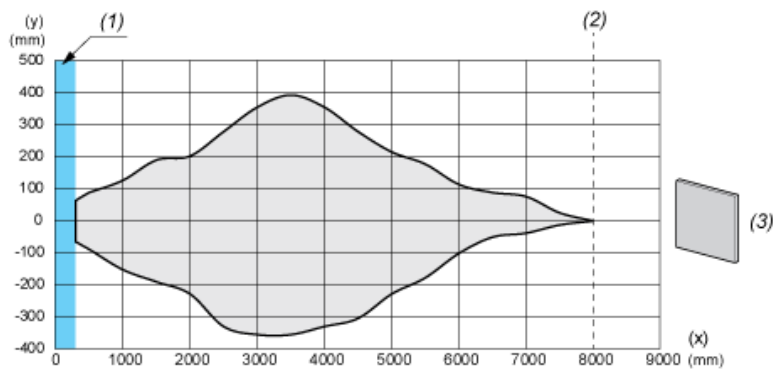
GY : Grey

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).

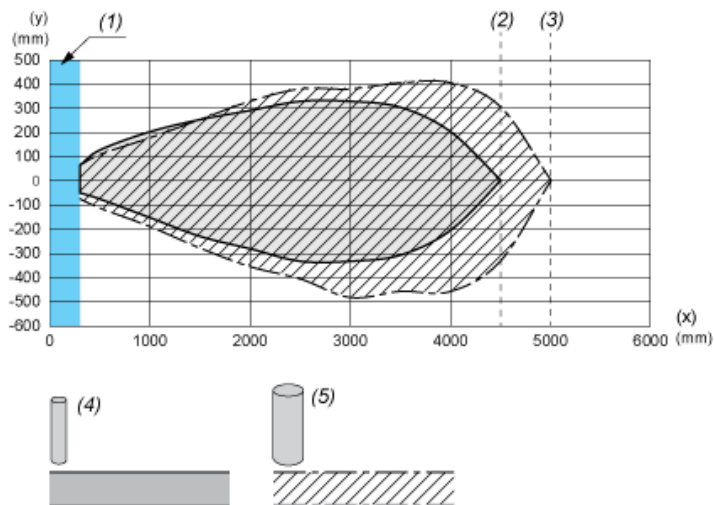
Performance Curves

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



- (X) : Target distance
(Y) : Detection limit
(1) : Blind zone: 290 mm / 11.41 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: 290 mm / 11.41 inches
(2) : Sn max. with $\varnothing$ 10 mm / 0.394 inches cylinder
(3) : Sn max. with $\varnothing$ 25 mm / 0.984 inches cylinder
(4) : $\varnothing$ 10 mm / 0.394 inches stainless steel cylinder
(5) : $\varnothing$ 25 mm / 0.984 inches stainless steel cylinder