



### Main

Range of Product	Telemecanique Ultrasonic sensors XX
Sensor Type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX5
Sensor design	Cylindrical M12
Detection system	Diffuse
[Sn] nominal sensing distance	0.33 ft (0.1 m) fixed
Material	Plastic
Type of output signal	Discrete
Discrete output function	1 NO
Wiring Technique	3-wire
Discrete output type	PNP
[Us] rated supply voltage	12...24 V DC reverse polarity protection
Electrical connection	Male connector M8 3 pins
[Sd] sensing range	0.02...0.33 ft (0.0064...0.102 m)
Beam angle	10 °
IP degree of protection	IP67 conforming to IEC 60529

### Complementary

Enclosure Material	ULTEM
Front material	Epoxy
Thread type	M12 x 1
Supply voltage limits	10...28 V DC
[Sa] assured operating distance	0.02...0.33 ft (0.0064...0.102 m)
Maximum differential travel	0.03 in (0.7 mm)
Blind zone	0.00...0.25 in (0...6.4 mm)
Transmission frequency	500 kHz
Repeat accuracy	0.7 %
Deviation angle from 90° of object to be detected	-10...10 °
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 overload and short-circuit protection
Maximum voltage drop	1 V
Switching frequency	<= 125 Hz
Maximum delay first up	20 ms
Maximum delay response	3 ms
Maximum delay recovery	3 ms
Marking	CE
Threaded length	1.50 in (38 mm)
Height	0.47 in (12 mm)
Width	0.47 in (12 mm)
Depth	1.97 in (50 mm)
Net Weight	0.02 lb(US) (0.011 kg)

## Environment

Standards	IEC 60947-5-2
Product Certifications	UL
Ambient Air Temperature for Operation	-4...149 °F (-20...65 °C)
Ambient Air Temperature for Storage	-40...176 °F (-40...80 °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 level 4 IEC 61000-4-2
Resistance to electromagnetic fields	9.14 V/m (10 V/m) level 3 IEC 61000-4-3
Resistance to fast transients	1 kV level 3 IEC 61000-4-4

## Ordering and shipping details

Category	22490-SENSORS-ULTRASONIC (XX5,6)
Discount Schedule	DS2
GTIN	3389110704044
Returnability	Yes
Country of origin	US

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.70 in (4.32 cm)
Package 1 Width	3.40 in (8.64 cm)
Package 1 Length	3.50 in (8.89 cm)
Package 1 Weight	0.07 lb(US) (0.03 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	30
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	2.84 lb(US) (1.287 kg)

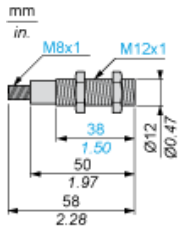
## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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## Dimensions



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Minimum Mounting Distances

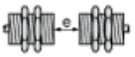
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Side by side



e : respect the distances indicated on the detection curves

Face to face

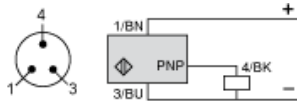


$e > 4 \times S_n$

## Wiring Diagram

### 3-Wire Type

NO outputs, PNP

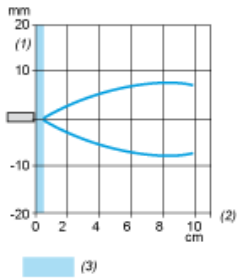


- (1) (+)
- (3) (-)
- (4) Output
- BN Brown
- BU Blue
- BK Black

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Curves

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