



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	NPN
[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)

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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	3389110704037
Returnability	No
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.42 in (3.6 cm)
Package 1 Width	1.42 in (3.6 cm)
Package 1 Length	3.74 in (9.5 cm)
Package 1 Weight	0.81 oz (23.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	30
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	32.28 oz (915.0 g)

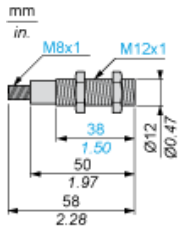
Offer Sustainability

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 www.P65Warnings.ca.gov
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
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	18 months
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Dimensions



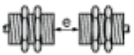
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

Face to face

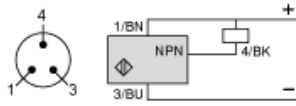


$e > 4 \times S_n$

Wiring Diagram

3-Wire Type

NO outputs, NPN



(1) (+)

(3) (-)

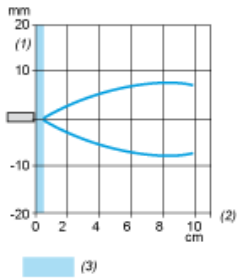
(4) Output

BN Brown

BU Blue

BK Black

Curves



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