



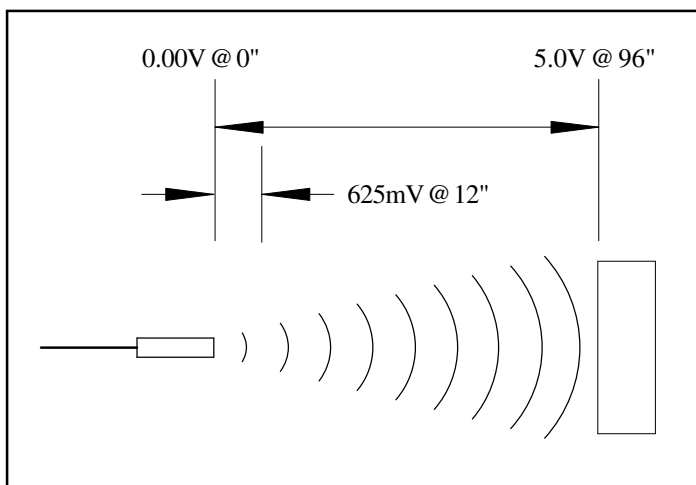
RPS-409A-5V

Features

- Input Voltage 15 - 24VDC
- Reverse Polarity Protected
- Analog Voltage Output 0 - 5V
- Short Circuit Protected
- Temperature Compensation
- LED Indicator
- Self Contained Sensor
- Quick Disconnect Connector
- Sync/Tx Input Line
- Wide Temperature Range

The RPS-409A-5V analog ultrasonic sensors are self contained in a 30mm barrel housing. They are powered by 15 - 24VDC with reverse polarity protection.

The RPS-409A-5V have a short circuit protected analog 0 - 5VDC output. The analog voltage is a fixed volts per inch based on the maximum range of the unit. For example using the RPS-409A-96-5V, the output is a linear 52.1mV per inch. A target placed 12 inches from the sensor will result in an output signal of 625mV or a target placed at 96 inches from the sensor will result in an output of 5V.



The RPS-409A-5V has temperature compensation built in to provide accurate readings throughout the entire operating temperature range.



For set up purposes an LED indicator is provided. The LED is Green when not detecting and changes to Red when a target moves into place. The sensor is completely sealed and the connection is made by way of IP and NEMA rated cables.

Besides the input and output lines there is a sync/Tx line provided. This can be used for connecting multiple sensors together to prevent cross talk, or to force the sensor to transmit at a particular time.

The RPS-409A-5V is designed to take advantage of today's PLC and computer analog input cards. The analog card chosen will determine the resolution of the system. The numerical values that are programmed into the PLC or computer will determine the zero and span.

If a set point or set points are required in the application, please refer to the Migatron SPC-701, SPC-704, or M-1000 control products. Both the SPC-704 and M-1000 can also provide excitation power to drive the sensor.

Specifications:

Model	Range	Input Current	mV/Inch
RPS-409A-96-5V	6 - 96"	25mA Typical	52.1mV
RPS-409A-240-5V	12 - 240"	25mA Typical	20.8mV

Power Input: 15 - 24VDC Reverse Polarity Protected
Full Range 14 - 27VDC

Ambient Temperature: -40 - 60°C or -40 - 140°F

Humidity: 0 - 95% Non-Condensing

Housing Material: Valox barrel with PVC sensing face/head

Output: Analog Voltage Output 0 - 5V
(Load 500 Ohms to infinity)
Short Circuit Protected

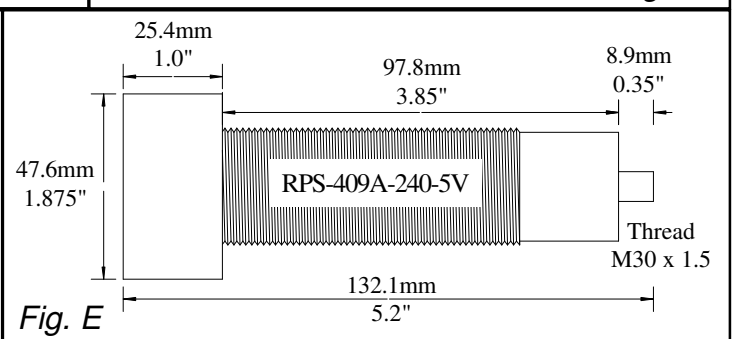
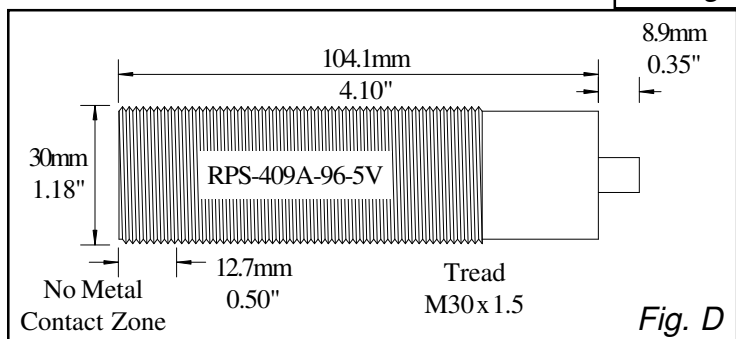
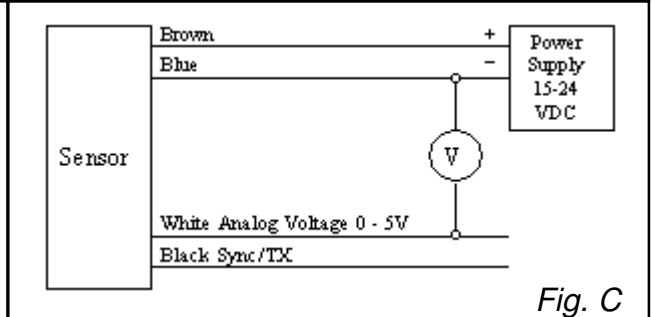
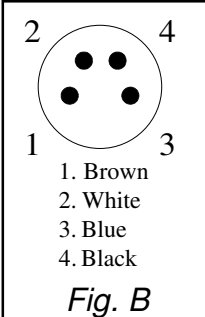
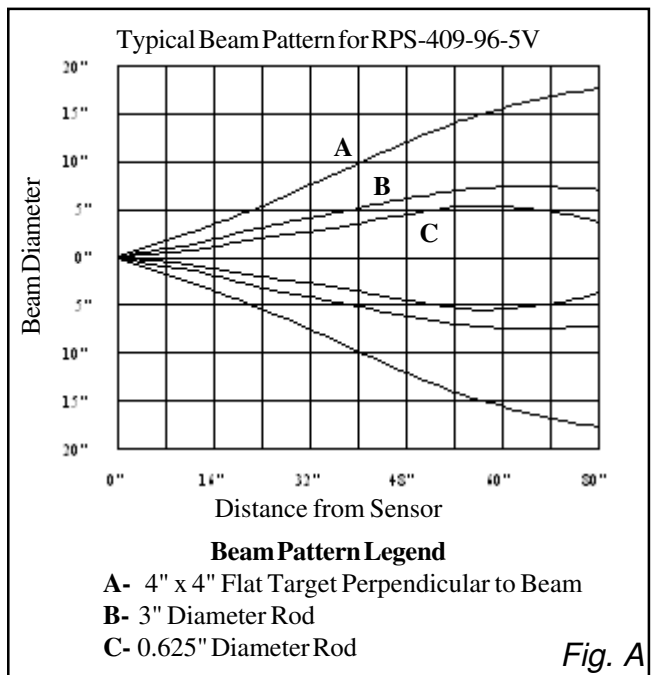
Model	Frequency	Response Time
RPS-409A-96-5V	135kHz	50ms Typical
RPS-409A-240-5V	58kHz	300ms Typical

Weight: RPS-409A-96 Sensor 4 ounces
RPS-409A-240 Sensor 6 ounces

Enclosure: Rating IP65 (NEMA 4)
Rating IP67 (NEMA 6P)
Depending on cable selection

Figure:

- A - Beam Spread
- B - Connector Diagram
- C - Wiring Diagram
- D - Mounting Dimensions RPS-409A-96-5V
- E - Mounting Dimensions RPS-409A-240-5V



Mounting Consideration:

The performance of this sensor can be influenced by direct metal contact. This zone is 0.50" measured from the sensor face. See Fig. D

PART NUMBER	RANGE	OUTPUT/DESCRIPTION
RPS-409A-96-5V	6 - 96"	0 - 5VDC Analog
RPS-409A-240-5V	12 - 240"	0 - 5VDC Analog
F32-5070042 F32-5070053 F32-5070094	Snap-In Cable Straight Locking Cable Straight Locking Cable Right-Angle	6' Cable, IP65, NEMA 4 - Sold Separately 6' Cable, IP67, NEMA 6P - Sold Separately 6' Cable, IP67, NEMA 6P - Sold Separately



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