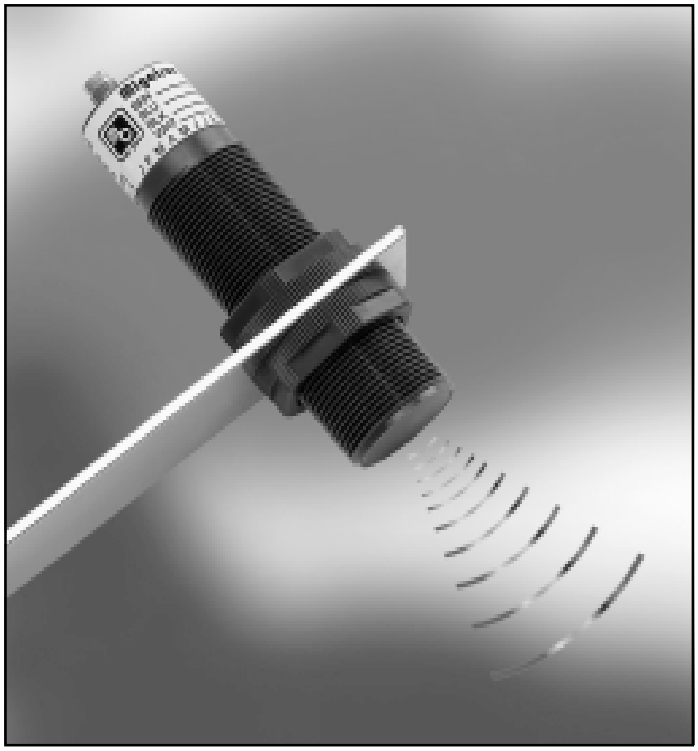
NEW

RPS-409A

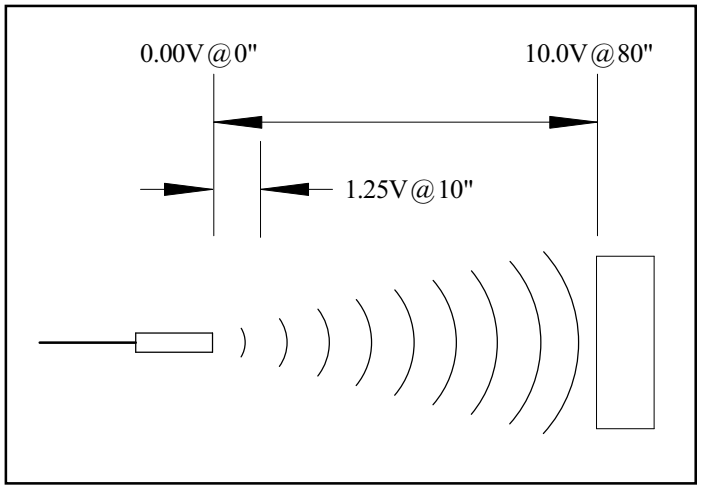


Features

- Input Voltage 20-30VDC
- Reverse Polarity Protected
- Analog Voltage Output
- Short Circuit Protected
- Temperature Compensation
- Wide Temperature Range
- Various Sensing Ranges
- LED Indicator
- Self Contained Sensor
- Quick Disconnect Connector
- PVC Housing
- Sync / Enable Input Line

The RPS-409A analog ultrasonic sensor is a self contained sensor in a 30mm PVC barrel housing. It is powered by 20-30VDC with reverse polarity protection.

The RPS-409A has a short circuit protected analog 0-10VDC output. The analog voltage is a fixed volts per inch based on the maximum range of the unit. For example using the RPS-409A-80, the output is a linear 0.125 volts per inch. A target placed 10 inches from the sensor will result in an output signal of 1.25 volts or a target placed at 80 inches from the sensor will result in an output of 10 volts.



The RPS-409A 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 / enable line provided. This can be used for connecting multiple sensors together to prevent cross talk, or to fire the sensor at a particular time.

The RPS 409A is designed to take advantage of todays 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	Volts/Inch
RPS-409A-40	4" to 40"	35mA Typical	.250
RPS-409A-80	6" to 80"	35mA Typical	.125
RPS-409A-144	10" to 144"	45mA Typical	.069

Power Input: 20-30VDC Reverse Polarity Protected
Ambient Temperature: -40° to 60°C (-40° to 140°F)
Humidity: 0% - 95% Non-Condensing
Housing Material: PVC with PVC sensing face
Output: Analog Voltage Output 0-10V
(Load 500 Ohms to infinity)
Short Circuit Protected

Model	Frequency	Response Time
RPS-409A-40	175kHz	25ms Typical
RPS-409A-80	135kHz	25ms Typical
RPS-409A-144	70kHz	75ms Typical

Weight: Sensor 4 ounces
Sensor plus cable 9 ounces
Enclosure: Rating IP65 (NEMA 4), Rating IP68 (NEMA 6P)
Depending on cable selection.

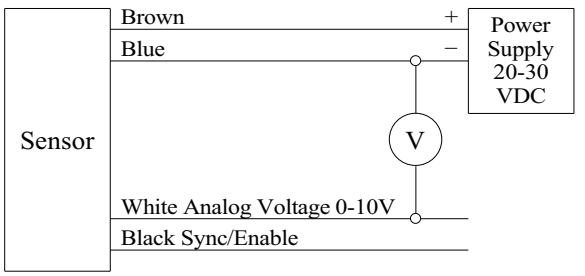
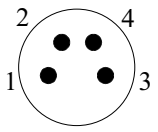


Fig. A



1.Brown
2.White
3.Blue
4.Black
Fig. B

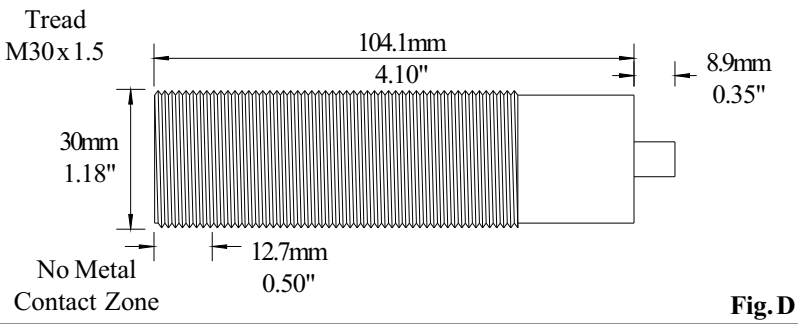
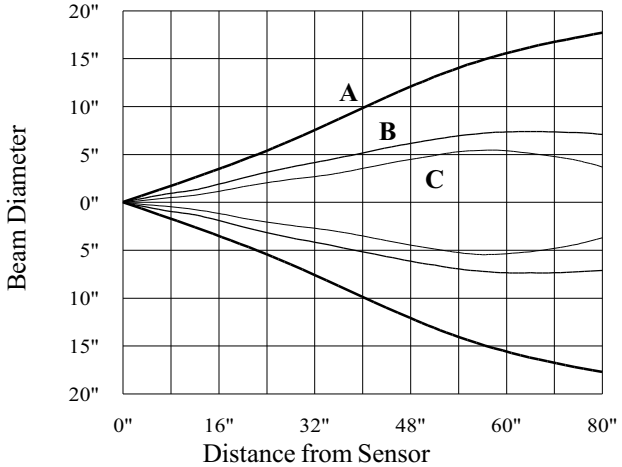
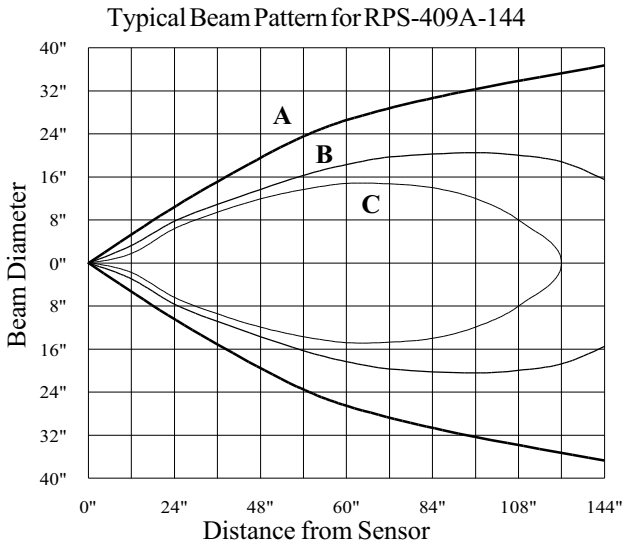


Fig. D





Beam Pattern Legend
A- 4" x 4" Flat Target Perpendicular to Beam
B- 3" Diameter Rod
C- 0.625" Diameter Rod
Fig. C

Figure:
A- Wiring Diagram
B- Connector Diagram
C- Beam Spread
D- Mounting Dimensions

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-40	4" to 40"	0 - 10VDC Analog
RPS-409A-80	6" to 80"	0 - 10VDC Analog
RPS-409A-144	10" to 144"	0 - 10VDC Analog
F32-5070042	Snap-In Cable Straight	6' Cable, IP65, NEMA 4 (sold separately)
F32-5070053	Locking Cable Straight	6' Cable, IP68, NEMA 6P (sold separately)
F32-5070094	Locking Cable Right-Angle	6' Cable, IP68, NEMA 6P (sold separately)

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