

RPS-400-30

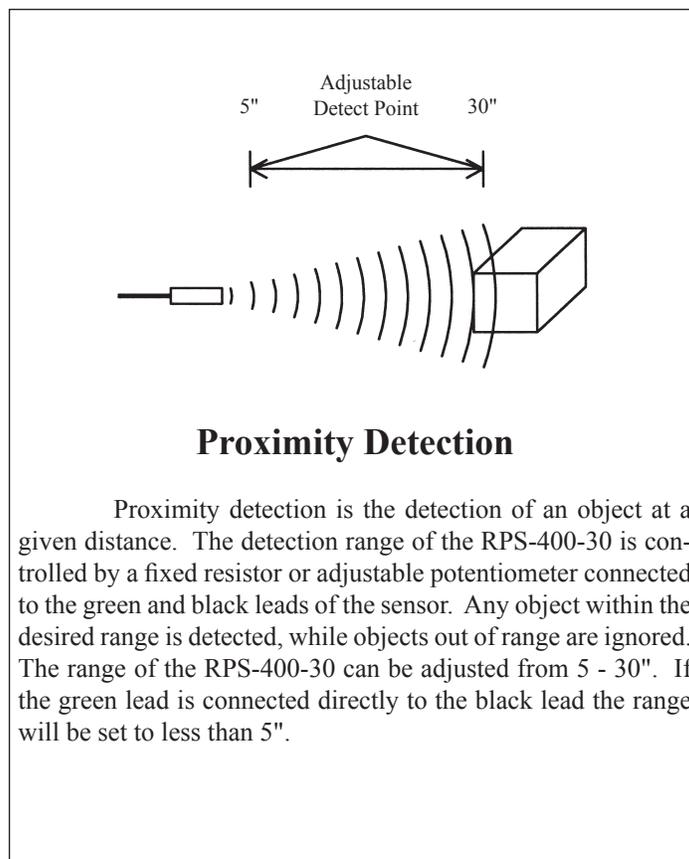
Features

- Self Contained
- Operates in Hostile Environments
- Sensing Range 5 - 30"
- Operating Voltage 12 - 30VDC
- Narrow Sensing Beam
- NPN Transistor Output
- High Frequency 222kHz
- Externally Adjustable Sensing Range

The RPS-400-30 has a 22mm barrel housing, completely self-contained, 12 - 30VDC powered ultrasonic proximity sensor. A sealed transducer provides protection in environments where dirt and moisture are a problem. The sensor is constructed of Acetal plastic with a silicon rubber sensing face. This sensor is range or distance sensitive, enabling the sensor to detect objects only within the desired range, and reject objects outside the desired range. The RPS-400-30 is a solid state sensor and has an NPN open collector transistor output. For initial setup purposes, a built in LED indicator illuminates when the ultrasonic wave from the sensor is reflected back to the unit within the desired range. The sensing range is fixed or adjustable. By connecting a fixed resistor or adjustable potentiometer



between the green lead and black lead of the cable the maximum range can be set from 5 to 30 inches. The resistor chart on the following page provides resistance values and the approximate resulting sensing range. These sensors provide precise proximity or level sensing regardless of color, density or transparency. They are equally effective on liquid, metal, plastic and glass targets. A standard 6 foot cable is provided. Call factory for optional cable lengths.



Specifications:

- Operational Range: Adjustable 5 - 30"
- Power Input: 12 - 30VDC
- Input Current: 30mA
- Ambient Temperature: 0 - 50°C or 32 - 122°F
- Humidity: 0 - 95% Non-Condensing
- Housing: Acetal Plastic with Silicone sensing face
- Output: NPN Open Collector Transistor
- Current Load: 60mA continuous
- Transducer Frequency: 222kHz
- Response Time: 30ms - On / 30ms - Off
- Weight: 4 ounces

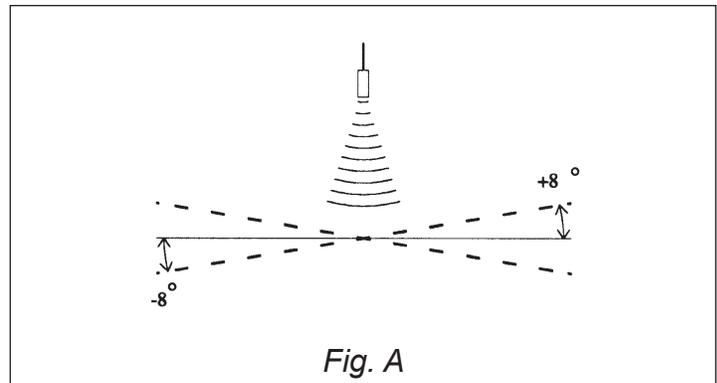


Fig. A

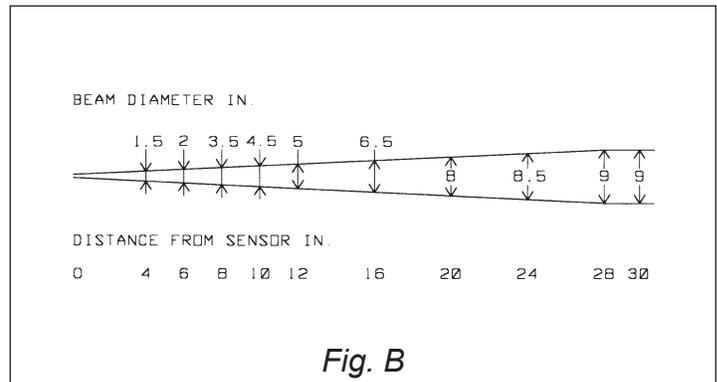


Fig. B

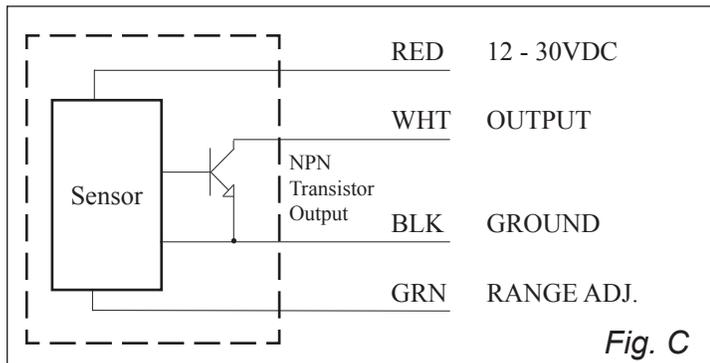


Fig. C

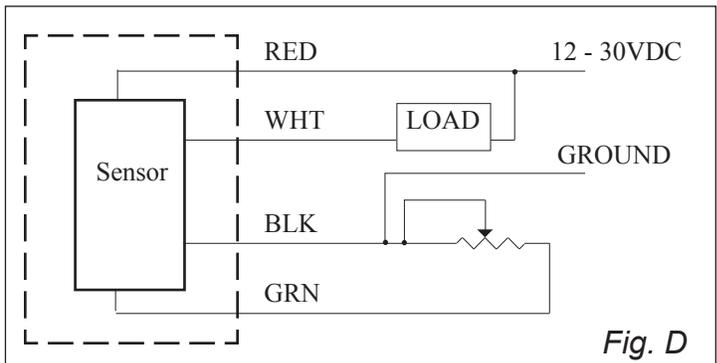


Fig. D

Figure:

- A - Angle of Tilt
- B - Beam Spread
- C - Wiring Diag. - Connect to NPN Output
- D - Wiring Diag. - Load and Range Control Pot
- E - Mounting Dimensions

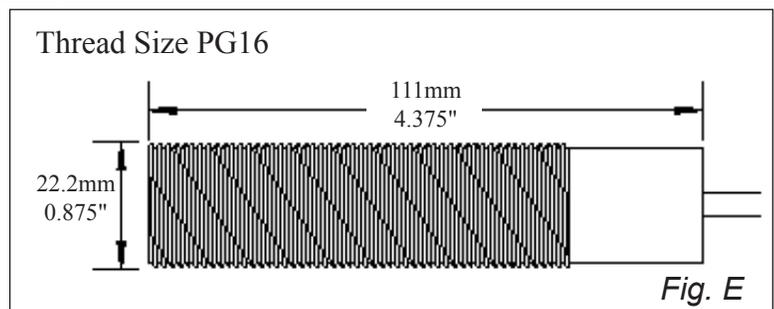


Fig. E

Resistor Chart								
Resistor Value	10k	22k	47k	68k	100k	150k	220k	330k
Approximate Distance	5"	6"	7"	9"	11"	15"	20"	30"

PART NUMBER	RANGE	OUTPUT / DESCRIPTION
RPS-400-30	5 - 30"	NPN Open Collector Output