

SERIES 742 THREADED END PRESSURE SENSOR

Specification #RV-742

PART 1 GENERAL

1.01 SUBMITTALS

- A. Submit product literature that includes information on the performance and operation of the sensor, materials of construction, dimensions and weights, elastomer sleeve characteristics, and pressure rating.
- B. Upon request, provide shop drawings that clearly identify the sensor dimensions including all supplied accessories.

1.02 QUALITY ASSURANCE

- A. Supplier shall have at least ten (10) years experience in the manufacture of pressure sensor isolation rings utilizing an elastomer sensing element, and shall provide references and a list of installations upon request.

PART 2 PRODUCTS

2.01 PRESSURE SENSOR

- A. Pressure Sensors are to be of the threaded end design with standard NPT threads. Port area shall be 100% of the mating pipe port area through the entire sensor length. The main body of the sensor shall be completely protected from the process fluid by a flexible elastomer sensing sleeve.
- B. The sensor sleeve shall measure pressure for 360° around the full circumference. The elastomer sensing sleeve shall be one piece construction with integral flanges locked in by bolted end covers. Flexible sensing ring shall have a cavity behind the ring filled with fluid to transfer pressure to the gauge.
- C. The sensor sleeve flanges shall have a molded O-ring, which shall fit into a mating O-ring groove machined into the sensor metal body. Threaded end covers shall hold down tightly on the rubber flange to positively lock it in place.
- D. Sensor shall be supplied with a back-mounted gauge. Sensor shall be manufactured in the USA.

2.02 FUNCTION

- A. Line pressure pushes against the elastomer ring inside the sensor. The deflection of the ring displaces a fluid fill inside the body of the sensor, forcing the fluid into a pressure reading device.

2.03 MANUFACTURER

- A. All Sensors shall be of the Series 742 as manufactured by the Red Valve Co., Inc. of Carnegie, PA 15106 or approved equal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Valve shall be installed in accordance with manufacturer's written Installation and Operation Manual and approved submittals.

3.02 MANUFACTURER'S CUSTOMER SERVICE

- A. Manufacturer's authorized representative shall be available for customer service during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the sensor.
- B. Manufacturer shall also make customer service available directly from the factory in addition to authorized representatives for assistance during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the sensor.