

Series 42/742 Pressure Sensors



- Series 42/742 can be finished or rodded clean without removal from the line or disassembly
- Protects and isolates instrumentation from chemical or slurry plugging
- Lower installation and operating costs
- Accommodates both positive and negative pressures

Materials of Construction

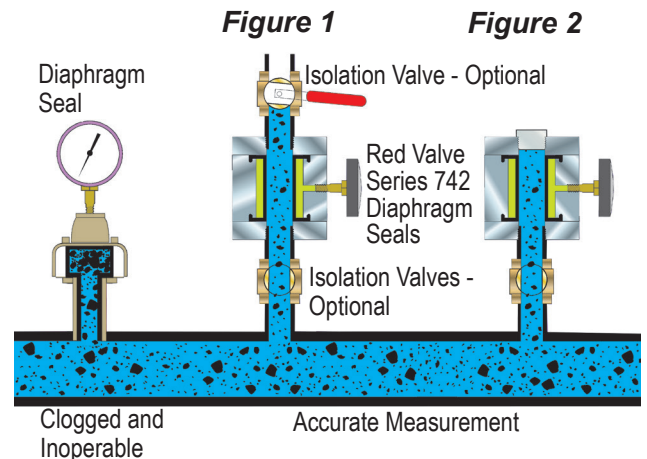
- **Body and Upper and Lower Case:** Carbon Steel or 316 Stainless Steel.
- **Sleeves:** Pure Gum Rubber (PGR), Ethylene Propylene Diene Terpolymer (EPDM)*, Acrylonitrile-Butadiene (NBR), Fluoroelastomer (FKM)*, Chloroprene (CR)*, Chlorosulfonated Polyethylene (CSM), Chloro-Isobutylene-Isoprene (CIIR).
* White food grade options available.
- **Fill Fluids:** Silicone Oil (400° F), Ethylene Glycol and Water (200° F), Vegetable Oil (230° F).

Red Valve's Series 42/742 Pressure Sensors isolate and provide accurate instrument reading of gauges, transmitters and pressure switches, making them ideal for use in chemical or slurry service. The Series 42/742 can be mounted in any flow direction and has threaded ends manufactured to standard NPT pipetap dimensions for smaller pipelines.

The Series 42/742 Pressure Sensor's principle of operation is simple. As process pressure is sensed by the 360° elastomer sleeve, the captive fluid transfers the process pressure to the instrument, providing a consistent, accurate reading.

The Series 42/742 offers a significant advantage over traditional diaphragm seals. When installed perpendicular to the pipeline, the Series 42/742 can be isolated so that in the event of plugging, the elastomer slurry ring area (which isolates the instrument) can be flushed (*Figure 1*) or rodded clean (*Figure 2*).

Series 42/742 Pressure Sensors are available in sizes 0.5-2" (15-50mm). The Series 42 features a top mounted gauge, while the Series 742 is supplied with a standard back mounted gauge. The elastomer sleeve extends to the flange face, eliminating the need for additional gaskets.



SERIES 42/742

DIMENSIONS in/mm			
SIZE D	LENGTH F TO F	WORKING PRESSURE psi/kPa	WEIGHT lbs/kg
0.5" 15mm	2.88 73	720 4960	5 2
1" 25mm	3.38 86	720 4960	6 3
1.5" 40mm	3.38 86	720 4960	15 7
2" 50mm	3.38 86	720 4960	20 9

