

SERIES 5200 RSR SURGE RELIEF PINCH VALVES
Specification #RV-5200RSR

PART 1 GENERAL

1.01 SUBMITTALS

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

1.02 QUALITY ASSURANCE

- A. Supplier shall have at least ten (10) years experience in the manufacture of pinch style valves, and shall provide references and a list of installations upon request.

PART 2 PRODUCTS

2.01 SPRING-LOADED CYLINDER, PINCH-STYLE PRESSURE RELIEF VALVES

- A. Valves are to be full metal body, mechanical pinch type with flange joint ends on both the body and the flexible sleeve. Port areas shall be 100% of the full pipe area at the valve ends. The Valve area shall be 100% of the full pipe area through the entire length of the valve.
- B. The valve length shall be as given in ISA S75.08 The integral flanges shall be drilled and tapped to mate with ANSI B16.1, Class 125 / ANSI B16.5 Class 150 flanges.
- C. The Pinch Tube shall be one piece construction with integral flanges drilled to be retained by the flange bolts. The Pinch Tube shall be fabric reinforced. All internal Valve metal parts are to be completely isolated from the process fluid by the flexible elastomer Pinch Tube.
- D. The steel mechanism shall be single acting, closing the Pinch Tube (Sleeve) from the top only. The mechanism shall be supported in the Valve Body. There shall be no cast parts in the operating mechanism. The pinch mechanism shall be adjustable for stroke without removing the Valve from the line. The mechanism shall be connected to the cylinder actuator by a stainless steel stem.
- E. The cylinder actuator shall be manufactured utilizing black AmalgonTM cylinder tubing. The spring shall be fully enclosed in the cylinder housing. The cylinder assembly shall be mounted on the Valve body by means of an open yoke. The spring shall be externally adjustable for set pressure.
- F. The yoke shall be used to mount limit switches, stem position indicator, and/or other accessories. All accessories shall be factory set and field adjustable.
- G. The Valve and Actuator System shall be self-contained with no external energy source required.

2.02 FUNCTION

- A. A pre-loaded spring inside the cylinder applies constant pressure to the piston, pushing the piston rod out of the actuator, forcing the pinch bar farther into the valve body, and pinching the sleeve closed. When line pressure exceeds the limit set on the pre-loaded spring, the pinch sleeve is forced open, until the pressure drops below the set limit and the spring closes the valve.

2.03 MANUFACTURER

- A. All valves shall be of the Series 5200 RSR 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 valve.

- 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 valve.