

SERIES 70 MANUALLY OPERATED PINCH VALVES

Specification #RV-70

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 MANUALLY OPERATED PINCH VALVES

- A. Valves are to be of the open frame, mechanical pinch type with flange joint ends on the sleeve trim, supported by backing plates secured to the frame. The valve shall have face-to-face dimensions of standard gate valves, in accordance with ANSI B16.10, or a custom length no longer than twice the nominal valve port diameter, as shown in submittal drawings. The sleeve flanges and backing plates shall be drilled to mate with ANSI B16.1, Class 125/ANSI B16.5, and Class 150 flanges.
- B. The sleeve trim shall be one piece construction with integral flanges drilled to be retained by the flange bolts. The sleeve trim shall be reinforced with calendared nylon or calendared polyester fabric to match service conditions. The sleeve trim shall be connected to the pinch bar by tabs imbedded in the sleeve trim reinforcing ply. All valve metal parts are to be completely isolated from the process fluid by the sleeve trim.
- C. The sleeve shall be visible while being pinched in all positions. For full port and reduced port sleeves the port areas shall be 100% of the full pipe area at the valve ends. For Cone and Variable Orifice sleeves the inlet port area shall be 100% of the full pipe area, reducing to a smaller port at the outlet. In sizes 8" and larger with ANSI B16.10 face-to-face dimensions, the sleeve will be pre-pinched so that the minimum full open area is centered in the valve.
- D. The steel mechanism shall be double acting with pinching of the sleeve trim occurring equally from two sides. ACME threads shall be used on all valve mechanisms. There shall be no cast parts in the operating mechanism. The stem shall be non-rising and have a non-rising handwheel. Bevel gear operators shall be provided on all valves over 8" size. Valves shall be made in the USA.
- E. The handwheel shall be constructed of welded, tubular steel and be connected to the stem by means of a single retaining bolt. The handwheel shall be fitted with a lubrication fitting to allow lubrication of the stem. A valve position indicator rod shall pass through the center of the stem, retaining bolt, and handwheel to provide visual position indication. Lifting eyelets shall be provided on the top of the valve body where applicable.

2.02 FUNCTION

- A. Rotating the handle clockwise simultaneously lowers a pinch bar above the sleeve, while raising a pinch bar below the sleeve, pinching the sleeve closed at the center of the valve. Turning the handle counter-clockwise separates the two pinch bars to open the valve.

2.03 MANUFACTURER

- A. All valves shall be of the Series 70 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 valves.

- 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 valves.