

# SERIES 75 MANUALLY OPERATED PINCH VALVES

## Specification #RV-75

### 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 full cast metal body, mechanical pinch type with flange joint ends on both the body and the sleeve trim. The valve shall have face-to-face dimensions of standard gate valves, in accordance with ANSI B16.10 up to 12" size. Sizes 14" and larger shall have a face to face dimension no longer than twice the nominal valve port diameter. The flanges 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 internal valve metal parts are to be completely isolated from the process fluid by the sleeve trim. To promote laminar flow. The interior surface of the sleeve shall be smooth. Sleeves manufactured with interior arches or folds shall not be permitted.
- C. 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.
- 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. To prevent pitting, corrosion, seizing or jamming. The pinching mechanism and side-rails shall be fully enclosed within the valve body. Side-rails that slide through bushings or protrude through the valve body shall not be permitted. The stem shall be non-rising and have a non-rising handwheel. 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. Bevel gear operators shall be provided on all valves over 8" size. Lifting eyelets shall be provided on the top of the valve body where applicable.

#### 2.02 FUNCTION

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

#### 2.03 MANUFACTURER

- A. All valves shall be of the Series 75 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.