

**SERIES 9000 MANUALLY OPERATED HIGH PRESSURE CONTROL PINCH VALVES**  
**Specification #RV-9000MAN**

**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 HIGH PRESSURE PINCH VALVES**

- A. Valves are to be of the full cast metal body with reinforcing ribs integrally cast, mechanical pinch type with flange joint ends. 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 250/ ANSI B16.5, Class 300 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, calendared polyester, or Kevlar fabric as required to match service conditions. All internal valve metal parts are to be completely isolated from the process fluid by the sleeve trim.
- 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 port area at the inlet shall be 100% of the full pipe area, reducing to a smaller port at the outlet.
- D. The solid steel mechanism shall be single acting, closing the sleeve trim 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.
- E. The mechanism shall be connected to a bevel gear actuator by a rising stainless steel stem. The handwheel shall be non-rising. Mechanism lubrication fittings shall be provided. Bevel gear operator shall be provided.
- F. The handwheel shall be constructed of welded, tubular steel and be connected to the bevel gear operator by means of a single retaining bolt. The handwheel shall be fitted with a lubrication fitting to allow lubrication of the stem.

**2.02 FUNCTION**

- A. Opening or closing of the valve is accomplished by manual rotation of a handwheel, which in turn operates a bevel-gearbox. The bevel-gear unit gives a mechanical advantage that reduces the torque needed to close. The bevel-gear unit acts upon a threaded stem connected to the upper pinch bar. Driving the stem downwards shall close the valve, and the reverse shall open.

**2.03 MANUFACTURER**

- A. All valves shall be of the Series 9000 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.