

MANUALLY OPERATED RESILIENT SEATED SERIES G KNIFE GATE VALVE
Specification #RV-G-R

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, elastomer characteristics, and pressure rating.
- 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 knife gate valves utilizing elastomer cartridge seats, and shall provide references and a list of installations upon request.

PART 2 PRODUCTS

2.01 KNIFE GATE VALVES

- A. Series "G" Knife Gate Valves shall be bonnetless, wafer type made with a cast iron body, with several support ribs for a strong, flanged connection. All sizes shall have a fabricated stainless steel liner.
- B. Standard flange holes are drilled and tapped. Through bolted flanges are also available, except in the chest area where the holes are drilled and tapped. Flange drilling dimensions meet M.S.S. SP-81 and ANSI B16.5, Class 125 / 150 requirements.
- C. The Series "G" has raised face flanges and meets MSS SP-8i face-to-face dimensions. Valve shall have all wetted parts of 304 or 316 Stainless Steel. Stainless Steel liner shall extend through the valve chest to the top of the packing gland. Both sides of the gate shall be finished ground. The Stem shall be Stainless Steel and shall have double pitch threads. The yoke nut shall be acid-resistant bronze. The valve shall have a raised seat with a relieved area around the seat to prevent jamming.
- D. The valve gate shall be suitable for 150-psi pressure differential. Packing gland shall have 3 layers of fiber packing with a 4th elastomer seal. Valve shall have a round port with a replaceable resilient seat interlocked by a metal retaining ring. The metal ring shall act as a wiper blade to clean the gate before it passes over the seat. The resilient seat shall be captured and locked in place on three sides only exposing one surface for sealing which prevents blowout.

2.02 FUNCTION

- A. Rotating the handle (*and therefore the threaded nut*) clockwise pushes the threaded stem towards the valve body, sliding the gate downward until the opening is completely blocked. The chamfered edge of the gate will seat against the jambs to ensure a tight seal. Rotating the handle counter-clockwise pulls the gate out from between the seats, opening the valve.

2.03 MANUFACTURER

- A. All valves shall be of the Series G style 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.

