

R-4 CONCENTRIC REDUCERS

Specification #RV-R4

PART 1 GENERAL

SUBMITTALS

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

1.02 QUALITY ASSURANCE

- A. Supplier shall have at least ten (10) years experience in the manufacture of non-metallic reducers, and shall provide references and a list of installations upon request. Supplier shall be a member of the Fluid Sealing Association.

PART 2 PRODUCTS

2.01 ELASTOMERIC REDUCERS

- A. The Concentric Reducer shall have a rubber inner tube, a body constructed of multiple plies of fabric impregnated with synthetic rubber, and a protective outer cover of synthetic rubber to provide resistance to deterioration from weather and ozone. Steel wire shall be imbedded in the body for additional strength.
- B. The temperature and chemical compatibility requirements, as specified in the Purchase Order shall determine the elastomer and fabric materials.

Class I - to 180° F: PGR, Neoprene, Hypalon, or Buna-N, with Nylon or Polyester reinforcement.

Class II - to 250° F: Chlorobutyl, EPDM with polyester reinforcement.

Class III - to 400° F: Solid Viton®, with Kevlar® reinforcement.

- C. Flanges shall be constructed to meet ANSI Class 125#/150# drilling. Split steel retaining rings must be installed on the inside of the rubber flanges. Control units shall be specified when piping is not anchored to eliminate excessive elongation of the reducer. Joint dimensions for all variations shall follow Fluid Sealing Association guidelines, unless otherwise specified in the purchase order. Reduction in flange size shall not exceed 20 degrees or one flange size. Reducer shall be manufactured in the USA.

2.02 FUNCTION

- A. The elastomer construction of the reducer acts to absorb vibration, preventing it from being transmitted to the piping, as well as compensating for lateral deflection. The concentric reduction of the joint allows the connection of 2 different sized pipe flanges.

2.03 MANUFACTURER

- A. All Concentric Reducers shall be Redflex™ Series R-4 as manufactured by the Red Valve Company, Inc. of Carnegie, PA 15106, USA, or approved equal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Reducer 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 joint.
- 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 reducer.