

## **QuadroSeal Hydrostatic Tank Pressure Relief Valves**

Ductile Iron

Suggested Specifications

Tank Pressure Relief Valves shall be installed as shown on the drawings to prevent sub-grade concrete tanks from becoming buoyant and floating from hydrostatic pressure, or to prevent damage to the tank side walls. A pocket of clean crushed stone approximately 3/4" to 2" in diameter should be placed at the external port of the Wall Pipe or Floor Valve. The lid shall open when the external pressure exceeds internal pressure by approximately 5" of head, so that pressure will be equalized on the inside and outside of the tank. All valves and wall pipes shall be ductile iron, grade 65-45-12.

### **WALL TYPE PRESSURE RELIEF VALVES:**

Wall Type Pressure Relief Valves shall have a removable strainer retained in the valve. Pressure Relief Valves without strainers or with strainers in the Wall Pipe are not acceptable. Wall Pipe shall have bolt holes tapped for studs, to allow for flush mounting of the valve to the tank wall. Flange on both Wall Pipe and Wall Valve shall comply with ANSI Class 125 for outside diameter, bolt circle and number of bolts. Flange thickness for 4" valves shall be a minimum of 7/16"; 6" valves shall be a minimum of 1/2". Hinge pin connecting the body and lid shall be made of stainless steel. Hinge pins of bronze are not acceptable. Isolating washers of UHMWPE shall be installed on the hinge pin between the lid and body, preventing metal to metal contact.

### **FLOOR TYPE PRESSURE RELIEF VALVES:**

Floor Type Pressure Relief Valves shall have an integrally cast collar. The lid shall have locking lugs to prevent separation from the valve body. Floor type valves shall have a removable strainer. The length of floor type valves shall be extended with the use of C900 PVC Pipe, having the same OD as ductile iron pipe. The C900 Pipe shall be securely retained by a "Reiber Style, Angled Gasket" inside the casting. O-Rings are not acceptable for retaining C900 PVC Pipe.

### **SEALS:**

Seals on both body and lid shall be Neoprene, 40 durometer and be field-replaceable. The surfaces on the body and lid where the seals are installed must be machined to insure an overall flush and parallel seating surface. Seals shall be the QuadroSeal "wrap-around" design that surrounds body and lid on four sides to prevent separation. In addition, seals shall be bonded to body and lid with an adhesive sealant. Designs which rely solely on adhesive are not acceptable.

The seals shall be secured to the valve body and lid at their outer perimeters to assure adequate sealing contact. Designs that retain the seal to the lid by means of a screw in the center of the lid are not acceptable. Valve designs whose seals do not completely cover the mating surfaces of the lid and body may be furnished in bronze or stainless steel, providing other requirements of this specification are met.

Tank Pressure Relief Valves shall be QuadroSeal as provided by Trumbull Industries, Youngstown, Ohio.