

SECTION 15115 - MISCELLANEOUS VALVES

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing miscellaneous valves as indicated, complete and operable, including accessories and operators.

1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
 - 1. Section 15100 Valves, General

PART 2 -- PRODUCTS

2.1 BACKFLOW PREVENTER VALVES

- A. **General:** Backflow preventers shall work on the reduced pressure principle. They shall consist of 2 spring-loaded check valves, automatic differential pressure relief valve, drain valves, shut-off valves as well as test ports at each pressure chamber. The body material shall be bronze or cast iron for a working pressure of not less than 150 psi, with bronze or stainless steel trim. Drain lines with air gaps shall be provided.

2.2 SEWAGE SURGE RELIEF VALVES

- A. **Operating Requirements:** The valve shall open immediately when the system pressure exceeds the load setting [50 psi] of the counterweights and shall close slowly at an adjustable speed upon return of system pressure to normal.
- B. **Valve Body:** Sewage surge relief valves shall be constructed of a heavy cast-iron or cast-steel body with a welded steel disc having rubber seating face, a non-corrosive shaft for attachment of counterweight arms and lever, and complete non-corrosive cushion chamber.
- C. **Cushion Chamber:** The cushion chamber shall be attached to the side of the valve body externally and so constructed with a piston operating in a chamber that will effectively permit the valve to be operated without any hammering action. The cushioning shall be by oil stored in an oil reservoir attached by piping and fittings to the cushion chamber. The cushion chamber shall be so arranged that the closing speed will be adjustable to meet the service requirements.

2.3 TEMPERATURE AND PRESSURE RELIEF VALVES

- A. **Valve Construction:** Temperature and pressure relief valves for cold and hot water, steam, and air service, unless otherwise indicated, shall have a minimum pressure rating of 250 psi, bronze, steel, or stainless steel bodies, adjustable spring action, screwed or flanged connections, and trim to suit individual applications. They shall be set for each specific condition.

2.4 CORPORATION STOPS

- A. Unless otherwise indicated, corporation stops shall be made of solid brass for key operation, with screwed ends with corporation thread or ironpipe thread, as required.

2.5 PINCH VALVES

- A. Pinch valves shall be of the manually, electrically, pneumatically or hydraulically operated type, as indicated. The valves shall have flanged, split cast iron bodies with ANSI Class 125 lb rating, unless otherwise indicated. The sleeves shall be of the best elastomer recommended for the specific application.

- 1. Pinch check valves for in-line service shall have split cast iron bodies with ANSI Class 125 lb flanged ends and elastomer sleeves best suited for the application. Check valves for end-of-line service shall be of all elastomer construction with single flanges.

2.6 MANUFACTURERS

- A. Products of the type or model indicated shall be manufactured by one of the following (or equal):

- 1. Backflow preventer valves

Cla-Val Company
Febco
Hersey Products, Inc.

- 2. Sewage surge relief valves

APCO (Valve and Primer Corporation)
Golden-Anderson Valve Division (G A Industries, Inc.)
Empire Specialty Co., Inc.

- 3. Temperature and pressure relief valves

A.W. Cash Valve Mfg. Corp.
Consolidated (Dresser Industries Valve Division)
Watts Regulator Company

- 4. Corporation stops

Ford Meter Box Company
James Jones Company
Mueller Company

5. Pinch valves

Red Valve Company, Inc.
RKL (Robbins & Myers)

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Backflow preventers shall be installed in potable water lines where required by applicable codes or regulations, or wherever there is any danger of contamination, and where indicated.
- B. All valves shall be installed in accordance with the manufacturer's printed recommendations.
- C. All backflow preventers shall have piped outlets to the nearest acceptable drain, firmly supported, and installed in such a way as to avoid splashing and wetting of floors.

**** END OF SECTION ****