

Section 15116

CHECK VALVE, TWIN DISC

PART 1 GENERAL

1.01 SUMMARY

This Section includes the furnishing and installation of twin disc check valves as shown on Plans and as described herein.

1.02 MEASUREMENT AND PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for Work performed under this Section. Include cost of Work performed under this Section in pay items for which this Work is a component.

1.03 REFERENCES

This specification references the following publications in their current editions. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

- A. ASTM A351 Standard Specification for Castings, Austenitic, for Pressure-Containing Parts
- B. ASTM A536: Standard Specification for Ductile Iron Castings
- C. NSF / ANSI 61: Standards for Drinking Water Systems Components

1.04 SUBMITTALS

Submit the following in accordance with Sections 01330 – “Submittal Procedures” and 01782 – “Operations and Maintenance Data.”

- A. Shop Drawings and product data, including construction features and materials of construction with ASTM designations.
- B. Operation and maintenance data.
- C. Furnish certification that each valve has been hydrostatically tested at 200 percent of rating.

1.05 RELATED REQUIREMENTS

- A. Section 01330 – “Submittal Procedures”
- B. Section 01782 – “Operations and Maintenance Data”
- C. Section 02515 – “Hydrostatic Testing of Pipelines,”

- D. Painting per Section 09902 – “Painting and Protective Coatings”
 - E. Attachment(s) to this Section if included designate quantity, size, acceptable manufacturers, and special features.
 - F. Other related Work as called for on Plans or specified elsewhere in other Sections.
- 1.06 QUALITY ASSURANCE
- A. Markings

Manufacturer’s name, working pressure, direction of flow, and size to be cast on valve body.
 - B. Standardization

All valves under this Section to be product of a single manufacturer.
- 1.07 SYSTEM DESCRIPTION (NOT USED)
- 1.08 DELIVERY, STORAGE, AND HANDLING
- Ship with flange protectors and store to prevent any damage prior to installation. Any damage occurring prior to the installation is to be replaced by the Contractor with no additional cost to the Owner.
- 1.09 – 1.12 (NOT USED)
- 1.13 WARRANTY
- Provide Authority with manufacturer's warranty guaranteeing the pumps flow meters and associated equipment to be free from defects in workmanship and materials, under normal use and service, for two (2) years from date of Substantial Completion.
- PART 2 PRODUCTS
- 2.01 MANUFACTURER(S)
- A. APCO - Double Door Check Valve (CCD), Series 9000T
 - B. Or Approved Equal
- 2.02 MATERIALS AND/OR EQUIPMENT
- A. General
 - 1. Valves to be plain faced wafer design to fit between specified flanges.

2. Plates to be spring loaded and shall be operated in a vertical position.
3. Valves 5" and larger shall come with a lifting eye bolt for installation

B. Body

1. Material: Ductile iron (ASTM A536)
2. Pressure Class: 150 psi

C. Hinge and Stop Pin

1. Material: AISI type 316 stainless steel

D. Seat

1. Material: EPDM
2. Temperature Rating: -20°F to 300°F
3. Seating shall be resilient and water tight

E. Plates

1. Material: 316 Stainless Steel (ASTM A351 CF8M)
2. Valves 24 inches and larger to have independent plate suspension with an AISI type 316 stainless steel support sleeve in the plate hinge.

F. Springs

1. Material: AISI type 316 stainless steel
2. Maximum Operating Temperature: 325°F

G. Source Quality Control

Factory Tests: Valves to be hydrostatically tested at factory prior to shipment.

2.03 – 2.04 (NOT USED)

PART 3 EXECUTION

3.01 – 3.02 (NOT USED)

3.03 INSTALLATION

Install in accordance with manufacturer's recommendations and other applicable Specification Sections.

3.04 – 3.10 (NOT USED)

END OF SECTION