



SECTION 40_XX_XX SINGLE BODY AIR VALVES FOR SEWAGE SERVICE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Single Body Air Valves for sewage service

- B. Related Sections:
 - 1. (provided by the engineer)
 - 2. (provided by the engineer)
 - 3. (provided by the engineer)

1.02 REFERENCES

- A. ASME B16.42 "Ductile Iron Pipe Flanges and Flanged Fittings"
- B. ASME B16.5 "Steel Pipe Flanges and Flanged Fittings"

1.03 SUBMITTALS

- A. (provided by the engineer)

1.04 QUALITY ASSURANCE

- A. Valves shall be warranted by the manufacturer for defects in materials and workmanship for a period of two years (24 months) from date of shipment.

PART 2 - PRODUCTS

2.01 GENERAL

- A. (provided by the engineer)

2.02 SINGLE BODY AIR VALVES FOR SEWAGE SERVICE

- A. Manufacturers: APCO ASC or pre-approved equal
- B. Design:
 - 1. Single Body Sewage Air Valve shall be a single body valve with double orifice
 - 2. General:
 - a. Large orifice shall allow large volumes of air to escape or enter when filling or draining a pipeline. The large orifice shall shut-off when the free floating, center-guided plug is raised into the orifice by the lifting force of the concave bottom float. The large orifice shall stay closed when the pipeline is filled and pressurized.
 - b. Small orifice shall remain operative and open during normal system operation to allow small pockets of air accumulation to escape automatically and independently of the large orifice.
 - c. Resilient seat shall be fastened to the valve cover without distortion
 - d. Float shall be hermetically sealed and have a concave bottom impact area to provide immediate resistance to flow and instant upwards movement to shut-off the large orifice without spilling.

- C. Materials:
 - 1. Body: Ductile Iron ASTM A536 Gr 65-45-12, Carbon Steel ASTM A216 or 316 Stainless Steel ASTM A351
 - 2. Cover: Ductile Iron ASTM A536 Gr 65-45-12, Carbon Steel ASTM A216 or 316 Stainless Steel ASTM A351
 - 3. Float & Float Stem: 316 Stainless Steel ASTM A240
 - 4. Seat: 316 Stainless Steel ASTM A276
 - 5. Needle: Acrylonitrile-Butadiene (NBR), Terpolymer of Ethylene, Propylene and A Diene (EPDM) or Fluoro Rubber
 - 6. Float & Needle Levers: 316 Stainless Steel ASTM A743 CF8M
- D. Specifications for optional accessories:
 - 1. MRC: A mushroom cap installed in the threaded outlet for discharge protection
 - 2. BFK: Blackflush kit includes shut-off valves, hose, and quick disconnect couplings
- E. Testing:
 - 1. Certified test reports shall be available upon request.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install valves as specified in section (filled in by the engineer) and the manufacturer's instructions.
- B. (verbiage by engineer instructing how discharge piping should be installed)

3.01 COMMISSIONING

- A. Field testing (verbiage by engineer)