



SECTION 40_XX_XX

AIR RELEASE VALVES FOR SEWAGE SERVICE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Air release 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 AIR RELEASE VALVES FOR SEWAGE SERVICE

- A. Manufacturers: APCO ASR or pre-approved equal
- B. Design:
 - 1. Sewage Air Release Valve shall have an elongated body, concave float and stem
 - 2. General:
 - a. Valve shall be designed to operate automatically (open) while pressurized allowing accumulated air in the pipeline, sewage pump or wastewater system to escape through the air release orifice without spilling.
 - b. After accumulated air escapes through the air release orifice, the valve orifice shall be closed by a needle mounted on a compound lever mechanism.
 - c. Lever mechanism is energized by a concave float
 - d. Concave float shall hang inside the valve body, slightly above the inlet and maintain an air gap between the lever mechanism and the waste media.
- 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. Float & Needle Lever: Stainless Steel ASTM A743 CF8M
5. Needle: Acrylonitrile-Butadiene (NBR), Terpolymer of Ethylene, Propylene and A Diene (EPDM) or Fluoro Rubber (FKM)
6. Seat: 316 Stainless Steel ASTM A276
- D. Specifications for optional accessories:
 1. BFK: Backflush kit includes shut-off valves, piping, hose, and quick disconnect couplings
 2. MRC: A mushroom cap installed in the threaded outlet for discharge protection
- 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)