

**ROGERS WATER UTILITIES WATER SYSTEM
ROGERS, ARKANSAS**

**SPECIFICATIONS FOR COMBINATION
AIR RELEASE VALVES
REVISED DECEMBER 2004**

1. **SCOPE**

This specification covers automatic valves installed on water mains to vent accumulated air under system pressure, and to provide air exhaust during initial fill or to prevent a vacuum during draining of the system.

2. **GENERAL REQUIREMENTS**

- a. Valve body and cover shall be cast iron fabricated in accordance with ASTM A48-35 or ASTM A126 Class B. Inlet sizes through 3 inch shall be screwed (NPT). Pipe sizes above 18 inches shall have flanged inlets (125# ANSI B 16.1). A protective hood or cowl shall be installed on the outlet of flange-bodied valves.
- b. Internal seat trim float arm and pivot pin shall be stainless steel type 303 or 304. Floats shall be stainless steel ASTM A240. Other internal parts shall be stainless steel ASTM A240 or ASTM A276.
- c. Internal seat or orifice button shall be of Buna-N rubber compounded for water service. Cover gasket shall be composition-type, equal to Armstrong CS-231, Garlock 3000, or Lexide NK-511. Cover bolts shall be alloy steel.
- d. Valve body shall have a test pressure rating of 300 psi and working pressure rating.

3. **GENERAL OPERATION REQUIREMENTS**

Combination valves shall provide for both automatic air release under system pressure and to allow air movement during filling or draining operations. The combination valve may be housed in a single casting. The housing shall be designed to incorporate conventional or kinetic flow principles to properly vent the air without premature closure. Flanged sized (4 inch) may be furnished in a dual housing. When dual casings are used a bronze manual isolation valve shall be installed. This will allow the air release valve to be serviced when the system is under pressure.

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4. **QUALITY ASSURANCE**

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random air release valves to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting.
- b. All air release valves shall be domestically manufactured.

The following manufactures are approved for combination air release valves.

APPROVED MANUFACTURERS LIST

<u>Manufacturer</u>	<u>6"-12" PIPE</u>	<u>18" PIPE</u>	<u>24" and Larger Pipe</u>
Apco Valve Company	143C	145C	149C
G.A. Industries, Inc. (Empire)	945(1"NPT)	945(2"NPT)	960C
Val-Matic Mfg. Co.	201C	202C	204C

Previous Specifications

April 16,1997