## Air Release Assemblies and Valves



ARA Air Release Assembly with ARV21 Valve

# Discharge outlet

ARA Air Release Assembly with ARV40 Valve

#### General

ARA Air Release Assemblies are highly reliable and easy to maintain. They can be quickly converted to automatic air/vacuum operation without the need to replace piping by using an ARV21 or ARV40 valve. This allows greater system flexibility because systems can be designed to use ARA assemblies with manual valves, and more costly automatic valves can be installed later in locations where they are necessary. The valves and pressure gauge port can be isolated for the installation or removal of components.

To make upgrading to an ARV21 or ARV40 valve easy, Orenco recommends a minimum diameter of 24 inches (610 mm) and a minimum height of 30 inches (760 mm) for ARA enclosures.

Because ARV21 and ARV40 valves are automatic combination air/vacuum release valves with large orifice valve designs, pre-filters are unnecessary. The large orifice valve design also enhances the reliability of the valves, which reduces the need for maintenance.

#### **Applications**

Orenco's ARA Air Release Assembly functions as a manual air, gas, and vacuum release at high points in pressurized effluent collection or transport lines.

The ARV21 and ARV40 are automatic combination air/vacuum release valves with large-orifice valve designs. Both are suitable for use on all pressure lines where the automatic release of air, gases, and vacuum is needed.

The ARV21 also has an air gap at the top of the valve that prevents fluid contact with the sealing mechanism. This makes it ideal for use in applications with continuous high-volume flows, such as pressure sewer mainlines.

#### **Standard Models**

ARA (Assembly); ARV21, ARV40 (Valves)



ARA Air Release Assembly with Integral Manual Air Release Ball Valve



### **Specifications**

ARA Air Release Assembly		
Working pressure	150 psi (10 bar)	
Test Pressure	n/a	
A	9.5 in. (241 mm)	
В	11.5 in. (292 mm)	
С	6.25 in. (159 mm)	
ARV21 Valve		
Working pressure	3-150 psi (0.2-10 bar)	
Test pressure	232 psi (16 bar)	
D	12.5 in. (320 mm)	
E	8.5 in. (220 mm)	
ARV40 Valve		
Working pressure	3-150 psi (0.2-10 bar)	
Test pressure	232 psi (16 bar)	
F	8.25 in. (210 mm)	
G	7.00 in. (180 mm)	

### **Materials of Construction**

ARA Air Release Assembly		
Piping	PVC	
Ball valves	Schedule 40 PVC, EPDM	
Reinforcing collar	Stainless steel	
ARV21 Valve		
Body and base	Reinforced nylon	
Clamp and hardware	Reinforced nylon Stainless steel	
Floats and stem	Foamed polypropylene, stainless steel	
Stopper	Acetal	
O-rings	BUNA-N	
Rolling seal	EPDM	
Discharge outlet	Polypropylene	
ARV40 Valve		
Body and base	Reinforced nylon	
Float	Foamed polypropylene	
O-ring	BUNA-N	
Discharge outlet	Polypropylene	
Seal Plug Assembly		
Screws	Stainless steel	
Plug cover	Reinforced nylon	
Rolling seal	EPDM	
Plug	Reinforced nylon	



ARA Air Release Assembly, Top View



ARA Air Release Assembly, Side View



ARV21 Valve, Side View



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