

Composite Exhaust Air Valve

Air Exhaust Valve

DN : DN50—DN200

Nominal pressure (MPa): PN1.0—1.6Mpa

Medium : Fresh water, sewage, sea water, weak acid, weak base etc

Temperature : -20°C—120°C

Body material : cast iron, ductile iron

Flange connection: DIN PN10, PN16, ANSI150, BS4504

Product Introduction

This product is used at the highest point of pipelines, the place where air is shutoff, or the outlets of pumps in order to eliminate air and dredge pipelines. If the vent valve is not set, the air in the pipeline will be possibly shutoff at any time, and the water content will not meet the design requirement. If the electricity is suddenly cut off when the pipeline is at work, the negative pressure in the pipeline will cause vibration or cracking. In this case, the vent valve can quickly inhale air into the pipeline and prevent the vibration and cracking of it.

Composite Exhaust Air Valve Operation Principle

There are two holes in the compound vent valve, one big, one small. The diameter nearly equals DN. The first time water is passed in the pipeline, a large amount of air will be released through the big hole. Immediately the air is completely removed, the big hole stops working. When the pipeline is at work, air cells will be generated. And air cells will grow bigger while move to the upper part of the pipeline, which will have a negative influence on the flow of water. At this moment, these air cells can be removed through the small hole. Therefore no air can exist in the pipeline. When the electricity is cut off, the pump does not work, or there is no water flow in the pipeline, negative pressure will be generated and there

will be a great need of air in the pipeline. In order to inhale a lot of air, a floating ball will fall and open the small hole which will drive the opening of the big hole.

Warning:

The working pressure of vent valve cannot be over 0.02MPa, if not, water will be leaked. And this valve should be equipped with another valve for its maintenance.

Combination air valve belongs to quick exhaust valve or exhaust valve:

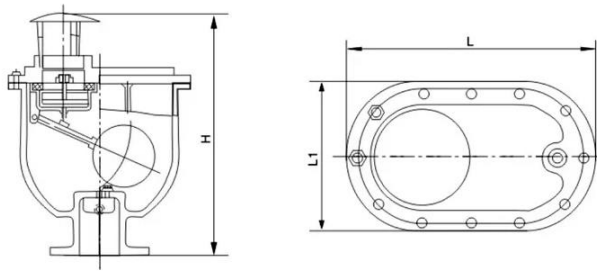
The exhaust valve body is a cylinder shape, composed of stainless steel float ball, lever and disc. This valve are often fixed in the highest point or closing space of the pipeline, to release air to keep the channel open and increase the efficient use of pipes and pump.

Working Principle of CARX Combination air quick exhaust valve:

When injecting water into pipeline, the disc keep open to exhaust air; After the valve is full of water, then no air in it, the float ball will rise, which will drive the disc close. When the pipeline transit the water, the water level will fall if the little air gather into a certain amount, then the air will be exhausted through ostiole. But the plug will be opened quickly to absorb air when no water or negative pressure in the pipes after closing the pump, to keep the pipeline safe.

| Valve Name | Composite Exhaust Air Valve |
|----------------------|---|
| Valve Name | 1.0-1.6 MPa |
| Nominal Diameter | DN25-30 threaded type; DN50-200 flanged type; |
| Media | Water, oil and non-corrosive fluid |
| Suitable Temperature | 0-80℃ |
| Test Standard | GB/T 13927-1992 |

COMPOSITE EXHAUST AIR VALVE PARAMETERS:



Composite Exhaust Air Valve dimensions:

| DN(mm) | D | D1 | D2 | L | L1 | H | Z-Φ d |
|--------|-----|-----|-----|-----|-----|-----|-------|
| 25 | 115 | 85 | 65 | 235 | 180 | 355 | 4-14 |
| 50 | 160 | 125 | 102 | 325 | 205 | 450 | 4-18 |
| 80 | 195 | 160 | 138 | 365 | 235 | 500 | 4-18 |
| 100 | 215 | 180 | 158 | 385 | 258 | 535 | 8-18 |







