

# AIR VALVE

## Double Chamber/Triple Function

**Description:** Our Double Chamber Triple Function Air Valves are meticulously engineered for exceptional performance, utilizing a unique 'Aerokinetic' design for quick air discharge or intake during system functioning. They proficiently manage accumulated air, ensuring the float only closes after all air has been expelled from the system and the chamber is filled with water. This inventive approach provides optimal system efficiency, safety, and prolongs operational lifespan.

## Material Specification

| Parts                        | Main Materials  | Optional Materials  |
|------------------------------|---|---|
| Body<br>Cover<br>Upper Cover | Ductile Iron  | Carbon Steel<br>Stainless Steel<br>Nickel Aluminum Bronze |
| Floats                       | Foamed Polypropylene (DN40-150)<br>Polyethylene (DN200-500)<br>(Full Material, Not Hollow Inside) | SS 304<br>SS 316<br>NAB                                   |
| Float Guide                  | PVC   | Nylon (Polyamide)SS 304, SS 316                           |
| Disc                         | Bronze  | Brass, SS 304, SS 316, NAB                                |
| Orifice                      | SS 304  | Bronze, SS 316  |
| Seals                        | EPDM  | NBR   |
| Fasteners                    | 8:8 (Galv.)   | SS 304, SS 316  |

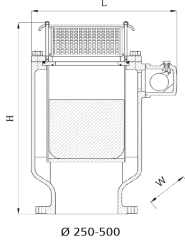
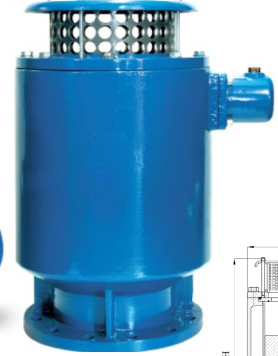
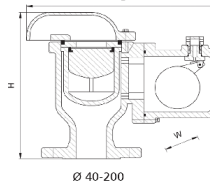
### Application:

Double Chamber Air Valves are designed to perform three functions:

1. Venting of air on the start-up of the system, while pipelines are filled.
2. Intake of air on shut-off of the system, while pipelines are drained.
3. Discharge of pressurized air pockets during the operation of the system.

### Features:

- **Efficiency-Driven Aerodynamic Float Design:** The employment of an aerodynamic float design ensures the elimination of premature closure, enhancing overall efficiency.
- **Full Bore & Reduced Bore:** We cater to both full bore and reduced bore preferences, with availability contingent upon customer requests, thereby providing customization to align with unique industry requirements.
- **Enhanced Safety with Optional Isolation Valves:** Upon demand, we can equip our products with isolation valves, thereby enabling system separation for enhanced safety and maintenance convenience.
- **Scalable Operation with Available Manifolds:** In response to customer



### Notes:

1. Different flange drillings are available, including ISO, EN, ANSI, and others.
2. The standard operating temperature range is -10°C to +80°C.
3. All RAL Colors are available.
4. Potable water certified coating is available.
5. Both thermoset and thermoplastic coatings are available.



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### Durable and Lightweight Float Design:

Our Air Valves are equipped with sturdy floats, engineered to endure significant forces as water enters, while maintaining sufficient lightness to float atop water. These fully solid floats, with no internal hollowness, ensure resistance against cracks or deformation, even after prolonged use. Their light structure guarantees excellent sealing performance.

### Advanced Sealing Performance:

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### Double Chamber Air Valves for Burst Prevention:

Our Dual Chamber Air Valves are designed to prevent pipeline bursts caused by air intake/discharge failure during system initiation, cessation, or ongoing operations. These valves incorporate two floats positioned at pre-set heights within different chambers. The primary float, guided by a ribbed cage, adjusts with water level changes. Its aerodynamic design maintains stability during air intake/discharge, averting premature closure. The valve only closes when water levels ascend and reopens as the water level descends, allowing for substantial air intake. The secondary float, attached by a pin, provides quick reaction, enabling air release during operational periods.

## DIMENSIONS (mm)

| DN                | 40  | 50  | 60  | 65  | 80  | 100 | 125 | 150 | 200     | 250     | 300 | 350  | 400  | 500  |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|-----|------|------|------|
| Height            | 255 | 260 | 260 | 260 | 260 | 320 | 320 | 320 | 450     | 700     | 812 | 1065 | 1065 | 1455 |
| Width (PN 10/16)  | 150 | 165 | 175 | 185 | 200 | 220 | 250 | 285 | 340     | 395/405 | 525 | 615  | 700  | 880  |
| Width (PN 25/40)  | 150 | 165 | 175 | 185 | 200 | 235 | 270 | 300 | 360/375 | 425/450 | 525 | 615  | 700  | 880  |
| Length            | 325 | 325 | 325 | 325 | 325 | 370 | 370 | 370 | 370     | 633     | 685 | 880  | 880  | 1060 |
| Weight (PN 10/16) | 17  | 17  | 19  | 20  | 21  | 31  | 32  | 34  | 64      | 181     | 197 | 422  | 840  | 1040 |
| Weight (PN 25/40) | 17  | 17  | 20  | 21  | 22  | 34  | 35  | 37  | 69      | 187     | 207 | 435  | -    | -    |

