

Single Chamber - Triple Function - Non-Slam

Description: Our Single Chamber Triple Function Non-Slam Air Valve is a marvel of engineering, meticulously crafted to avert premature closure thanks to its aerodynamic float. The valve's full bore design guarantees elevated air capacity, facilitating rapid air discharge and intake.

Material Specification

Parts	Main Materials	Optional Materials			
Body	Ductile Iron	Carbon Steel Stainless Steel Nickel Aluminum Bronze			
Upper Cover	SS 304	SS 316			
Floats	Polyethylene (Full Material, Not Hollow Inside)				
Float Guide	SS 304	SS 316			
Cover	SS 304	Ductile Iron, SS 316, NAB			
Orifice	SS 304	SS 316			
Seals	EPDM	NBR			
Fasteners	8:8 (Galv.)	SS 304, SS 316			



Notes:

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

Application:

Non-Slam 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:

- Superior Float Design: Leveraging an aerodynamic float design, the valve optimally prevents premature closure, thereby increasing efficiency and reducing potential system downtime.
- **High Air Capacity:** Full bore design facilitates higher air capacity.
- Optional Isolation Valves: For those seeking additional control and flexibility, isolation valves can be integrated into the system upon request. This feature allows for specific sections of the system to be isolated, facilitating system management and maintenance.
- Parallel Installation: To accommodate a broader range of installation scenarios,

- manifolds can be provided on request for parallel installation, enabling increased system flexibility and efficiency.
- Inspection and Control: Ensuring a smooth operational flow and system integrity is paramount. Therefore, testing cocks are readily available upon request to facilitate regular inspection and control, enhancing system longevity and reliability.
- Customizable Threaded Versions: In an effort to cater to diverse installation needs, threaded versions are available upon request for dimensions less than DN50, ensuring a more customized fit and optimized performance.





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Non-Slam Feature:

The Non-Slam Air Valves feature a trio of unique floats housed within a single chamber. The topmost non-slam float is specially engineered to prevent valve slamming during high-speed air expulsion. It achieves this by reducing the air discharge cross-sectional area when a certain discharge speed is surpassed, thereby moderating the pace of air ejection and allowing for a gentle water column progression towards the valve. The outcome is a non-slam operation that amplifies system durability.

Float Durability & Lightness:

The floats within our Air Valves are designed to close upon water entry, necessitating a sturdy build to endure such forces. These non-hollow, solid material floats retain sufficient lightness to float on water, ensuring their resistance to deformation or cracking and maintaining their structural integrity over extended operational periods.

Superior Sealing Performance:

Our Air Valves are renowned for their superior float design that promises optimal sealing capabilities. Able to provide a leak-tight seal even at low pressures of 2mwc, they present a dependable solution for low-pressure networks.

Pipeline Protection:

Our Non-Slam Air Valves play a crucial role in averting pipeline bursts triggered by air intake/discharge failures during system start-up, shut-off, and operation. Their three-float system, guided by studs, responds to alterations in water elevation. Their aerodynamic design ensures stability during air intake/discharge, preventing premature closure. The large float governs the minor air discharge orifice, allowing for air release during system operation. The non-slam float functions as a buffering mechanism, reducing the air discharge cross-sectional area to control high air discharge velocities, thus averting valve slamming.

DIMENSIONS (mm)											
DN	25	50	80	100	150	200	250	300	350	400	500
Height	205	280	330	380	490	580	700	812	1065	1065	1455
Width (PN 10/16)	115	165	200	220	285	340	395/405	445/460	615	700	880
Width (PN 25/40)	115	165	200	235	300	360/375	425/450	485/515	615	700	880
Length	105	155	200	230	310	420	530	580	625	625	860
Weight (PN 10/16)	8	11	19	25	40	90	185	200	417	835	1035
Weight (PN 25/40)	8	11	37	40	43	96	190	210	430	-	-

