COMBINATION AIR VALVE

Model C75-IP

BERMAD C75-IP is a high quality combination air valve for a variety of water networks and operating conditions. It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and does not enalbe air intake in the event of network draining.

With its advanced aerodynamic design, double orifice and inflow prevention device, this valve provides excellent protection against air accumulation with improved sealing in low pressure conditions. The valve minimizes water spraying during air release.

C75-IP (Inflow Prevention)
air discharge only with side outlet

Typical Applications

- Pumping stations and deep well pumps: Air relief, surge protection.
- Pipelines: Protection against air accumulation at elevations, slope change points and at road / river crossings.

Features & Benefits

- Straight flow body: Higher than usual flow rates.
- Aerodynamic full-body kinetic shield: Prevents premature closing without disturbing air intake or discharge.
- Dynamic sealing: Prevents leakage under low pressure conditions (1.5 psi; 0.1 bar).
- Minimizes water spraying during air release: Innovative 2-step function, automatic orifice (Patent Pending).
- Three optional outlets (sideways, downwards, circular-surround mushroom configuration) that can swivel 360°: Easy to install in a variety of site conditions.
- Compact, simple, robust and reliable structure with fully corrosion-resistant parts: Lower maintenance and increased life span.
- Approved to AS4945-2017 / AS4020 & appraised with WSAA.
- Factory approval and Quality Control: Performance and specification tested and measured with specialized test bench, including vacuum pressure conditions.

All images in this catalog are for illustration only

Valve models, functions & accessories

- C75-IP (Inflow Prevention)
  - Air discharge and release function only with check feature to avoid any air entry.
  - Valve has kinetic air discharge function with automatic air release.
  - No air entry due to check valve.
- Note :
  - All valves are fitted with the lower body threaded connection and drainage valve (code Z)

Valve Inlet connections

- Flanged
  - AS4087-PN16
  - AS4087-PN35
  - AS2129 T/E
  - ANSI-150/300 on request

Materials

- Body and cover
  - Cast Ductile Iron - standard (sizes 3-8")
  - Stainless Steel 316 optional (sizes 3-8")
- Coating - Fusion bonded epoxy (blue) to AS4158
- Top plate - Stainless Steel 316, Ductile Iron
- Float assembly - Polypropylene, glass reinforced nylon
- Automatic orifice - Stainless Steel 316
- Elastomers - EPDM

Operational Data

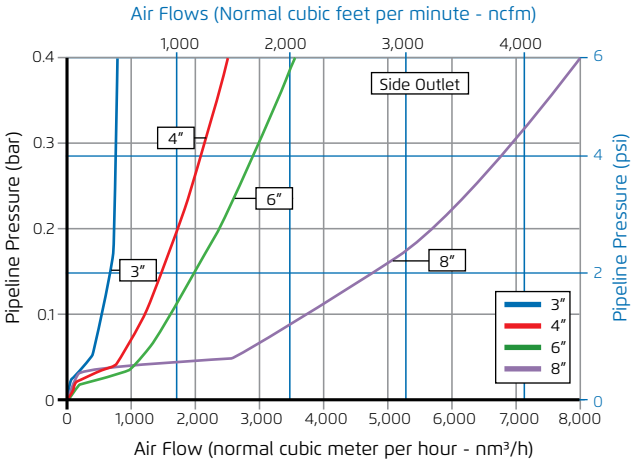
- Pressure rating PN16 or PN35 standard (PN40 on request)
- Minimum sealing pressure: 0.1 bar
- Maximum operating pressure: 16 bar or 35 bar
- Media and operating temperature: Water 1-60 degrees C

Orifice Specifications

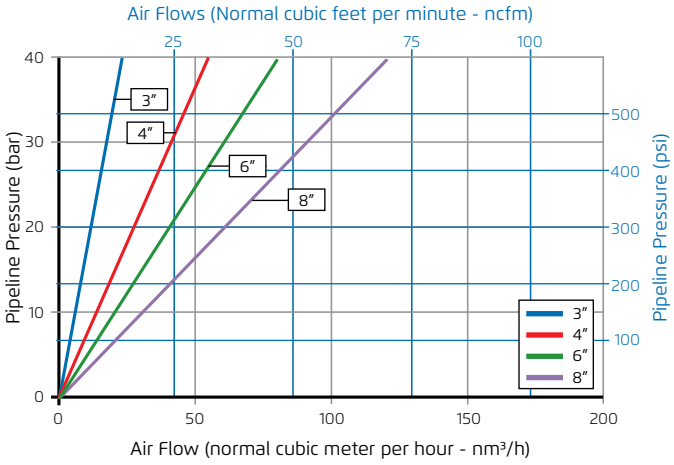
Inlet Size	Automatic Orifice Area		Kinetic Orifice	
	PN16	PN35	Diameter	Area
mm	Sq mm	Sq mm	mm	Sq mm
DN80	1.1	0.4	50	1,963
DN100	2.5	1	80	5,027
DN150	3.1	1.3	100	7,854
DN200	9.1	3.5	150	17,671

Air Flow Performance Charts

Air Relief with Inflow Prevention (Pipeline Filling)



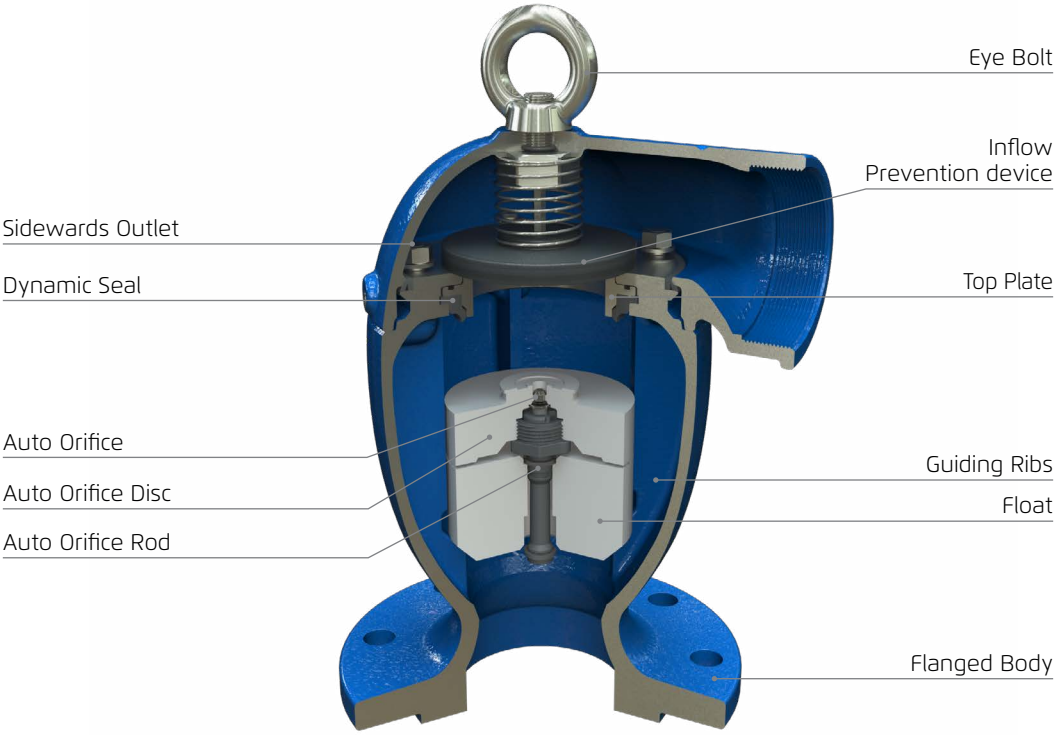
Air Release (Pressurized Operation)



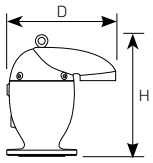
For higher automatic air release capacity, Please consult with BERMAD.

Air relief and intake charts for inlet sizes 3-8"; DN80-DN200 are based on actual measurements, measured during 2014-2015 in Bermad Air Flow test bench, according to AS-4598 (2008) standard and recongnized by AS-4598 (2008) standard. For Side outlet air flow performance, please consult with BERMAD.
Use Bermad Air software for optimized Sizing & Positioning of Air Valves

Cutaway



Dimensions & Weights **



Side Ductile Outlet

Inlet Size	Connection	Width (D)	Height (H)	Weight
Inch	---	inch	inch	lbs
mm		mm	mm	Kg
3"	Threaded	7.874	12.598	30.8
DN80		200	320	14.0
4"	Flanged	10.335	14.567	54.6
DN100		263	370	24.8
6"	Flanged	12.402	17.047	82.2
DN150		315	433	37.3
8"	Flanged	15.945	23.346	145.7
DN200		405	593	66.1

** Dimension and weight may vary based on the final configuration. Please contact Bermad.