

Series WAVVB Vacuum Breaker Air Inlet Valve

Henry Pratt AirPro Max® Vacuum Breaker Valves (Series WAVVB) are designed as large orifice, one way, spring loaded valves that allow air flow in only one direction (air flowing in to the pipeline). All standard valves begin admitting air at a minimal 1/4 - 1/2 PSI vacuum to maximize vacuum breaking potential. When the vacuum condition ceases, the vacuum breaker valve disc is instantly closed against the body seat, thereby trapping air at the high point. The fast closure of the valve disc avoids any slamming which could be caused when the water column rejoins.

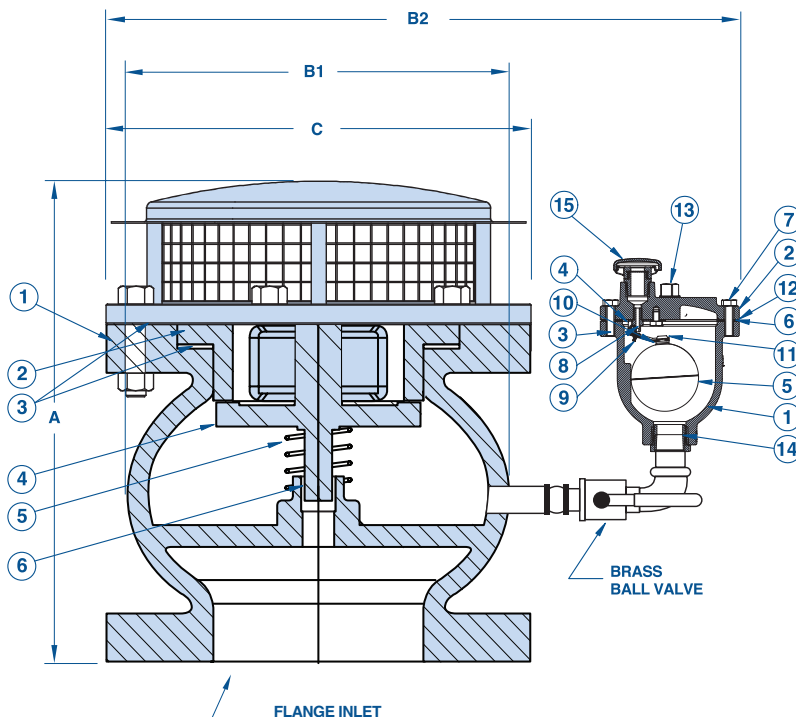
By equipping the Vacuum Breaker Valve with an optional AirPro Max® Series WAR Air Release valve as a special combination setup, the assembly acts as a “free air in – controlled air out” regulator. After a vacuum condition ceases and the line returns to positive pressure – the Air Release valve slowly releases the trapped air and bleeds it to atmosphere. In this manner, the pipeline is fully restored in a controlled manner to normal operating condition (pipeline fully charged with liquid media).

Series WAVVB Vacuum Breaker Valves should be used:

- For high vacuum break capacity required to protect critical infrastructure (like a penstock, etc.)
- At high points in pipelines where the hydraulic gradient and flow conditions are such that a negative pressure can possibly form but where some trapped air is desired for cushioning (until bled off).
- Where water column separation is expected which may result in water hammer.
- Adjacent to any quick closing valve in a pipeline where a severe vacuum can be formed when closed.

Vacuum Breaker Valve

A.V. Pipe Size	Vacuum Breaker Model	Air Release Model	A	B1	B2	C
3"	WAVVB-30	WAR101005-316-150	9"	6-7/8"	16-1/8"	7-1/2"
4"	WAVVB-40	WAR101005-316-150	10-1/4"	8-1/2"	17-3/4"	9"
6"	WAVVB-60	WAR101005-316-150	13-1/2"	11-1/8"	20-3/8"	12-1/2"
8"	WAVVB-80	WAR101005-316-150	17"	16-1/8"	25-3/8"	16-1/4"
10"	WAVVB-100	WAR101005-316-150	21"	17-7/8"	27-1/8"	16"
12"	WAVVB-120	WAR101005-316-150	19-1/4"	19-1/8"	28-3/8"	19"
14"	WAVVB-140	WAR101005-316-150	22-1/4"	22-1/2"	31-3/4"	21"
16"	WAVVB-160	WAR101005-316-150	24-1/8"	26"	35-1/4"	23-1/2"
18"	WAVVB-180	WAR101005-316-150	26-1/4"	29"	38-1/4"	25"
20"	WAVVB-200	WAR101005-316-150	30-1/8"	32-3/4"	42"	27-1/2"



Vacuum Breaker Valve		
1	Body	Ductile Iron
2	Seat	304 Stainless Steel/EPDM
3	Gasket	EPDM
4	Disc	304 Stainless Steel
5	Spring	304 Stainless Steel
6	Bushing	304 Stainless Steel

Air Release Valve		
1	Body	ASTM A536 (65-45-12)
2	Cover	ASTM A536 (65-45-12)
3	Lever Bracket	ASTM A582 316 S.S.
4	Seat	ASTM A582 316 S.S.
5	Float	ASTM A240 316 S.S.
6	Gasket	Non-Asbestos Fiber
7	Cover Bolt	ASTM A593 316 S.S.
8	Lever Arm	ASTM A240 316 S.S.
9	Button	BUNA-N
10	Pivot Pin & Rtnr Ring	Stainless Steel
11	Float Retainer	ASTM A879 316 S.S.
12	Positioner	ASTM A593 316 S.S.
13	Pipe Plug	Steel
14	Reducer Bushing	ASTM A582 316 S.S.
15	Vent Cap	ASTM A536 (65-45-12)

WAR-01 Series Air Release Valve shown as typical.
For other Air Release Valve Series, see appropriate page number.