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Vacuum Breaker **VB14, VB21**

واحد فروش ۲۱۶۶۴۷۹۴۸۶ واتساب استعلام ٩١٢٨۴۴٨٧۶٣٠

The VB14 and VB21 are designed to admit air to condensing vapor (steam) or liquid systems where vacuum formation may inhibit system drainage or operation.

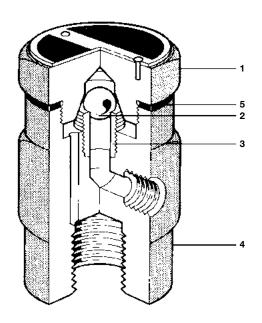
Model	VB14	VB21		
Sizes	1/2" x 1/8"			
Connections	NPT			
Construction	Brass Body	Stainless Steel Body		
	Stainless Steel Valve			
Options	BSP Connections			

Typical Applications

Used on steam inlet to air coils, heat exchangers, sparge systems, jacketed kettles, boiler feed water tanks, chilled water lines and liquid process lines, all of which at one time or another generate vacuum conditions which must be releived to allow proper system operation.

Construction Materials

No.	Part	Material			
1	Сар	VB14 Brass CU ZN 39 PB2			
		VB21 Stainless Steel Type 303			
2	Valve Check Ball	VB14 Stainless Steel Z 100 CD 17			
		VB21 Stainless Steel Type 440C			
3	Valve Seat	VB14 Stainless Steel Z10 CN 18 08			
		VB21 Stainless Steel Type 303			
4	Body	VB14 Brass CU ZN 39 PB2			
		VB21 Stainless Steel Type 303			
5	Gasket	VB14 Nickel Reinforced Exfoliated Type 304			
		VB21 Stainless Steel Type 304			



Limiting Operating Conditions

Max. Operating Pressure (PMO) VB14: 210 psig (14 barg) VB21: 304 psig (21 barg)

Max. Operating Temperature VB14: 500°F (260°C) VB21: 752°F (400°C)

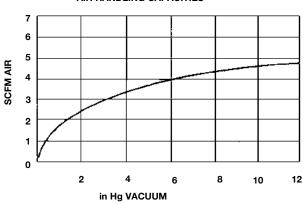
Pressure Shell Design Conditions

PMA 232 psig/0-500°F 16 barg/0-260℃ VB14: Max. allowable pressure 21 barg/0-400℃ VB21: 304 psig/0-752°F **TMA** VB14: 500°F/0-232 psig 260°C/0-14 barg VB21: 752°F/0-304 psig 400°C/0-21 barg Max. allowable temperature

Operating Characteristics

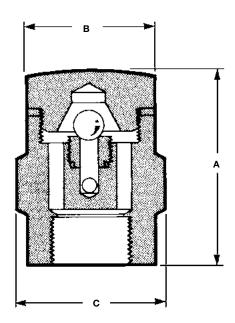
Maximum Cv - 0.625. Vacuum required to open - 2 in H₂O (0.15 in Hg)

AIR HANDLING CAPACITIES



Pipeline Ancillaries

Vacuum Breaker VB14, VB21



Dimensions (nominal) in inches and millimeters								
Size		Α	В	С	Weight			
1/2"	VB14	2.2	1.3	1.5	0.77 lb			
		55	34	39	0.35 kg			
1/2"	VB21	2.0	1.3	1.5	0.73 lb			
		52	34	39	0.33 kg			

Sample Specification

Vacuum Breakers shall be used on all modulating or on/off heat exchangers and coils, except in vacuum return systems. They shall be installed in the supply side between the control valve and equipment and be of hardened ball check valve design with all working parts manufactured from stainless steel. Bodies shall be made from either brass or stainless steel depending on the application, and shall be suitable for operating conditions of 210 psig (or 304 psig) saturated steam.

Installation

Always install in a vertical position with cap at the top. Generally the device should be mounted on the highest point of the circuit. Large coils or equipment may require more than one vacuum breaker to be fitted. An isolating valve should be fitted to facilitate servicing.

Maintenance

After the vacuum breaker is isolated from system pressure, the cap can be unthreaded to examine the valve and valve seat areas for debris which can become trapped and cause breakage of system pressure during normal operation. The vacuum breaker is not repairable.

