

## VB14 and VB21 Vacuum Breakers

### VB14

#### Description

The VB14 is a small purpose designed vacuum breaker for general purpose applications on condensing vapour (steam) or liquid systems.

#### Sizes and pipe connections

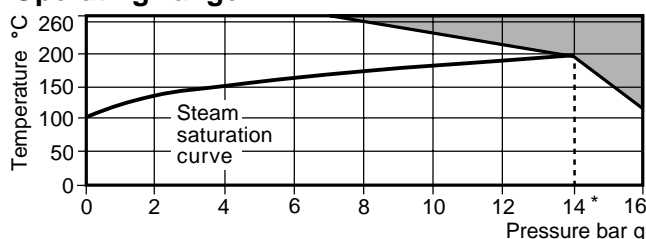
½" (system connection) screwed BSP or NPT

⅛" (air inlet connection) screwed BSP or NPT

#### Limiting conditions

Body design conditions	PN16
Maximum design temperature	260°C
Maximum cold hydraulic test pressure	24 bar g

#### Operating range



The product must not be used in this region.

\*PMO - Maximum operating pressure for saturated steam.

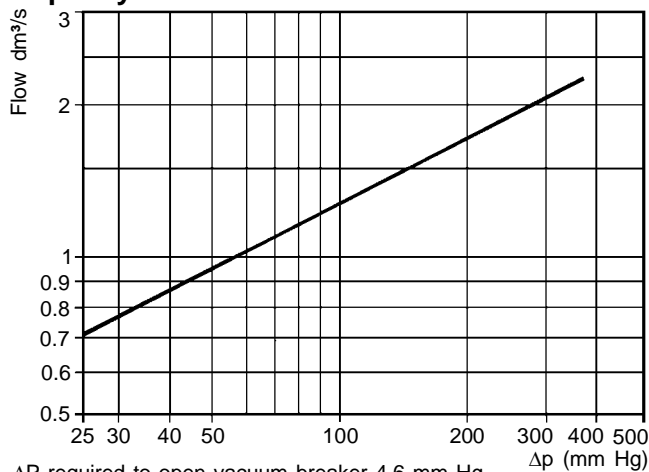
#### Materials

No	Part	Material	
1	Cap	Brass	CU ZN 39 PB2
2	Valve	Stainless steel	Z 100 CD 17
3	Valve seat	Stainless steel	Z15 CN 16 02
4	Body	Brass	CU ZN 39 PB2
5	Gasket	Stainless steel	AISI 304

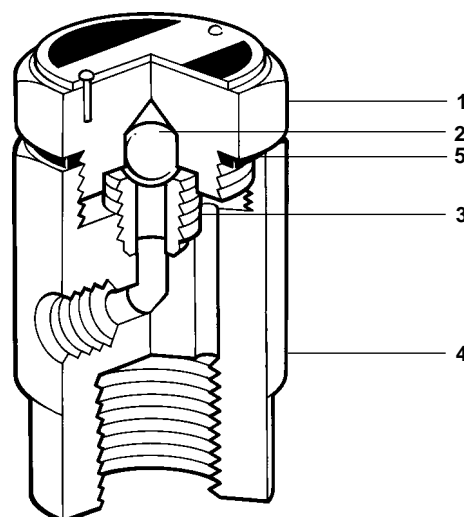
#### Certification

The product is available with material certification to EN 10204 2.2 for body and cap as standard.

#### Capacity

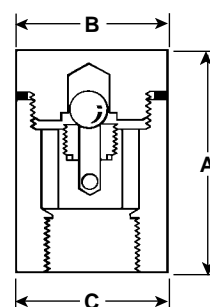


ΔP required to open vacuum breaker 4.6 mm Hg



#### Dimensions/weight (approximate) in mm and kg

Size	A	B (A/F)	C	K <sub>v</sub>	Weight
½"	55	34	34	0.52	0.35



#### Installation

The VB14 vacuum breaker must be installed in a vertical position with the system connection at the bottom. On steam systems, the vacuum breaker should be installed at the highest point in the system where it will not be flooded with condensate.

#### Safety

##### Pressure

Before attempting any maintenance of the vacuum breaker, consider what is or may have been in the pipeline. Ensure that any pressure is isolated and safely vented to atmospheric pressure before attempting to maintain the vacuum breaker. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

##### Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

#### Disposal

The product is recyclable. No ecological hazard is anticipated with disposal of this product providing due care is taken.

#### How to order

Spirax Sarco ½" VB14 vacuum breaker screwed BSP.

# VB21

## Description

The VB21 is a small purpose designed vacuum breaker for general purpose applications on condensing vapour (steam) or liquid systems

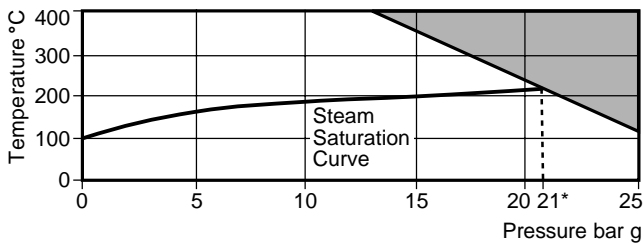
## Sizes and pipe connections

½" (system connection) screwed BSP or NPT  
 ⅛" (air inlet connection) screwed BSP or NPT

## Limiting conditions

Body design conditions	PN25
Maximum design temperature	400°C
Maximum cold hydraulic test pressure	38 bar g

## Operating range



The product must not be used in this region.

\*PMO - Maximum operating pressure for saturated steam.

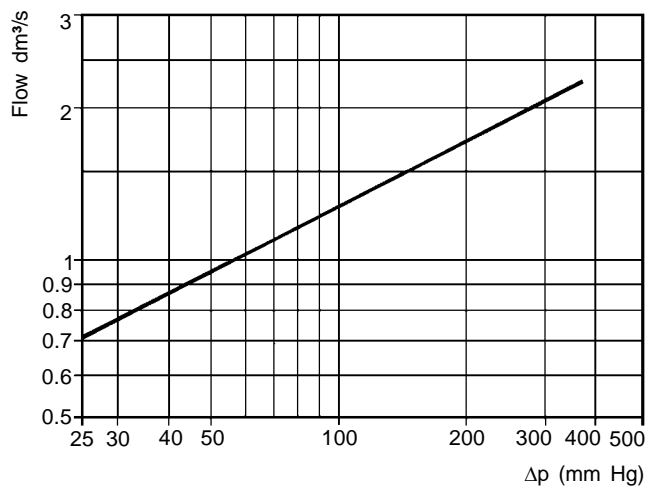
## Materials

No	Part	Material	
1	Cap	Stainless steel	AISI 303
2	Valve	Stainless steel	AISI 440 C
4	Body	Stainless steel	AISI 303
5	Gasket	Stainless steel	AISI 304

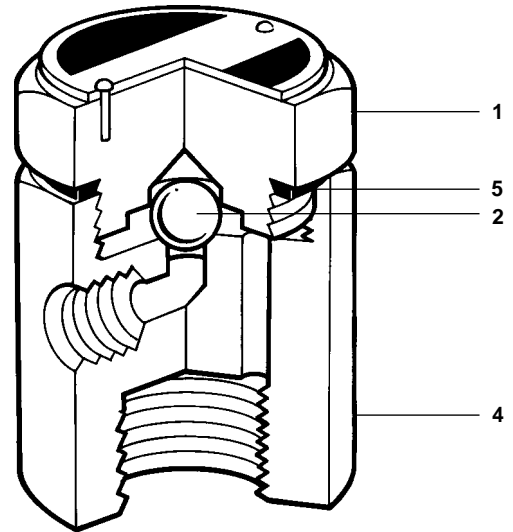
## Certification

The product is available with material certification to EN 10204 2.2 for body and cap as standard.

## Capacity

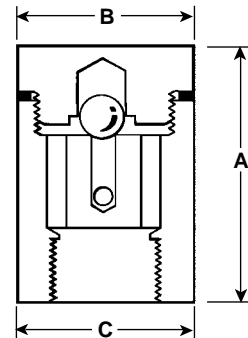


ΔP required to open vacuum breaker 4.6 mm Hg



## Dimensions/weight (approximate) in mm and kg

Size	A	B (A/F)	C	K <sub>v</sub>	Weight
½"	52	36	36	0.52	0.33



## Installation

The VB21 vacuum breaker must be installed in a vertical position with the system connection at the bottom.

On steam systems the vacuum breaker should be installed at the highest point in the system where it will not be flooded with condensate.

## Safety

### Pressure

Before attempting any maintenance of the vacuum breaker, consider what is or may have been in the pipeline. Ensure that any pressure is isolated and safely vented to atmospheric pressure before attempting to maintain the vacuum breaker. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when a pressure gauge indicates zero.

### Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

## Disposal

The product is recyclable. No ecological hazard is anticipated with disposal of this product providing due care is taken.

## How to order

Spirax Sarco ½" VB21 vacuum breaker screwed BSP.