

## 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.

#### Standards

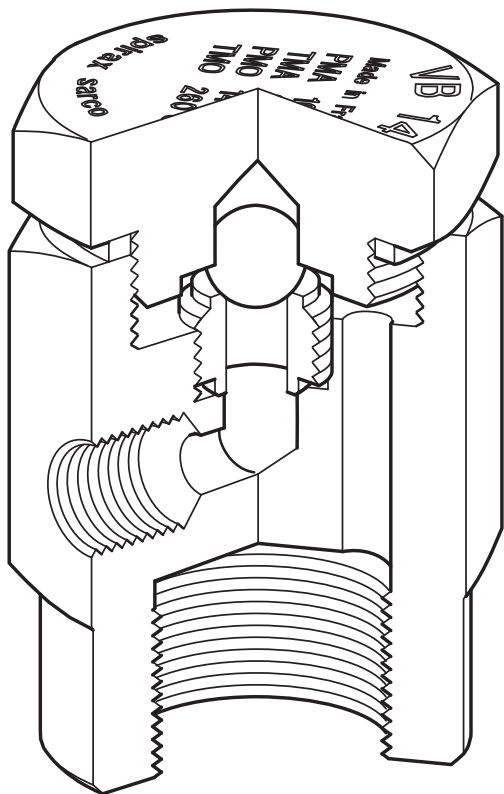
This product fully complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

Shut-off conforms to EN 12266-1 Rate E

#### Certification

This product is available with a manufacturer's Typical Test Report.

**Note:** All certification/inspection requirements must be stated at the time of order placement.



### VB21

#### Description

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

#### Standards

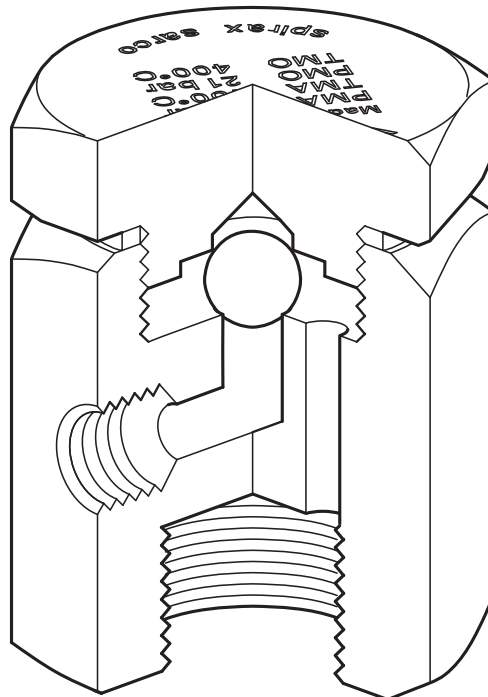
This product fully complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

Shut-off conforms to EN 12266-1 Rate E

#### Certification

This product is available with a manufacturer's Typical Test Report.

**Note:** All certification/inspection requirements must be stated at the time of order placement.



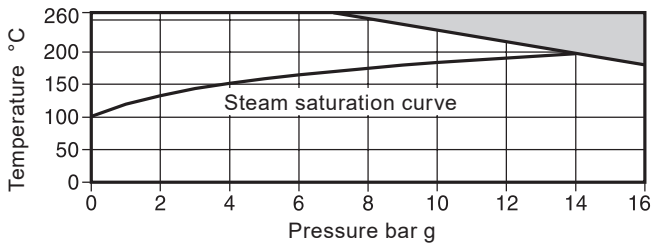
# VB14

## Sizes and pipe connections

½" (system connection) screwed BSP or NPT.

⅜" (air inlet connection) screwed BSP or NPT.

## Pressure/temperature limits



The product **must not** be used in this region.

Body design conditions	PN16
PMA Maximum allowable pressure	16 bar g @ 180 °C
TMA Maximum allowable temperature	260 °C @ 7 bar g
Minimum allowable temperature	-196 °C
PMO Maximum operating pressure for saturated steam service	14 bar g
TMO Maximum operating temperature	260 °C @ 7 bar g
Minimum operating temperature	0 °C
<b>Note:</b> For lower operating temperatures consult Spirax Sarco	
Designed for a maximum cold hydraulic test pressure of 24 bar g	

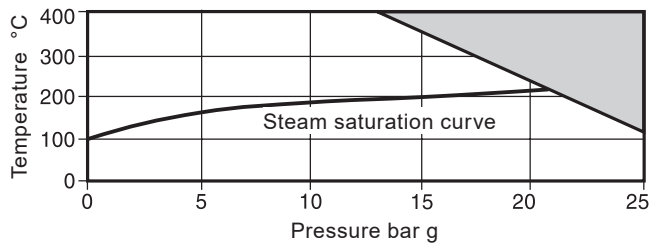
# VB21

## Sizes and pipe connections

½" (system connection) screwed BSP or NPT.

⅜" (air inlet connection) screwed BSP or NPT.

## Pressure/temperature limits



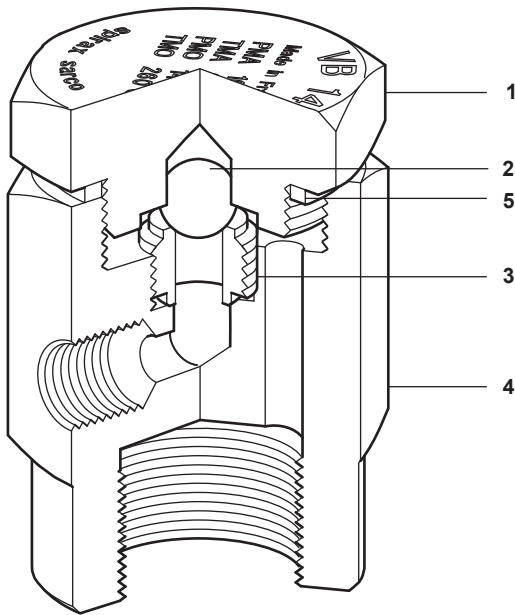
The product **must not** be used in this region.

Body design conditions	PN25
PMA Maximum allowable pressure	25 bar g @ 120 °C
TMA Maximum allowable temperature	400 °C @ 13 bar g
Minimum allowable temperature	-48 °C
PMO Maximum operating pressure for saturated steam service	21 bar g
TMO Maximum operating temperature	400 °C @ 13 bar g
Minimum operating temperature	0 °C
<b>Note:</b> For lower operating temperatures consult Spirax Sarco	
Designed for a maximum cold hydraulic test pressure of 38 bar g	

# VB14

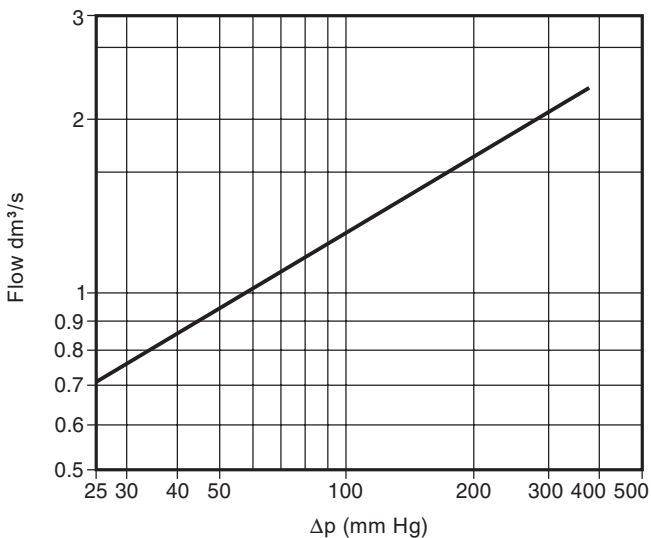
## Materials

No. Part	Material	
1 Cap	Brass	Cu Zn 39 Pb3
2 Valve	Stainless steel	Z 100 CD 17
3 Valve seat	Stainless steel	Z15 CN 16 02
4 Body	Brass	Cu Zn 39 Pb3
5 Gasket	Stainless steel	AISI 304



## Capacity

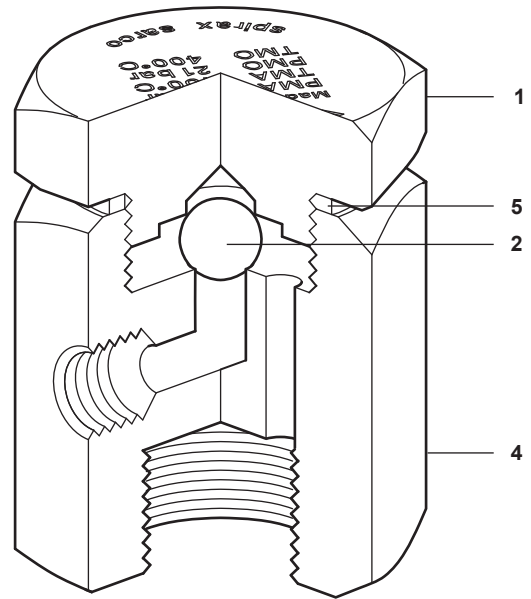
$\Delta p$  required to open vacuum breaker 4.6 mm Hg



# VB21

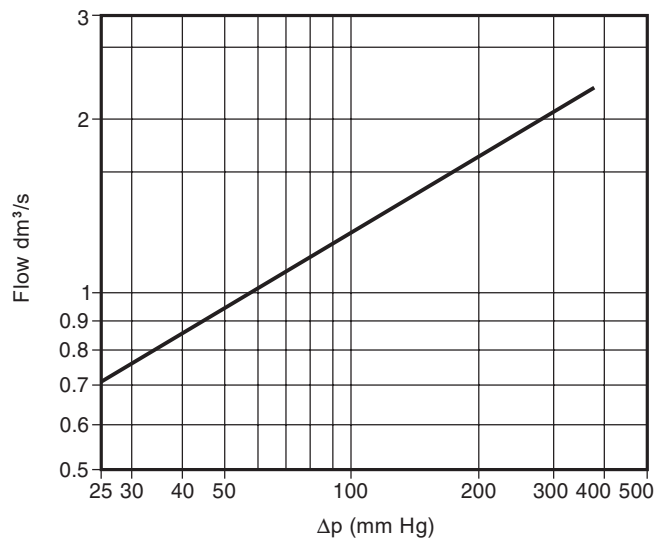
## Materials

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



## Capacity

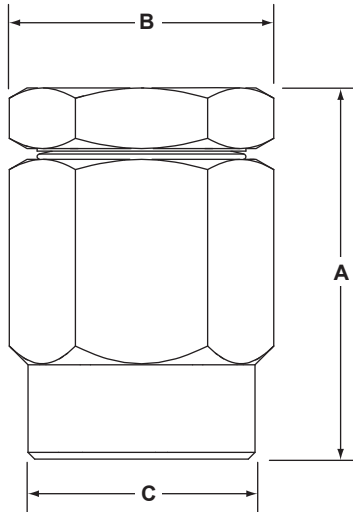
$\Delta p$  required to open vacuum breaker 4.6 mm Hg



## VB14

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

Size	A	B (A/F)	C	K <sub>v</sub>	Weight
1/2"	55	34	34	0.52	0.35



### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P019-05) supplied with the product.

#### Installation note:

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.

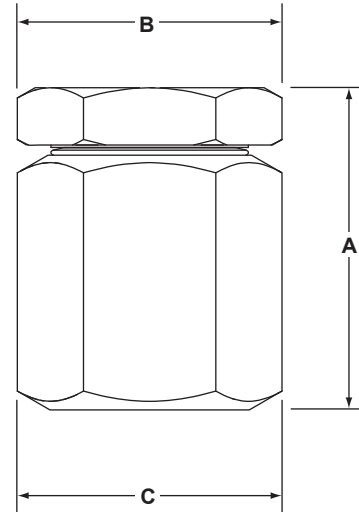
#### How to order

**Example:** 1 off Spirax Sarco VB14 vacuum breaker having 1/2" screwed BSP connections.

## VB21

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

Size	A	B (A/F)	C	K <sub>v</sub>	Weight
1/2"	52	36	36	0.52	0.33



### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P019-05) supplied with the product.

#### Installation note:

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.

#### How to order

**Example:** 1 off Spirax Sarco VB21 vacuum breaker having 1/2" screwed BSP connections.