



TI-P019-02
ST Issue 8

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 European Pressure Equipment Directive 97/23/EC.

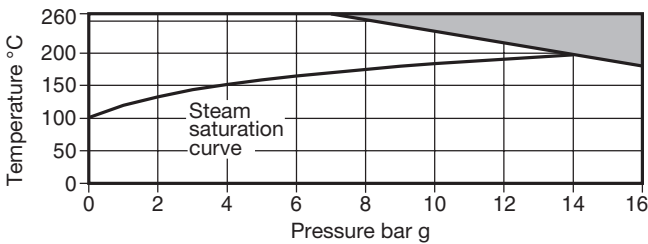
Certification

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.

Sizes and pipe connections

1/2" (system connection) screwed BSP or NPT.
1/8" (air inlet connection) screwed BSP or NPT.

Pressure/temperature limits



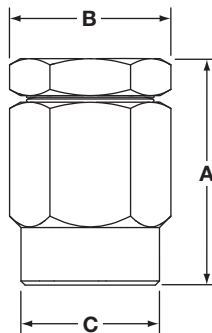
The product **must not** be used in this region.

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
Note: For lower operating temperatures consult Spirax Sarco		
Designed for a maximum cold hydraulic test pressure of 24 bar g		

Dimensions/weight

(approximate) in mm and kg

Size	A	B (A/F)	C	K _v	Weight
1/2"	55	34	34	0.52	0.35

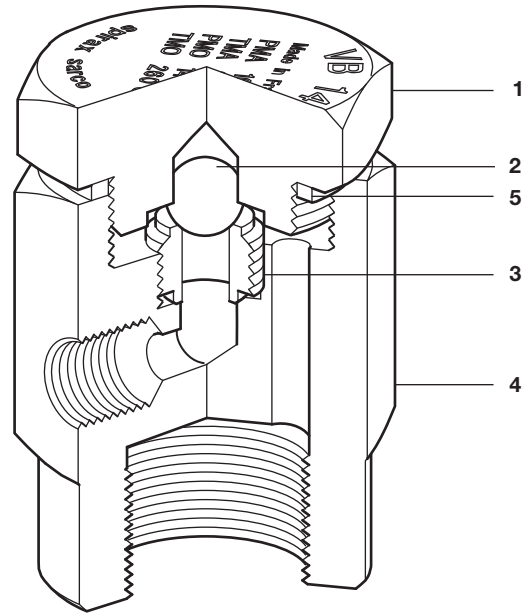


Safety information, installation and maintenance

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

Installation note:

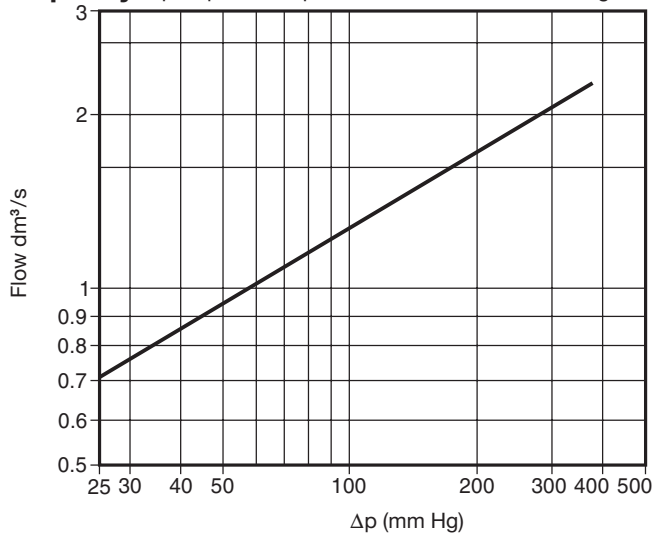
The VB14 vacuum breaker must be installed in a vertical position with the system connection at the bottom. On steam systems, the vacuum breaker should be installed at the highest point in the system where it will not be flooded with condensate.



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

Capacity Δp required to open vacuum breaker 4.6 mm Hg



How to order

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

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 European Pressure Equipment Directive 97/23/EC.

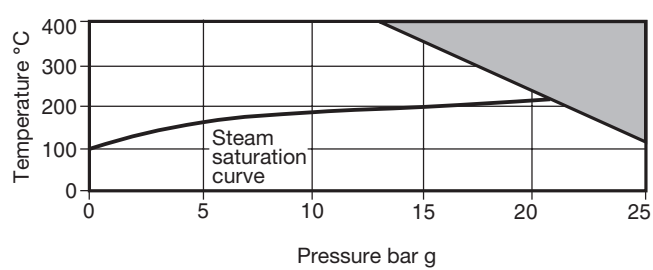
Certification

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.

Sizes and pipe connections

1/2" (system connection) screwed BSP or NPT.
 1/8" (air inlet connection) screwed BSP or NPT.

Pressure/temperature limits

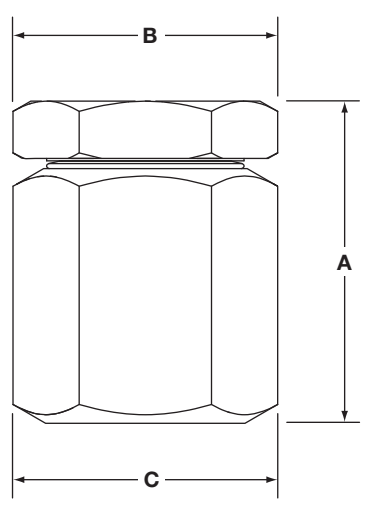


The product **must not** be used in this region.

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
Note: For lower operating temperatures consult Spirax Sarco		
Designed for a maximum cold hydraulic test pressure of 38 bar g		

Dimensions/weight (approximate) in mm and kg

Size	A	B (A/F)	C	K _v	Weight
1/2"	52	36	36	0.52	0.33

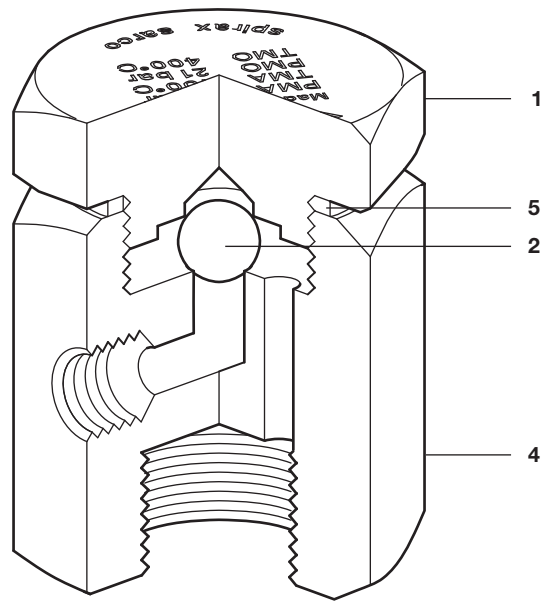


Safety information, installation and maintenance

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

Installation note:

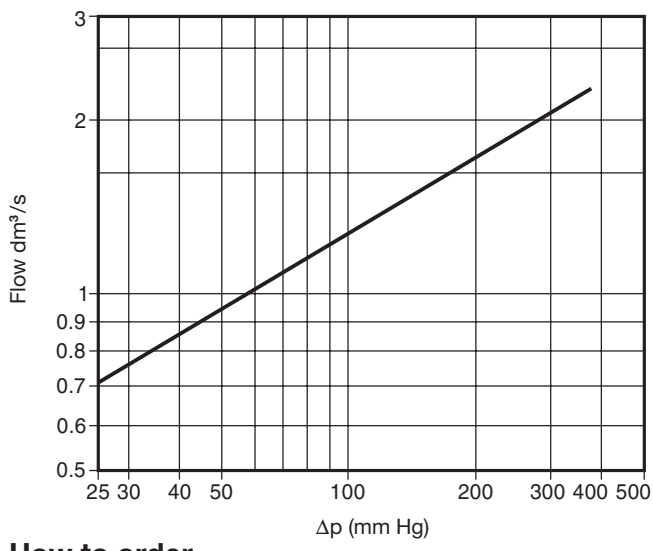
The VB21 vacuum breaker must be installed in a vertical position with the system connection at the bottom. On steam systems, the vacuum breaker should be installed at the highest point in the system where it will not be flooded with condensate.



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 Δp required to open vacuum breaker 4.6 mm Hg



How to order

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