

VACUUM BREAKER

CVU15

USER'S MANUAL



SAFETY



WARNING

The model CVU15 is a stainless steel vacuum breaker with threaded ends.

In order to get maximum benefit from this product, be sure to read this manual thoroughly before installing the product.

The following warnings and cautions are shown at appropriate places in this manual.



Failure to observe this type of precaution may lead to serious injury or death.



Failure to follow this type of precaution can lead to injury or damage to equipment and property.

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1 SPECIFICATION AND MARKING



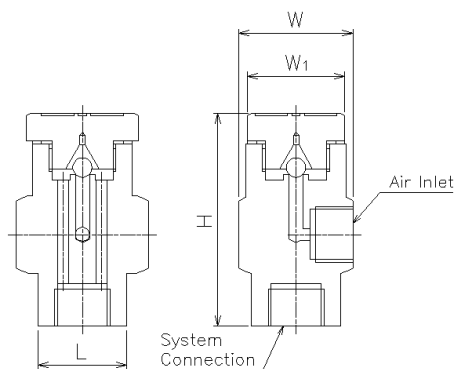
WARNING

Be sure not to use this product at higher pressures than the specified maximum operating pressure (PMO) or at temperatures higher than the specified maximum operating temperature (TMO).

The following items are displayed on the name plate or the side of the product.

Check each item to avoid misuse of the product.

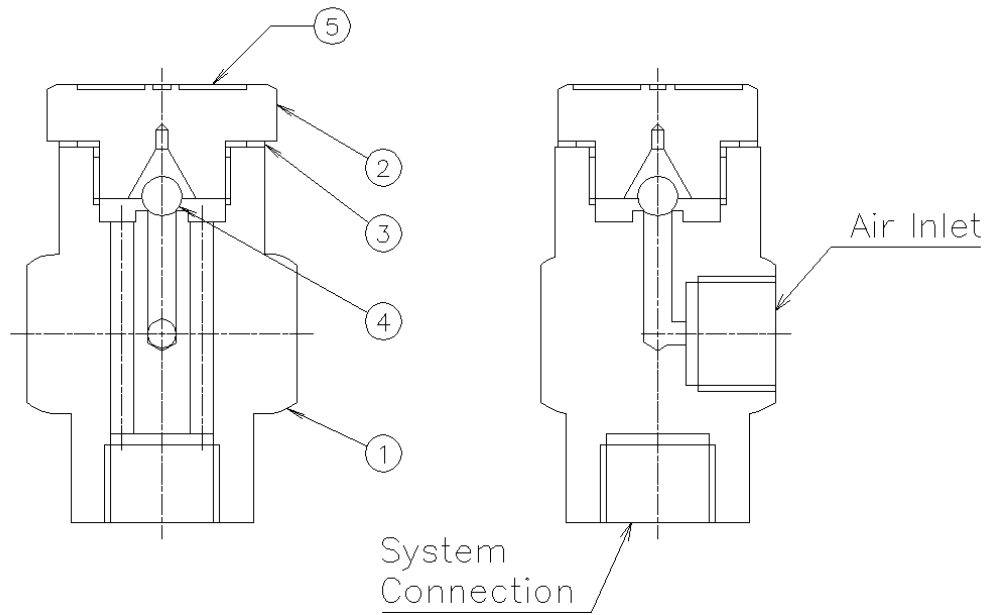
- (1) Maximum allowable pressure (PMA): 2,1 MPa (21 barg, 305 psig)
- (2) Maximum allowable temperature (TMA): 450°C (842°F)
- (3) Maximum operating pressure (PMO): 2,1 MPa (21 barg, 305 psig)
- (4) Maximum operating temperature (TMO): 450°C (842°F)
- (5) Size: ½" x ⅛" and ½" x ½"
- (6) Serial number: Showing the year and date of production
- (7) Body material: Stainless Steel AISI 304 (1.4301)



Connections		Size	PMO		TMO		Dimensions (mm)				Dimensions (in)				Weight	
System	Air inlet		MPa	psig	°C	°F	L	H	W	W ₁	L	H	W	W ₁	kg	lb
½"	⅛" and ½"	½" x ⅛"	2,1	305	450	842	32±2	55±3	41	36	1.26	2.16	1.62	1.42	0,38	0.84
		½" x ½"						70±3				2.75			0,55	1.21

Opening pressure: 0,5 kPa (5mbarg, 0.0725 psig)

2 CONSTRUCTION DETAILS



1.	Body	AISI 304
2.	Cap	AISI 304
3.	Gasket	Copper
4.	Ball	AISI 420
5.	Name Plate	AISI 304

3 INSTALLATION



WARNING

Pay very careful attention when working in hazardous environments. There is a risk of explosion and the possibility of dangerous gases leaking. Always check whether the pipeline contains flammable, high pressure or high temperature materials before starting to work.

- Make sure that isolation valves are installed on both the upstream and downstream lines.



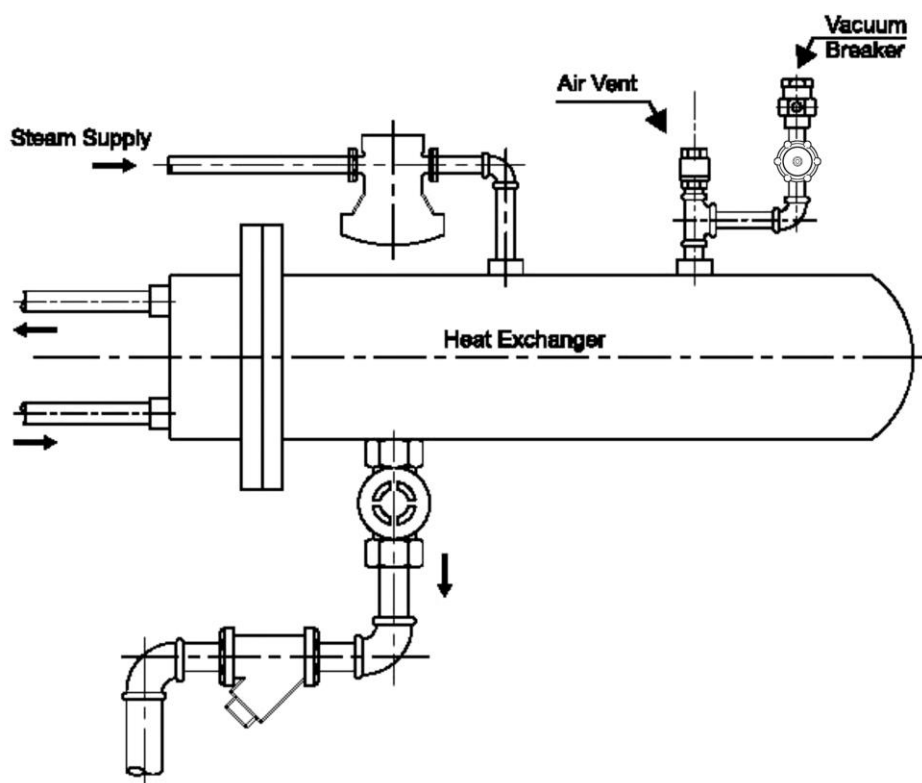
CAUTION

Before installing the product, open both isolation valves and the bypass valve, if one exists, to blow out any debris or dirt inside the pipeline or equipment. After blowing out the line and/or the equipment, before starting to work, close the isolation valves and allow time for the temperature to drop to a safe working temperature.

When installing the product, be sure to leave clearance for maintaining it.

The vacuum breaker should be installed in a vertical position with the cap and name plate at top and should be placed at the highest point in the system.

Typical installation



4 MAINTENANCE



CAUTION

- When replacing parts, make sure the replacement parts are supplied by Miyawaki.

After the vacuum breaker is isolated from the system, unscrew the top cap (2) with a wrench of 36 mm and examine the product for any wear/tear and debris on the ball or seat, which could cause the breakage of the system pressure. Clean the parts and refit with a new gasket.

Recommended torque for tightening the cap : 120 Nm.

With the exception of possible cleaning this product is maintenance free. Vacuum breakers are not repairable on line.

5 WARRANTY

5.1 Warranty period

The warranty period is 18 months after shipment or 12 months after installation, whichever occurs first.

5.2 Details of the warranty

If the product stops working correctly within the warranty period, we will repair or replace the product free of charge if the cause of the trouble is not one of the following items.

- 1) The precautions described in this manual were not observed.
- 2) User's errors or mistakes such as an inappropriate installation or incorrect handling, or an excessively large impact caused by dropping
- 3) Problems caused by devices or equipment other than ours, or a disallowed use environment
- 4) When a repair or modification has been performed by anyone other than us or people who are authorized to make such repairs
- 5) Intrusion of salt or other substances that promote significant rust or corrosion or problems from fluids that contain the same substances
- 6) Extremely worn gaskets or other parts
- 7) Attachment or accumulation of foreign matter in the pipe, such as dust and scale
- 8) Problems from fires, natural disasters, or other force majeure which is not our responsibility

5.3 Warranty limitation

The remedy available under the warranty shall not exceed the sales price of the products delivered, for any cause whatsoever.

6 SERIAL NUMBER (S. No.) DESIGNATION

S.No.

Represents the day.
 Represents the month.
 Represents the year. (last two digits of the year according to the Western calendar)

Month designation system

Symbol	Month	Symbol	Month	Symbol	Month	Symbol	Month
1	1	4	4	7	7	X	10
2	2	5	5	8	8	Y	11
3	3	6	6	9	9	Z	12

Day designation system

Symbol	Day	Symbol	Day	Symbol	Day	Symbol	Day
1	1	9	9	H	17	Q	25
2	2	A	10	J	18	R	26
3	3	B	11	K	19	S	27
4	4	C	12	L	20	T	28
5	5	D	13	M	21	U	29
6	6	E	14	N	22	V	30
7	7	F	15	O	23	W	31
8	8	G	16	P	24		

Example of serial number designation

1 7 1 1 → Jan.1, 2017

2 9 X M → Oct. 21, 2029

7 GUIDANCE FOR READING SPECIAL PRODUCT NAME



Special symbol:

**The symbol applies only to special products
(Please refer to table 1 for details)**

English letter after “-“

**Model symbol: Product
model number**

Table 1 Symbol description

Suffix	Special contents
A	Trap for high-pressure gas installed property
C	Blow valve attached
K	Change of gasket
L	Special face to face dimension
M	Change of parts material
P, T	Change of operating pressure, temperature, condensate capacity, etc.
R	Change of screen mesh
V	Change of air vent
X	Other than mentioned above or complex of special contents above

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- For any questions about the product that you purchased or about the details in this user's manual, please contact the following.
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 - Some special specifications of the product may found to be different from the ones in the user's manual. If you have any question, please contact MIYAWAKI, our local authorized agent, or the company where you purchased the product.
 - In the interest of the development and improvement of our products, MIYAWAKI Inc. reserves the right to change the specification of the products without prior notice.
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MIYAWAKI INC.'s International Sales Dept. or its local representative.
By scanning QR Code, you can access inquiry form.



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