

Vent valves TYPE VB03 / VB04



description:

Vent valves are used for protection against and prevention of vacuum in containers or closed systems.

product features:

- suitable for neutral gaseous media like air, gases & technical fumes
- protection of vacuum in tanks, pipeline systems, heat exchanger and containers

connection:

1/2", 3/4", 1"

temperature:

-60°C up to 225°C

pressure:

-6 mbar up to -800mbar
depending on design

material: component

entrance body
leakage body
interior parts
seal
Secondary seal

material

brass
brass steel
brass steel
PTFE
PTFE

DIN EN

CW617N
1. CW617N
1. CW617N
PTFE
PTFE

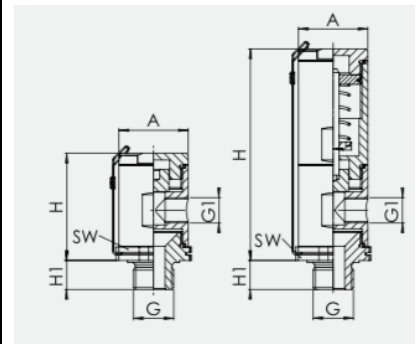
ASME

CW617N
CW617N
CW617N
PTFE
PTFE

dimensions:

	VB03			VB04		
diameter DN	15	20	25	15	20	25
PN	40	40	40	40	40	40
entrance G*	1/2"	3/4"	1"	1/2"	3/4"	1"
G1*	1/4"	1/2"	3/4"	1/4"	1/2"	3/4"
H	55,4	63,4	69	109,4	117	123
H1	15	17	19	15	17	19
A	36	52	64	36	52	64
SW	36	52	64	36	52	64
weight	0,37	0,80	1,26	0,65	1,31	2,0
adjustment range mbar	-6	-6	-6	-100 to -800	-100 to -800	-100 to -800

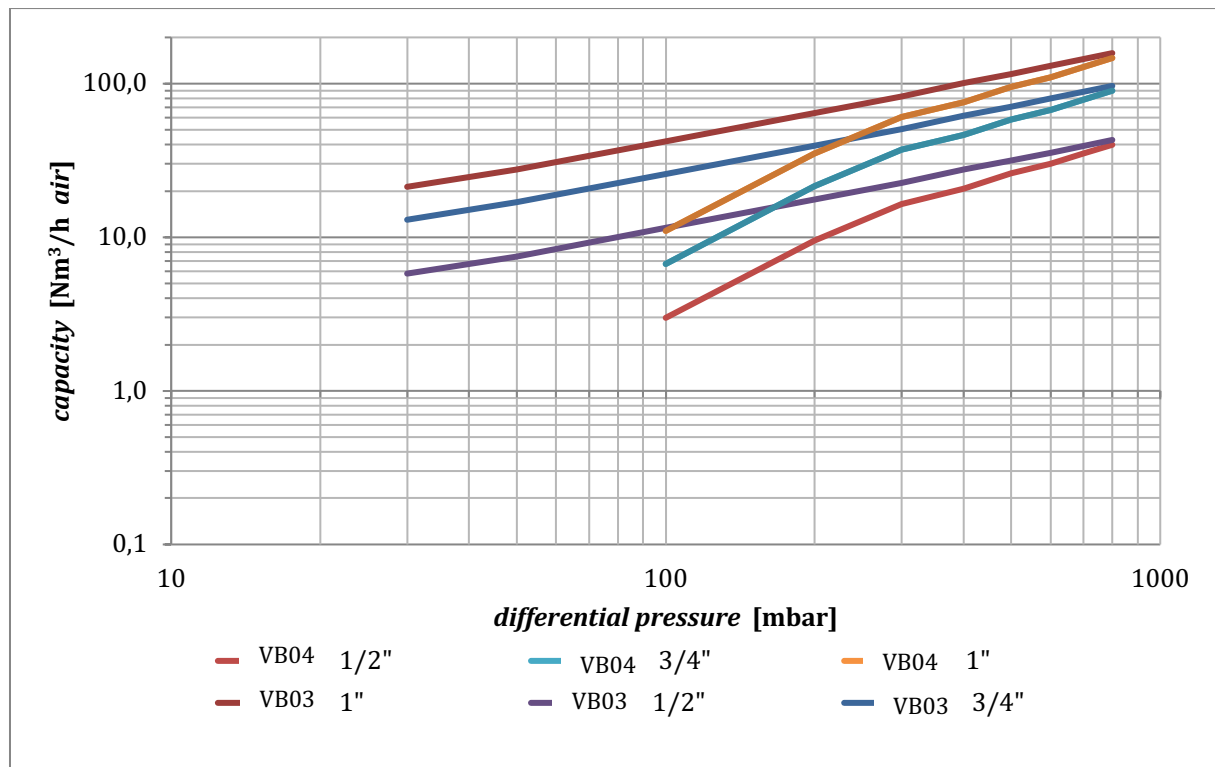
* thread / connection acc. to DIN EN ISO 228



type VB03

type VB04

performance chart:



VB03:

Differential pressure	Capacity					
	1/2"		3/4"		1"	
mbar	Nm³/h	NI/s	Nm³/h	NI/s	Nm³/h	NI/s
30	10,0	2,8	22,5	6,3	36,7	10,2
50	12,0	3,3	27,0	7,5	44,1	12,3
100	16,0	4,4	36,0	10,0	58,8	16,3
300	29,0	8,1	65,2	18,1	106,5	29,6
400	35,0	9,7	78,7	21,9	128,6	35,7
500	42,0	11,7	94,5	26,3	154,3	42,9
600	46,0	12,8	103,5	28,8	169,0	46,9
800	52,0	14,4	117,0	32,5	191,0	53,1

VB04:

Differential pressure	Capacity					
	1/2"		3/4"		1"	
mbar	Nm³/h	NI/s	Nm³/h	NI/s	Nm³/h	NI/s
100	8,0	2,2	18,0	5,0	29,4	8,2
200	13,0	3,6	29,2	8,1	47,8	13,3
300	20,0	5,6	45,0	12,5	73,5	20,4
400	26,0	7,2	58,5	16,3	95,5	26,5
500	34,0	9,4	76,5	21,3	124,9	34,7
600	39,0	10,8	87,7	24,4	143,3	39,8
700	44,0	12,2	99,0	27,5	161,6	44,9
800	49,0	13,6	110,2	30,6	180,0	50,0

conversion:

$$\text{Nm}^3/\text{h} \times \frac{1000}{3600} = \text{NI/s}$$

type VB03 opening at -6 mbar (=0,994 bar abs.)

The capacity increases with increasing differential pressure.

Example connection 1":

The capacity on differential pressure of 60 mbar is 30Nm³/h air which equates to 8,3 NI/s

The capacity on differential pressure of 200 mbar is 65 Nm³/h air which equates to 18,1 NI/s

type VB04 adjustable from -100 up to -800 mbar (=0,9 up to 0,2 bar abs.)

The capacity is independent of set pressure and increases with increasing differential pressure.

Example connection 1/2":

The capacity on differential pressure of 100 mbar is 3 Nm³/h air which equates to 0,8 NI/s

The capacity on differential pressure of 400 mbar is 20 Nm³/h air which equates to 5,6 NI/s

Installation and assembly:

Installation must only be performed by qualified staff, and when the pipeline system is unpressurised. Pipes are to be flushed to remove residues before valve installation. Such residues may cause damage to the valve interior and result in functional disorder including valve failure.

The valve is operated in a vertical installation position. The system connection must point downward.

article number:

Type	Connection	Seal	Size
VB03 – pressure: -6mbar	00 – male thread	00 – PTFE	03 – 1/2"
VB04 – pressure: -100 up to -800mbar*			04 – 3/4"
			05 – 1"
Example no. VB03000004:			
VB03	00	00	04

Vent valve made of brass

Opening pressure: -6 mbar

Seal: PTFE

Size: 3/4"

* Please note: adjustable

Image similar, subject change without notice.