

# Bleeding and Venting Valves

## Continuous Bleeding and Venting Valves EB 1.12



### Compact Standard Bleeding Valve

#### Technical Data

Connection DN	25 - 100
Connection G	1/2 - 2
Nominal Pressure PN	16
Operating Pressure	0 - 16
Flow Rate	248 Nm <sup>3</sup> /h
Temperature	130 °C
Medium	liquids

#### Description

Bleeding and venting valves remove air or gases from systems or pipelines without requiring an external energy input. When a system is drained they act as venting valves.

The EB 1.12 bleeding/venting valves are compact and lightweight float-controlled valves for water treatment (incl. ozone), pipelines, petrol tanks etc. They are manufactured from deep-drawn stainless steel featuring excellent corrosion resistance. The valve cone can be fitted with a soft or metallic seal.

Top and bottom sections of the valve body are connected by a clamp ring and two bolts. Servicing/maintenance is easy and does not call for special tooling.

The simple design makes it easy to specify, install, handle and service these valves in an industrial environment.

Valves for continuous bleeding must not be overdimensioned. If a larger valve size is selected, a higher working pressure range with a correspondingly lower flow volume should be chosen. In case of doubt we shall be happy to advise you.

On filter vessels the bleed connection is often located in the middle of the vessel. If the flow volume is large and the distance between distribution funnel and bleed connection small, the incoming water jet hits the bleed connection. This will impair the efficiency of the bleed valve and can result in water hammer. This problem may be avoided by installing a baffle or by placing the bleed connection away from the centre.

#### Standard

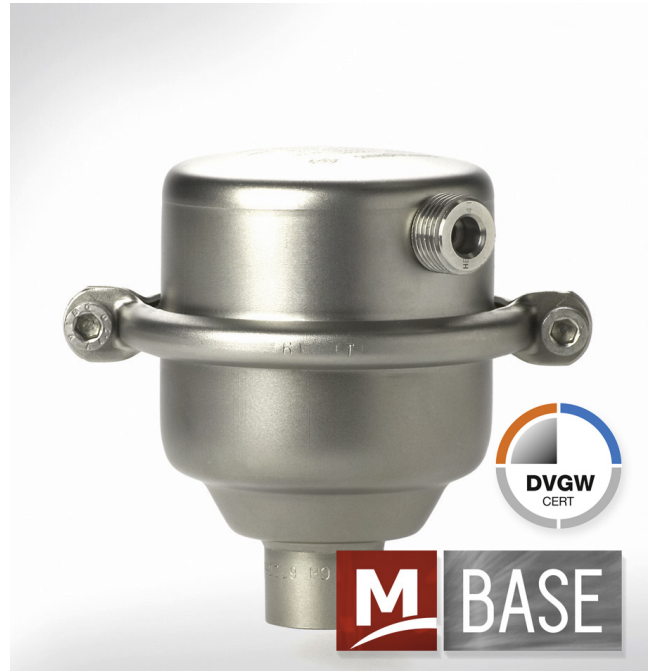
- » certified by DVGW (German Gas and Water Association)
- » All stainless steel construction
- » Quick-release body clamp ring

#### Options

- » Ozone-resistant design
- » Various seal materials suitable for your medium
- » Plastic coating for corrosive fluids
- » Special materials such as Duplex, Superduplex, Hastelloy® or titanium
- » Special connections: Aseptic, ANSI or JIS flanges, welding spigots; other connections on request
- » Special versions on request

Please state working pressure range when enquiring or ordering.

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



#### Pressure Ranges [bar]

nominal diameter G 1/2 - 3/4

press. range bar	0 - 2	0 - 6	0 - 16
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#### Pressure Ranges [bar]

nominal diameter G 1 - 2, DN 25 - 100

press. range bar	0 - 2	0 - 6	0 - 10	0 - 16
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#### Materials

Design	standard	
Type	G 1/2 - 2, DN 25 - 50	DN 65 - 100
Temperature	130 °C	130 °C
Body	CrNiMo-steel	CrNiMo-steel
Body Seal	EPDM	EPDM
Internals	CrNiMo-steel	CrNiMo-steel
Float	CrNiMo-steel	CrNiMo-steel
Valve Seal	EPDM	CrNiMo-steel
Profile Clamp	CrNiMo-steel	CrNiMo-steel

#### Dimensions [mm] G 1/2 - 3/4

size	inlet female G	
	1/2	3/4
	outlet male G 1/2A	
A*	109	109
B*	57	57
C	127	127
D	140	140

#### Dimensions [mm] G 1 - 2

size	inlet female G			
	1	1 1/4	1 1/2	2
	outlet male G 3/4A			
A*	146	149	149	145
B*	140	140	140	140
C	185	190	190	185
D	200	200	200	200

#### Dimensions [mm] DN 25 - 100

size	inlet flange DN						
	25	32	40	50	65	80	100
	outlet male G 3/4A						
A*	161	163	165	164	250	255	257
B*	140	140	140	140	113	113	113
C	200	200	205	205	295	300	305
D	200	200	200	200	265	265	265

\* Overall length tolerances in acc. with DIN EN 558

#### Weights [kg] G 1/2 - 2

inlet female G					
1/2	3/4	1	1 1/4	1 1/2	2
0.8	0.8	2.6	2.6	2.7	3.1

#### Weights [kg] DN 25 - 100

inlet flange DN						
25	32	40	50	65	80	100
3.5	4.2	4.2	5	11	11	12

#### Customs Tariff Number

84818059

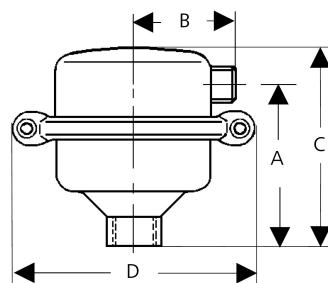
Special designs on request.

The pressure has always been indicated as overpressure.

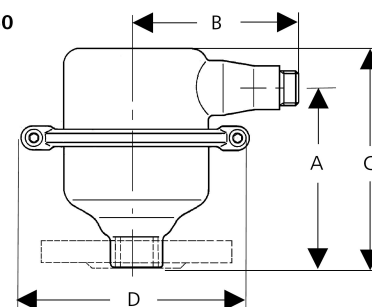
Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

#### Dimensional Drawing

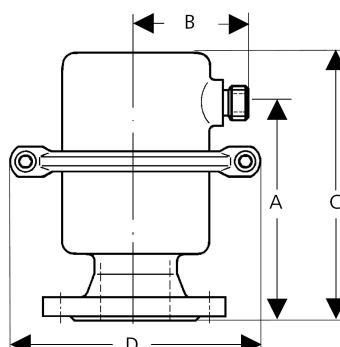
EB 1.12 3/4 x 1/2



EB 1.12 G 1 - 2, DN 25 - 50



EB 1.12 DN 65 - 100



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### Compact Standard Bleeding Valve

#### Flow Rate [Nm³/h] G 1/2 - 3/4

Δp bar	pressure range bar *		
	0 - 2	0 - 6	0 - 16
0.1	3.1	1	0.3
0.2	4.4	1.4	0.4
0.5	6.8	2.2	0.6
1	8.6	2.8	0.7
2	12	4.2	1
4		7	1.7
6		9.8	2.4
8			3.1
10			3.8
12			4.5
16			5.9

The quoted flow volumes apply to a fully open valve i.e. in start-up condition at 0 °C and 1013 mbar. With continuous bleeding e.g. of filter vessels, the maximum flow volume is 30 % less on average.

\* Please note: Smaller seat diameter for higher pressure range. If the selected working pressure range is too high, the flow volume may be inadequate.

#### Flow Rate [Nm³/h] G 1 - 2, DN 25 - 50

Δp bar	pressure range bar *			
	0 - 2	0 - 6	0 - 10	0 - 16
0.1	14	6.4	4.1	3.1
0.2	20	9	5.7	4.4
0.5	31	13	8.9	6.8
1	39	17	11	8.6
2	59	26	16	12
4		44	28	21
6		61	39	30
8			50	38
10			62	47
12				53
16				73

#### Flow Rate [Nm³/h] DN 65 - 100

Δp bar	pressure range bar *			
	0 - 2	0 - 6	0 - 10	0 - 16
0.1	25	25	16	8
0.2	36	36	23	11
0.5	55	55	35	16
1	70	70	45	21
2	106	106	67	32
4		176	113	53
6		246	157	75
8			203	96
10			248	118
12				139
16				182

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