# **Bleeding and Venting Valves**

### Combined Bleeding and Venting Valves EB 1.76

Valve made of Duplex or Superduplex



#### **Technical Data**

 Connection G
 1, 2

 Connection DN
 50 - 200

 Nominal Pressure PN
 10 - 40

 Operating Pressure
 0.2 - 40 bar

Flow Rate bleeding up to 12500 Nm³/h venting up to 11800 Nm³/h

continous bleeding up to 90 Nm<sup>3</sup>/h

Temperature 60 °C

Medium aggressive fluids

#### 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.

EB 1.76 is a combined startup and continuous bleeding and venting valve with guided float. During startup large air quantities are discharged at low pressure via a large seat. If the bleeding valve is closed and further small volumes of air accumulate during continuous operation, a second seat arranged within the float opens and discharges the accruing air. The large cone does not open until the level is going down at simultaneous pressure release. In the event of a vacuum the valves open immediately.

The bleeding and venting valves EB 1.76 are float-controlled compact devices for aggressive fluids. The body is made of Duplex or Superduplex. The valve cone is soft sealed. The minimum pressure required for valve seal is 0.2 bar.

Maintenance work can be done from above at the installed valve.

#### Standard

- » Pressure stage PN 16
- » Designed acc. to EN-1074/4 and AWWA C-512
- » Flanges as per EN 1092/2
- » Body made of Duplex or Superduplex
- » Float made of polypropylene PP
- » Seals made of EPDM, FKM or silicone
- » Outlet with protection cover

#### **Options**

- » Pressure stage PN 10, 25, 40
- » Degassing bend made of polypropylene PP, 1.4401 / 316 for DN 200
- » Non-slam closing mechanism
- » Pressure surge attenuation by anti-shock system
- » Dirty water version
- » Purging connection
- » Flanges acc. to ANSI
- » Other flanges and seal materials on request
- » Closing pressure 0.1 bar
- » Bigger nominal diamters up to DN 400 on request

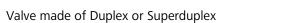
Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



Air Flow Rate Nm³/h										
	ΔΡ	G		nominal diameter DN						
	bar	1	2	50	65	80	100	150	200	
venting	0.05	80	300	300	300	750	1200	2800	4500	
	0.1	110	450	450	450	1100	1800	4000	7000	
	0.3	200	750	750	750	2000	3000	7000	12500	
start-up	0.05	80	300	300	300	800	1200	3000	5000	
bleeding	0.1	120	450	450	450	1100	1700	4000	7000	
	0.3	200	750	750	750	1800	3000	6100	11800	
continuous bleeding	2	2	2	2	2	2	4	11	18	
	6	4	4	4	4	5	7	18	36	
	8	6	6	6	6	7	11	29	54	
	10	6	6	6	6	8	13	36	65	
	16	8	8	8	8	13	18	54	90	

# **Bleeding and Venting Valves**

## **Combined Bleeding and Venting Valves EB 1.76**





Materials	
Body	Duplex, Superduplex
Flanges	Duplex, Superduplex
Seat	Duplex, Superduplex
O-Rings	EPDM / FKM / silicone
Float	polypropylene
Spacer	Duplex, Superduplex
Deflector	Duplex, Superduplex
Cap, Screen	1.4401 / 316
Nuts	1.4401 / 316
Drain valve	1.4401 / 316
Studs	1.4401 / 316

Dimensions Sleeve Connection [mm]								
size	G 1	G 2						
Α	95	165						
В	200	255						
B1	285	380						
D	G 1	G 2						

Dimensions Flange Connection [mm]										
size	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200				
Α	165	185	200	235	300	360				
В	255	255	285	335	445	515				
B1	380	380	435	510	650	830				
C	40	40	50	50	70	70				
D	G 2	G 2	G 2 1/2	G 3	G 4	G 6				

Weights with Protection Cap [kg]										
G 1	G 2	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200			
6.5	6.5	8	8	12	17	45	62			

Wheits with Degassing Bend [kg]									
nomin	al diameter								
G 1	G 2	DN 50	DN 65	DN 80	DN 100	DN 150	DN 200		
7	8	9.5	9.5	13.5	20	51.5	78.5		

## 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**

