Bleeding and Venting Valves

Combined Bleeding and Venting Valves EB 6.54

Valve for highest Flow Rates

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www.mankenberg.de | Tel. +49 (0) 451 - 8 79 75 0
MANKENBERG GmbH | Spenglerstraße 99 | D-23556 Lübeck
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Technical Data

Connection DN	25 - 300
Nominal Pressure PN	6 - 40
Operating Pressure	0,3 - 40 bar
Flow Rate	18550 Nm³/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; venting may be prevented by fitting a non-return valve.

EB 6.54 is a float-controlled combined start-up and continuous bleeding and venting valve consisting of a main valve for start-up bleed and a continuous bleeding and venting valve built-on laterally. The valve cone is provided with a soft seal, and the minimum pressure for the valve seal is to be 0.3 bar.

Owing to the large seat diametre, large air volumes are discharged at low pressures. The main valve closes as soon as having been filled with liquid. With additional small air quantities accrueing during continuous operation, the continuous bleeding and venting valve opens and discharges the accrueing air. The main valve only opens with falling level and simultaneous pressure relief. If a vacuum arises the valve will open immediately.

Depending on the version the start-up bleeding valves EB 3.50 (PN 6-40) or EB 3.52 (PN 16) can be employed as main valve and for continuous bleeding and venting the types EB 1.12 or EB 1.32 with a nominal width of G 3/4 x 1/2 can be used. Details concerning materials and dimensions can be found on the corresponding data sheets.

Standard

» EB 3.52 up to DN 100 completely made of stainless steel

Options

» various seal materials suitable for your medium
» plastic coating for corrosive fluids
» non-return valve to prevent venting
» special connections: Aseptic, ANSI or DIN flanges, welding spigots; other connections on request
» special versions on request

Customs Tariff Number
84818059

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 for Start-up Venting [Nm³/h] with EB 3.52 basis

Δp bar	nominal diameter DN						
	25	32	40	50	65	80	100
0.05	52	90	125	217	378	543	790
0.1	73	126	177	307	534	767	1117
0.2	104	178	250	435	755	1085	1580
0.3	127	219	306	532	925	1330	1935

Air Flow Rate for Start-up Venting [Nm³/h] with EB 3.50 basis

Δp bar	nominal diameter DN					
	100	125	150	200	250	300
0.05	971	1604	2236	3948	5783	7572
0.1	1374	2268	3162	5583	8178	10708
0.2	1940	3210	4470	7900	11570	15150
0.3	2380	3930	5480	9670	14165	18550

Air Flow Rate for Continuous Venting [Nm³/h]

Δp bar	Pressure Range bar *		
	0 - 2	0 - 6	0 - 16
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
> 16	on request		

Air Flow Rate for Bleeding [Nm³/h] with EB 3.52 Basis

Δp bar	nominal diamer DN						
	25	32	40	50	65	80	100
0.1	69	120	167	291	507	728	1060
0.2	93	160	223	390	675	970	1410
0.3	106	183	255	445	775	1110	1620
0.4	114	195	275	475	825	1185	1730

Air Flow Rate for Bleeding [Nm³/h] with EB 3.50 basis

Δp bar	nominal diameter DN					
	100	125	150	200	250	300
0.1	1300	2150	3000	5300	7760	10160
0.2	1740	2870	4000	7060	10345	13545
0.3	1990	3290	4580	8090	11850	15520
0.4	2130	3515	4900	8650	12670	16590