



FULL-LIFT SAFETY VALVE

MODEL SV442

SPRING-LOADED FLANGE TYPE SAFETY VALVE

Features

Full-lift safety valve with open lifting device. Available in cast iron, ductile cast iron or cast steel; to blow off steam, gases or fluids.

1. Approved according to TRD 421, AD-A2 and ASME Sect. VIII Div.1.
2. High blow-off capacity.
3. Stable operation, even under adverse piping conditions.
4. Spring-loaded, direct-action design.
5. Valve seat and disc are extremely wear resistant.
6. Precision disc alignment and guide.
7. Contains no asbestos or copper-alloys.
8. Options:
 - Back pressure-compensating bellows
 - Elastomer-bellows
 - Disc with soft seal
 - Drain hole



Specifications

Model	SV4421	SV4422	SV4425
Body Material DIN EN	Cast Iron GG-25 (0.6025)	Cast Steel GP 240 GH (1.0619)	Ductile Cast Iron GGG-40.3 (0.7043)
Material Number ASTM (equivalent)	A126 Cl. B	A216 Gr. WCB	A395
Connection	Flanged DIN 2501*		
Nominal Pressure Rating Inlet/Outlet	PN 16 / PN 16	PN 40 / PN 16	
Size/DN Inlet/Outlet	20/32 - 150/250	20/40 - 150/250	25/40 - 100/150
Temperature Range (°C)	- 10 to + 200	- 85 to + 400	- 60 to + 220
Maximum Operating Pressure PMO	13	40	22
Maximum Operating Temperature TMO	200	400	220

* Other standards available

1 bar = 0.1 MPa

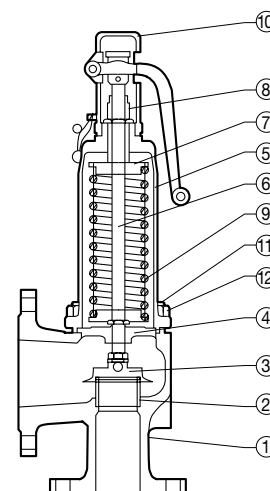
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure (barg) PMA: 13 (GG-25), 22 (GGG-40.3), 46 (GP 240 GH)
 Maximum Allowable Temperature (°C) TMA: 200 (GG-25), 220 (GGG-40.3), 400 (GP 240 GH)



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN EN	ASTM/AISI*
①	Body	See above	—	—
②	Valve Seat	Stainless Steel	1.4404	AISI316L
③	Disc	Stainless Steel	1.4122	AISI440
④	Guide	Carbon Steel	1.0501	AISI1035
⑤	Bonnet	Ductile Cast Iron	0.7040	A536 Gr. 65-45-12
⑥	Spindle	Stainless Steel	1.4021	AISI420
⑦	Spring Plate	Carbon Steel	1.0718	AISI12L13
⑧	Adjusting Screw with Bushing	Stainless Steel	1.4104	AISI430F
		PTFE	PTFE	PTFE
⑨	Spring t < 200 °C	Alloy Steel	1.1200	—
	Spring t > 200 °C	Alloy Steel	1.8159	AISI6145
⑩	Lifting Device H3	Ductile Cast Iron	0.7040	A536 Gr. 65-45-12
⑪	Body Bolt	Alloy Steel	1.1181	AISI1035
⑫	Body Nut	Alloy Steel	1.0501	AISI1035

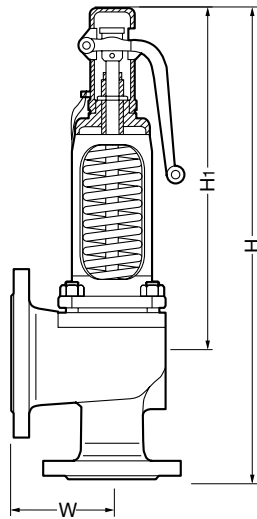
* Equivalent materials



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Dimensions, Weights

- **SV4421**
SV4422
SV4425
Flanged



SV4421 • SV4422 • SV4425 Flanged*

DN	H	H1	W	Weight (kg)
20 / 32	300	215	95	9
20 / 40	304	219	95	9
25 / 40	339	234	100	9
32 / 50	446	331	110	12
40 / 65	512	372	115	16
50 / 80	569	419	120	22
65 / 100	699	529	140	32
80 / 125	800	606	160	56
100 / 150	883	663	180	75
125 / 200	913	663	200	85
150 / 250	1020	735	225	131

* DIN 2501 PN 16, 25, 40, other standards available

Blow-Off Capacity

DN	20	25	32	40	50	65	80	100	125	150
Flow Diameter d ₀ (mm)	18	23	29	37	46	60	74	92	98	125
Operating Pressure p (barg)	Saturated Steam (kg/h) (Consult TLV for blow-off capacities of air and water)									
0.2	84	137	217	354	547	930	1410	2180	2480	4030
0.5	130	212	337	549	849	1440	2190	3390	3850	6260
1	189	308	490	798	1230	2090	3190	4930	5590	9100
2	302	493	783	1270	1970	3350	5100	7880	8940	14500
3	406	663	1050	1710	2650	4510	6860	10600	12000	19500
4	507	827	1310	2140	3300	5620	8560	13200	15000	24400
5	607	990	1570	2560	3960	6740	10200	15800	17900	29200
6	706	1150	1830	2980	4610	7840	11900	18400	20900	34000
7	806	1310	2090	3400	5260	8950	13600	21000	23800	38800
8	905	1470	2340	3820	5910	10000	15200	23600	26800	43600
9	1000	1630	2600	4240	6550	11100	16900	26200	29700	48400
10	1100	1800	2860	4660	7200	12200	18600	28800	32600	53100
12	1300	2120	3370	5490	8490	14400	21900	33900	38500	62700
14	1490	2440	3890	6330	9780	16600	25300	39100	44400	72200
16	1690	2770	4400	7170	11000	18800	28600	44300	50300	81800
18	1890	3090	4910	8000	12300	21000	32000	49500	56100	91400
20	2090	3410	5430	8840	13600	23200	35300	54600	62000	100000
22	2290	3740	5950	9680	14900	25400	38700	59900	67900	111000
24	2490	4070	6470	10500	16200	27700	42100	65100	73900	120000
26	2690	4390	6990	11300	17500	29900	45500	70400		
28	2890	4720	7510	12200	18900	32100	48900	75600		
30	3090	5050	8030	13000	20200	34400	52300	80900		
32	3290	5380	8560	13900	21500	36600	55700	86200		

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