



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	SV4425	SV4422
Body Material	Cast Iron GG-25	Ductile Cast Iron GGG40.3	Cast Steel GP240GH
Material Number DIN EN (ASTM*)	0.6025 (A126 Cl.B)	0.7043 (A395)	1.0619 (A216 Gr.WCB)
Connection	Flanged DIN EN 1092**		
Nominal Pressure Rating Inlet/Outlet	PN 16 / PN 16	PN 40 / PN 16***	
Size/DN Inlet/Outlet	20/32, 25/40 - 150/250	25/40 - 200/300	20/40 - 200/300
Temperature Range (°C)	- 10 to + 200	- 60 to + 220	- 85 to + 400
Maximum Operating Pressure (barg) PMO	13	22	40
Maximum Operating Temperature TMO	200	220	400

* Equivalent material ** Other standards available

*** Pressures for larger sizes may differ

1 bar = 0.1 MPa

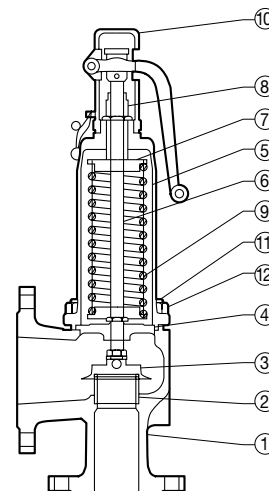
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure (barg) PMA: 13 (GG-25), 22 (GGG40.3), 46 (GP240GH)
 Maximum Allowable Temperature (°C) TMA: 200 (GG-25), 220 (GGG40.3), 400 (GP240GH)



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
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
⑪	Body Bolt	Alloy Steel	1.1181	AISI1035
⑫	Body Nut	Alloy Steel	1.0501	AISI1035

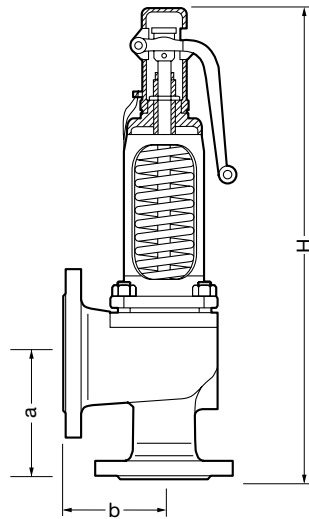
* Equivalent materials



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Dimensions, Weights

- SV4421
SV4422
SV4425
Flanged



SV4421 • SV4422 • SV4425 Flanged¹⁾

DN	H	a	b	Weight (kg)
20 / 32 ²⁾	304	85	95	9
20 / 40 ³⁾	304	85	95	9
25 / 40	339	105	100	9
32 / 50	446	115	110	12
40 / 65	512	140	115	16
50 / 80	569	150	120	22
65 / 100	699	170	140	32
80 / 125	801	195	160	56
100 / 150	883	220	180	75
125 / 200	913	250	200	85
150 / 250	1083	285	225	131
200 / 300 ⁴⁾	1380	290	300	285

¹⁾ DIN EN 1092 PN 16, 25, 40, other standards available ²⁾ Only model with Cast Iron body
³⁾ Only model with Cast Steel body ⁴⁾ Only model with Ductile Cast Iron body

Blow-Off Capacity

DN	20	25	32	40	50	65	80	100	125	150	200
Flow Diameter d ₀ (mm)	18	23	29	37	46	60	74	92	98	125	165
Operating Pressure p (barg)	Saturated Steam (kg/h) (Consult TLV for blow-off capacities of air and water)										
0.2	86	140	223	363	561	954	1451	2243	2545	4140	7214
0.5	137	224	356	579	895	1523	2316	3580	4062	6609	11516
1	199	326	518	843	1302	2215	3370	5209	5910	9616	16755
2	318	519	825	1343	2075	3531	5371	8302	9420	15326	26704
3	428	699	1111	1808	2794	4754	7232	11178	12683	20635	35954
4	534	871	1385	2254	3485	5928	9018	13938	15816	25731	44934
5	639	1043	1658	2699	4172	7097	10796	16687	18934	30804	53673
6	744	1214	1930	3142	4856	8262	12568	19426	22042	35861	62484
7	846	1381	2196	3574	5525	9399	14297	22098	25074	40794	71080
8	950	1551	2466	4014	6205	10556	16057	24818	28161	45816	79830
9	1054	1721	2736	4454	6884	11712	17815	27535	31244	50831	88569
10	1158	1891	3006	4893	7562	12866	19571	30250	34324	55842	97300
12	1366	2230	3545	5770	8919	15174	23081	35675	40480	65858	114751
14	1569	2562	4073	6629	10247	17433	26518	40987	46507	75664	131837
16	1776	2900	4610	7505	11600	19735	30020	46400	52650	85657	149249
18	1984	3239	5149	8382	12955	22041	33526	51820	58800	95663	166683
20	2191	3578	5688	9260	14312	24350	37039	57249	64960	105685	184145
22	2393	3907	6212	10111	15629	26590	40446	62515	70935	115407	201085
24	2601	4247	6752	10991	16988	28903	43964	67953	77106	125445	218576
26	2810	4588	7294	11873	18351	31222	47491	73405	83292		
28	3019	4930	7837	12757	19718	33547	51029	78873	89496		
30	3229	5272	8382	13644	21089	35880	54577	84358			
32	3440	5616	8929	14534	22465	38220	58137	89860			

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