



SV568H Safety Valve

Description

SV568H is a full nozzle high capacity valves Safety Valve, designed with flat seat and metal / metal seal. Its modern design with two adjustment rings, allows the precise adjustment of the differential pressure (blowdown). It is suitable to serve the majority of industrial processes, and can be used for services with gases and steam.

Available Types

SV568H valves are available with NPT threaded connections according to ASME B1.20.1 Standard and test lever.

Construction Standard

The SV568H Safety Valves are designed and manufactured according ASME Code, Section VIII requirements. The building materials meet ASME Code, Section VIII UG-136 requirements and and seat tightness complies with requirements of API STD 527.

Certifications

A manufacturers' Typical Test Report is provided as standard for each valve which will include material certification, valve set and hydraulic test pressure in accordance with EN 10204 2.2.

Materials

See pages 2 for details.

Dimensions & Weight

See pages 2 for details.

Capacity Table

See pages 2 for details.

Limiting Conditions

Set Pressure	Maximum	20,7 bar g
	Minimum	1,0 bar g
Temperature	Maximum	232°C
	Minimum	-29°C
Maximum backpressure		2,1 bar g



How to order

For the correct sizing and selection of the SV568H, the following information is necessary:

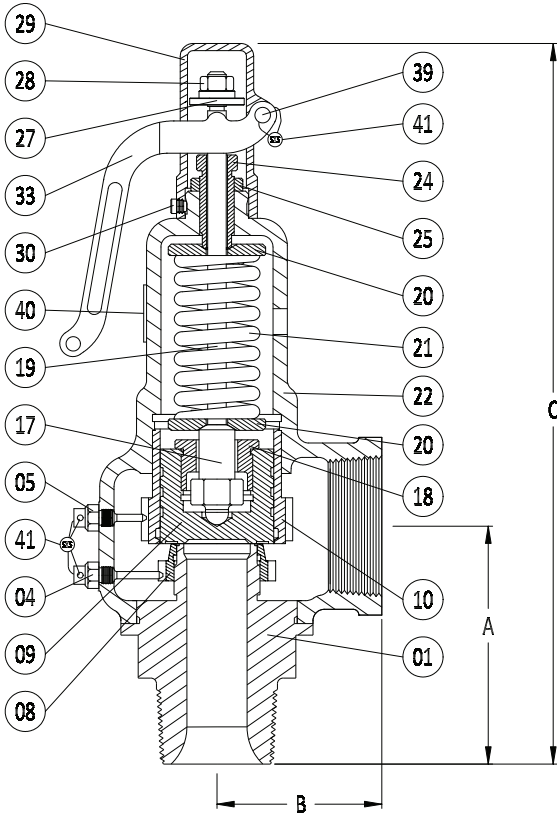
- 1.Fluid
- 2.Required capacity (flow)
- 3.Operation pressure and Set pressure
- 4.Operating temperature and Opening temperature
- 5.Backpressure
- 6.Overpressure
- 7.Viscosity and Specific Gravity (Liquid)
- 8.Molecular Weight (Gases)

Spirax Sarco has a computer sizing program (PSV Calc) which performs sizing and selection functions. Additionally, it will select materials, configure the complete valve and provide a data sheet.

Dimensions and Weights approximate in mm and kg NPTM x NPTF threaded connections

Connections		Orifice	Effective Area cm ²	Dimensions			Weight
Inlet	Outlet			A	B	C	
1/2"	3/4"	D	0,810	56,0	37,0	175,3	0,9
3/4"	1"	E	1,453	63,4	40,0	199,5	1,2
1"	1.1/4"	F	2,405	70,0	49,0	227,8	1,9
1.1/4"	1.1/2"	G	3,464	83,0	57,5	252,5	3,4
1.1/2"	2"	H	5,425	85,0	67,0	289,5	4,5
2"	2.1/2"	J	8,864	100,4	86,0	327,0	7,6

Standard Materials



N° Part	Materials
01 Body (Base)	Stainless Steel T 316
08 Lower Ring	Stainless Steel T 316
04 Lower Lock Screw	Brass -
05 Upper Lock Screw	Brass -
09 Disc	Stainless Steel T 316
10 Upper Ring	Stainless Steel T 316
17 Stem Terminal (Orifices F /G/ H e J)	Brass
18 Stem Retainer	Brass
19 Stem	Brass -
20 Spring Support	Brass
21 Spring	120 a 201 °C Carbon Steel
21 Spring	202 a 232 °C Stainless Steel T 302
22 Bonnet	ASTM A 126 Cl B -
24 Pressure Screw	Brass
25 Lock Nut	Carbon Steel
27 Lifter Nut	Brass
28 Nut	Carbon Steel
29 Bonnet	Carbon Steel
30 Bonnet Screw	Blackened Carbon Steel
33 Lever	Carbon Steel
39 Lever Pin	Brass
40 Name Plate	Stainless Steel T 316
41 Seal Wire	Lead

Steam Capacity - 10% Overpressure - kg/h

Compressed Air Capacity - 10% Overpressure - Nm³/h (0°C e 1,013 bar)

Set Pressure (barg)	Orifice / Flow Area (cm ²)					
	D	E	F	G	H	J
	0,810	1,453	2,405	3,464	5,425	8,864
1,0	81	146	241	347	544	889
1,5	100	179	296	426	667	1.089
2,0	118	211	350	504	789	1.290
2,5	138	247	409	589	922	1.507
3,0	158	283	469	675	1.057	1.727
3,5	178	319	528	761	1.192	1.948
4,0	198	355	588	847	1.327	2.168
4,5	218	391	648	933	1.462	2.388
5,0	238	428	708	1.019	1.596	2.608
5,5	258	464	768	1.105	1.731	2.829
6,0	279	500	827	1.192	1.866	3.049
6,5	299	536	887	1.278	2.001	3.269
7,0	319	572	947	1.364	2.136	3.490
7,5	339	608	1.007	1.450	2.271	3.710
8,0	359	644	1.066	1.536	2.405	3.930
8,5	379	680	1.126	1.622	2.540	4.150
9,0	399	716	1.186	1.708	2.675	4.371
9,5	420	753	1.246	1.794	2.810	4.591
10	440	789	1.305	1.880	2.945	4.811
12	520	933	1.544	2.225	3.484	5.692
14	601	1.078	1.784	2.569	4.023	6.573
16	681	1.222	2.023	2.913	4.562	7.455
18	762	1.366	2.262	3.258	5.102	8.336
20	842	1.511	2.501	3.602	5.641	9.217
20,7	870	1.561	2.584	3.722	5.830	9.525

Set Pressure (barg)	Orifice / Flow Area (cm ²)					
	D	E	F	G	H	J
	0,810	1,453	2,405	3,464	5,425	8,864
1,0	105	189	312	450	705	1.152
1,5	129	231	383	551	864	1.411
2,0	153	274	453	653	1.022	1.670
2,5	178	320	530	763	1.195	1.952
3,0	204	367	607	874	1.369	2.237
3,5	231	414	684	986	1.544	2.523
4,0	257	460	762	1.097	1.719	2.806
4,5	283	507	839	1.209	1.893	3.093
5,0	309	554	917	1.320	2.068	3.379
5,5	335	601	994	1.432	2.242	3.664
6,0	361	647	1.072	1.543	2.417	3.949
6,5	387	694	1.149	1.655	2.592	4.235
7,0	413	741	1.226	1.766	2.766	4.520
7,5	439	788	1.304	1.878	2.941	4.805
8,0	465	834	1.381	1.989	3.115	5.090
8,5	491	881	1.459	2.101	3.290	5.376
9,0	517	928	1.536	2.212	3.465	5.661
9,5	543	975	1.613	2.324	3.639	5.946
10	569	1.022	1.691	2.435	3.814	6.232
12	674	1.209	2.000	2.881	4.512	7.373
14	778	1.396	2.310	3.327	5.211	8.514
16	882	1.583	2.620	3.773	5.909	9.655
18	987	1.770	2.929	4.219	6.606	10.797
20	1.091	1.957	3.239	4.665	7.306	11.938
20,7	1.127	2.022	3.347	4.896	7.551	12.337

For sizing purpose using the ASME actual areas, the certified coefficient of discharge Kd for air, gas and steam is 0.859.

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lb/h = kg/h x 2,2046

SCFM = Nm³/h x 0,6135