

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 multiple industries, applications, environments, and media. 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 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)

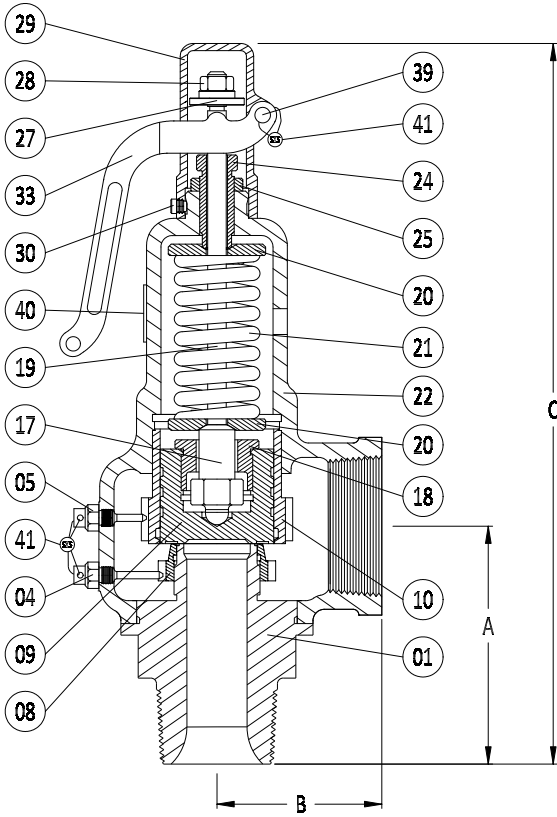
Spirax Sarco has a computer sizing program (PSV Calc) which performs sizing and selection functions. Additionally, it will select materials, configure the complete valve and provide a data sheet.



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	0,817	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	5,433	85,0	67,0	289,5	4,5
2"	2.1/2"	J	8,867	100,4	86,0	327,0	7,6

Standard Materials



N° Part	Materials	
01 Body (Base)	316 Stainless Steel	
08 Lower Adjusting Ring	316 Stainless Steel	
04 Lower Lock Screw	Brass	
05 Upper Lock Screw	Brass	
09 Disc	316 Stainless Steel	
10 Upper Adjusting Ring	316 Stainless Steel	
17 Lower Stem (Orifices F /G/ H e J)	Brass	
18 Stem Retainer	Brass	
19 Stem	Brass	
20 Spring Washer	Brass	
21 Spring	120 a 201 °C	Carbon Steel
21 Spring	202 a 232 °C	302 Stainless Steel
22 Bonnet	SA-395 Gr. 60-40-18	
24 Compression Screw	Brass	
25 Compression Screw Nut	Carbon Steel	
27 Lifting Washer	Brass	
28 Lifting Washer Nut	Carbon Steel	
29 Cap	Carbon Steel	
30 Cap Screw	Carbon Steel	
33 Lever	Carbon Steel	
39 Lever Pin	Brass	
40 Name Plate	316 Stainless Steel	
41 Seal Wire	Lead	

**Steam Capacity -
10% Overpressure - kg/h**

Set Pressure (barg)	Orifice / Flow Areal (cm ²)					
	D 0,817	E 1,453	F 2,405	G 3,464	H 5,433	J 8,867
1,0	82	146	241	347	545	889
1,5	100	179	296	426	668	1090
2,0	119	211	350	504	790	1290
2,5	139	247	409	589	924	1508
3,0	159	283	469	675	1059	1728
3,5	180	319	528	761	1194	1948
4,0	200	355	588	847	1329	2169
4,5	220	391	648	933	1464	2389
5,0	240	428	708	1019	1599	2609
5,5	261	464	768	1105	1734	2830
6,0	281	500	827	1192	1869	3050
6,5	301	536	887	1278	2004	3270
7,0	322	572	947	1364	2139	3491
7,5	342	608	1007	1450	2274	3711
8,0	362	644	1066	1536	2409	3931
8,5	383	680	1126	1622	2544	4152
9,0	403	716	1186	1708	2679	4372
9,5	423	753	1246	1794	2814	4593
10	443	789	1305	1880	2949	4813
12	525	933	1544	2225	3489	5694
14	606	1078	1784	2569	4029	6576
16	687	1222	2023	2913	4569	7457
18	768	1366	2262	3258	5109	8339
20	850	1511	2501	3602	5649	9220
20,7	878	1561	2584	3722	5838	9528

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

lb/h = kg/h x 2,2046

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

Set Pressure (barg)	Orifice / Flow Area (cm ²)					
	D 0,817	E 1,453	F 2,405	G 3,464	H 5,433	J 8,867
1,0	106	189	312	450	706	1.152
1,5	130	231	383	551	865	1.411
2,0	154	274	453	653	1.024	1.671
2,5	180	320	530	763	1.196	1.953
3,0	206	367	607	874	1.371	2.238
3,5	233	414	684	986	1.546	2.524
4,0	259	460	762	1.097	1.721	2.809
4,5	285	507	839	1.209	1.896	3.094
5,0	311	554	917	1.320	2.071	3.380
5,5	338	601	994	1.432	2.246	3.665
6,0	364	647	1.072	1.543	2.421	3.951
6,5	390	694	1.149	1.655	2.595	4.236
7,0	417	741	1.226	1.766	2.770	4.521
7,5	443	788	1.304	1.878	2.945	4.807
8,0	469	834	1.381	1.989	3.120	5.092
8,5	495	881	1.459	2.101	3.295	5.378
9,0	522	928	1.536	2.212	3.470	5.663
9,5	548	975	1.613	2.324	3.645	5.948
10	574	1.022	1.691	2.435	3.820	6.234
12	680	1.209	2.000	2.881	4.519	7.375
14	785	1.396	2.310	3.327	5.219	8.517
16	890	1.583	2.620	3.773	5.918	9.659
18	995	1.770	2.929	4.219	6.618	10.800
20	1.100	1.957	3.239	4.665	7.317	11.942
20,7	1.137	2.022	3.347	4.796	7.562	12.342

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

SCFM = Nm³/h x 0,6135