

SV561H/SV568H

Safety Valves

Guarantee of protection of your process



The most important requirement: Safety

When it comes to safety valves, Spirax Sarco is the largest and most respected reference in the market. Its Safety and Relief Valves are the result of engineering expertise, application knowledge and experience in the development of high quality products.

Spirax Sarco is the only manufacturer in Latin America with technological expertise to design and manufacture Safety Valves certified by the NBBI (The National Board of Boiler and Pressure Vessel Inspectors) for the final quality of fluids: liquid, steam and gas.

New SV561H/SV568H

The new **SV561H** and **SV568H** valves were designed to meet demanding application requirements, such as protection of steam boilers, air compressors, dryers, receiver vessels, pressure vessels, piping systems, accumulators, pressure reducing stations, among others.

Designed to be compact, the Safety Valves SV561H and SV568H are full nozzle high capacity valves, with flat seat and metal / metal seal. They have a modern design with two adjustment rings, allowing precise adjustments of blowdown. All valves are individually tested before delivery.

Model	Material	Maximum set Pressure	Maximum Overpressure	Connections		Sizes	Codes	Approvals
				Inlet	Outlet			
SV561H	Body and Interns in Stainless Steel T 316	20,7 bar g	3%	NPTM threaded connection according to ASME B 1.20.1	NPTF threaded connection according to ASME B 1.20.1	Inlet 1/2", 3/4", 1", 1.1/2", 2"	Designed and engineered for heavy-duty industrial use. ASME and National Board Certified for Section I. Used for Boilers	The construction materials meet the requirements of the ASME Code Sec.I PG-73.3 and the sealing tests (tightness) are performed according to the requirements of item PG-73.5.3 of this code.
SV568H	Body and Interns in Stainless Steel T 316	20,7 bar g	10%	NPTM threaded connection according to ASME B 1.20.1	NPTF threaded connection according to ASME B 1.20.1	Inlet 1/2", 3/4", 1", 1.1/2", 2"	Designed and engineered for heavy-duty industrial use. ASME and National Board Certified for Section VIII. Can be used in the majority of industrial processes and can be used in services with gases, vapors.	The building materials meet the requirements of the ASME Code Section VIII UG-136 and the sealing tests (tightness) are carried out in accordance with the requirements of API STD 527.

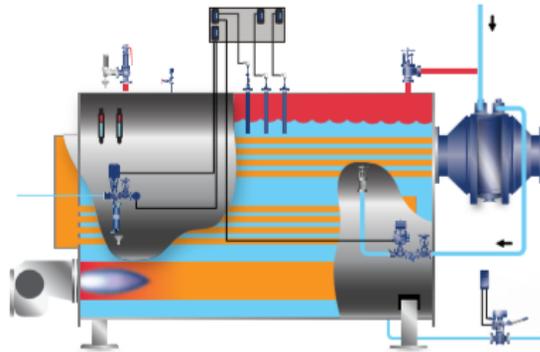
Safety Valves SV561H/SV568H

Technical Features

- Single piece Body (Seat) / Disc design in T 316 Stainless Steel, for long service life
- Dual adjustment rings for precise adjustments of the blowdown
- NPTM x NPTF threaded connections according to ASME B 1.20.1
- Test lever as required by ASME Section I PG-73.2.4, code ASME Section VIII UG-136 (a) (3) (water vapor, air and water above 60° C)
- Materials comply with item PG-73.3 of code ASME Section I (SV561H) and item UG-136 (b) of code ASME Section VIII (SV568H)

Typical Applications

- Steam Boilers,
- Air Compressors
- Dryers
- Receivers
- Pressure Vessels
- Piping Systems
- Accumulators
- Pressure Reducing Stations
- Tanks, Inter/After Coolers
- Cooking Equipment
- Autoclaves
- Sterilizers



Can be applied wherever higher capacity pressure protection or relief may be required.

Benefits

The SV561H / SV568H safety valves have a long service life. If maintenance is required, spare parts can be provided. Refer to the Installation and Maintenance Manual for more details.

SV561H/SV568H Safety Valves

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



Sizing Software

Spirax Sarco offers its customers a modern and exclusive technical software, “**PSV Calc**”, developed exclusively to size the correct safety valve, meeting the needs of the process, quickly and effectively. Request the software from a Spirax Sarco Sales Engineer.

How to Specify and Request

For the correct sizing and selection of the SV561H and SV568H Safety Valves, please provide relevant information marked on the table below:

Data/Product	SV561H	SV568H
1. Fluid	•	•
2. Required Capacity (Flowrate)	•	
3. Operating Pressure	•	
4. Set Pressure	•	
5. Operating and Set Pressure Temperature	•	•
6. Backpressure	•	•
7. Overpressure	•	•
8. Molecular Weight	•	•

Steam Capacity - 3% Overpressure - kg/h – SV561H

Set Pressure (barg)	Orifice/Flow Area (cm ²)					
	D 0,810	E 1,453	F 2,405	G 3,464	H 5,425	J 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

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

$$\text{lb/h} = \text{kg/h} / 0.4536$$

Steam Capacity - 10% Overpressure - kg/h – SV568H

Set Pressure (barg)	Orifice/Flow Area (cm ²)					
	D 0,810	E 1,453	F 2,405	G 3,464	H 5,425	J 8,864
1,0	79	141	234	337	527	861
1,5	97	174	288	415	650	1062
2,0	115	207	342	493	772	1262
2,5	134	240	397	571	895	1462
3,0	152	273	451	650	1017	1662
3,5	170	305	505	728	1140	1863
4,0	189	338	560	806	1263	2063
4,5	207	371	614	884	1385	2263
5,0	226	405	670	965	1511	2468
5,5	244	438	726	1045	1637	2675
6,0	263	472	782	1126	1763	2881
6,5	282	506	838	1206	1889	3087
7,0	301	540	894	1287	2016	3293
7,5	320	574	950	1368	2142	3500
8,0	339	607	1005	1448	2268	3706
8,5	357	641	1061	1529	2394	3912
9,0	376	675	1117	1609	2521	4118
9,5	395	709	1173	1690	2647	4325
10	414	743	1229	1771	2773	4531
12	489	878	1453	2093	3278	5356
14	565	1013	1677	2416	3783	6181
16	640	1148	1901	2738	4288	7006
18	716	1284	2125	3060	4793	7831
20	791	1419	2349	3383	5298	8656
20,7	817	1466	2427	3496	5475	8945

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

$$\text{lb/h} = \text{kg/h} \times 2,2046$$

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