

TI-P276-04 CTLS Issue 1

SV568L Relief Valve

Description

The SV568L Relief Valves are high-capacity valves with a full nozzle and flat seat for metal/metal sealing. They have a modern design and are suitable for most industrial processes. Used in services with liquids.

Available types

SV568L Relief Valves have threaded connections (NPT) in accordance with ASME Standard B1.20.1, with stainless steel springs (17-7).

Standards and approvals

SV568L Relief Valves are designed and built in accordance with the requirements of ASME Code Sections VIII and XIII and meet the requirements of API Standard STD 527 for seat sealing tests.

Certificates

A certificate of conformity is supplied for each valve, including opening pressure and construction materials, in accordance with BS-EN 10204 Type 2.2.



Materials



No.	Description	Material	
1	Сар	Bronze	ASTM B 16
2	Adjusting screw	Bronze	ASTM B 16
3	Locking nut	Bronze	ASTM B 16
4	Bonnet	Bronze	ASTM B 61/62
5	Spring washer	Bronze	ASTM B 16
6	Stem	Bronze	ASTM B 16
7	Spring	Stainless steel	ASTM A 313 T 631
8	Nameplate	Stainless steel	
9	Spring washer bracket	Bronze	ASTM B 283
10	Disc	Bronze	ASTM B 16
11	Body	Bronze	ASTM B 16
12	Cap gasket	Teflon	

Dimensions/weights (approximate) in mm and kg



NPTM x NPTF threaded connections

Connections		Orifica	Dimensions			Moight		
Entry	Output	Office	Α	В	С	weight		
1⁄2"	3/4"	A2	149	54	35	0,7		
3⁄4"	1"	B2	152	60	35	0,9		
1"	1"	C1	191	67	48	1,4		
11⁄2"	11⁄2"	E1	248	89	63,5	2,9		
2"	2"	F1	283	102	67	4,2		
21⁄2"	21⁄2"	G1	305	121	79,5	9,5		

Opening pressure	Hole Designation / Current Area (cm²)						
(bar g)	A2 0.316	B2 0.457	C1 1.119	E1 2.408	F1 3.637	G1 6.586	
1.0	0.6	1.2	1.9	3.5	5.3	7.1	
1.5	0.8	1.5	2.3	4.2	6.3	8.4	
2.0	0.9	1.7	2.6	4.8	7.1	9.6	
2.5	1.0	1.9	2.9	5.3	8.0	10.7	
3.0	1.1	2.0	3.2	5.8	8.7	11.8	
3.5	1.2	2.2	3.5	6.3	9.4	12.7	
4.0	1.2	2.4	3.7	6.7	10.1	13.6	
4.5	1.3	2.5	4.0	7.2	10.7	14.4	
5.0	1.4	2.6	4.2	7.5	11.3	15.2	
5.5	1.4	2.8	4.4	7.9	11.8	15.9	
6.0	1.5	2.9	4.6	8.3	12.3	16.6	
6.5	1.6	3.0	4.7	8.6	12.8	17.3	
7.0	1.6	3.1	4.9	8.9	13.3	18.0	
7.5	1.7	3.2	5.1	9.2	13.8	18.6	
8.0	1.7	3.3	5.3	9.5	14.3	19.2	
8.5	1.8	3.4	5.4	9.8	14.7	19.8	
9.0	1.9	3.5	5.6	10.1	15.1	20.4	
9.5	1.9	3.6	5.7	10.4	15.5	20.9	
10	2.0	3.7	5.9	10.7	15.9	21.5	
12	2.1	4.1	6.5	11.7	17.5	23.5	
14	2.3	4.4	7.0	12.6	18.9	25.4	
16	2.5	4.7	7.4	13.5	20.2	27.1	
18	2.6	5.0	7.9	14.3	21.4	28.8	
20.7	2.8	5.4	8.5	15.3	22.9	30.9	

Capacity Table - Water - 10% Overpressure -m³/h

For sizing using the current areas, the discharge coefficient K for liquid is 0.540. GPM= $m^3/h \; x \; 4.403$

Pressure

Minimum opening pressure	0.5 bar g
Maximum opening pressure	20.7 bar g at 217 °C

Purchasing Information The following information is required for the correct sizing and selection of SV568L Relief Valves:

- 1) Fluid
- 2) Required Capacity (Flow)
- 3) Operating Pressure and Opening Pressure
- 4) Viscosity and Density

SxS offers the PSV Calc calculation and sizing software for selecting safety and relief valves.