

# Safety Relief Valve

- Angle type spring loaded lift safety relief valve for steam, air, water, oil.
- Suitable for small and medium capacity.
- Quickly popping reaction and correct re-setting.
- Easy adjustment of set pressure and blow-down pressure.
- Since this valve is produced with compact design, this is easy to install by small size and light weight.
- The simple structure of this valve allows to operating accurately and maintaining easily.

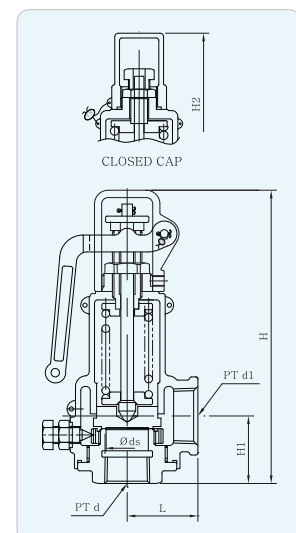
## LSV-1S | Low Lift Type Safety Relief Valve

### ► Specifications

Type	Working Fluid	Setting Pressure (kgf/cm <sup>2</sup> )	Working Temperature	Materials		Connection
				Body & Bonnet	Trim	
Laver	Steam, Air	0.35~11	MAX. 220°C	Cast Bronze	Forged Brass	PT Screwed
No Laver	Water, Oil					

### ► Dimensions

Size	Part	d	ds	L	H1	H	Lift	Inlet	Outlet
15A × 20A		15	21	33.5	40	149	1.0	PT Screwed	PT Screwed
20A × 20A		20	21	33.5	40	149	1.0		
25A × 25A		25	26	43	46	164	1.7		
32A × 32A		32	33	45	48	177	2.2		
40A × 40A		40	41	50	54	196	2.3		
50A × 50A		50	51	62	62	213	2.5		



# Discharge Capacities

S : Saturated Steam (kg/h with 3% accumulation)  
 A : Air (kg/h at 20°C with 10% accumulation)  
 W : Water (m<sup>3</sup>/h at G=1 with 15% accumulation)

## ► Model (LSV-1S)

Size	Effective Area(m <sup>2</sup> )	Fluid	Set Pressure kg/cm <sup>2</sup>																
			0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
15A ~ 20A	62.83	S	35.78	38.17	40.56	42.94	45.33	47.71	50.10	52.48	76.34	100.20	124.05	147.91	171.77	195.62	219.48	243.34	267.19
		A	52.65	56.90	61.15	65.40	69.65	73.90	78.15	82.40	124.89	167.39	209.88	252.38	294.87	337.36	379.86	422.35	464.85
25A	133.52	W	0.72	0.83	0.93	1.02	1.10	1.18	1.25	1.32	1.86	2.28	2.63	2.94	3.23	3.48	3.73	3.95	4.16
		S	76.05	81.12	86.19	91.26	96.33	101.40	106.47	111.53	162.23	212.93	263.63	314.33	365.02	415.72	466.42	517.12	567.81
32A	221.17	A	111.89	120.93	129.96	138.99	148.02	157.05	166.08	175.11	265.41	355.72	446.02	536.32	626.63	716.93	807.24	897.54	987.84
		W	1.53	1.77	1.98	2.17	2.34	2.50	2.66	2.80	3.96	4.85	5.60	6.26	6.86	7.40	7.92	8.40	8.85
40A	289.03	S	125.97	134.37	142.76	151.16	159.56	167.96	176.35	184.75	268.73	352.71	436.69	520.67	604.64	688.62	772.60	856.58	940.56
		A	185.35	200.31	215.27	230.22	245.18	260.14	275.10	290.06	439.64	589.23	738.81	888.40	1037.98	1187.56	1337.15	1486.73	1636.32
50A	392.7	W	1.53	1.77	1.98	2.17	2.34	2.50	2.66	2.80	3.96	4.85	5.60	6.26	6.86	7.40	7.92	8.40	8.85
		S	164.62	175.59	186.57	197.54	208.52	219.49	230.46	241.44	351.18	460.93	570.67	680.42	790.16	899.91	1009.65	1119.40	1229.14
100A	1166.89	A	242.22	261.77	281.31	300.86	320.41	339.96	359.51	379.05	574.53	770.02	965.50	1160.98	1356.46	1551.94	1747.42	1942.90	2138.38
		W	3.32	3.83	4.28	4.69	5.07	5.42	5.75	6.06	8.57	10.49	12.12	13.55	14.84	16.03	17.14	18.18	19.16
200A	4648.5	S	223.66	238.57	253.48	268.40	283.31	298.22	313.13	328.04	477.15	626.26	775.36	924.47	1073.58	1222.69	1371.80	1520.91	1670.02
		A	329.10	355.66	382.22	408.78	435.34	461.90	488.45	515.01	780.61	1046.21	1311.80	1577.40	1842.99	2108.59	2374.19	2639.78	2905.38
300A	7032.8	W	4.51	5.21	5.82	6.38	6.89	7.36	7.81	8.23	11.64	14.26	16.46	18.41	20.16	21.78	23.28	24.70	26.03

## ► Model (HSV-3S)

Size	Effective Area(m <sup>2</sup> )	Fluid	Set Pressure kg/cm <sup>2</sup>																				
			11	12	13	14	15	16	17	18	19	20	21	22	24	26	28	30	32				
15A~ 20A	408.4	S	189.19	204.69	220.20	235.71	251.21	266.72	282.23	297.73	313.24	328.75	344.26	359.76	375.27	390.78	406.29	421.79	437.30	452.80	468.31	483.82	514.83
		A	329.77	357.40	385.02	412.64	440.26	467.88	495.50	523.12	550.75	578.37	605.99	633.61	661.23	688.85	716.47	744.09	771.71	799.33	826.95	854.57	882.19
25A	96.13	W	2.84	2.97	3.09	3.20	3.32	3.42	3.53	3.63	3.73	3.83	3.92	4.02	4.19	4.37	4.53	4.69	4.84	4.98	5.12	5.25	5.38
		S	445.31	481.81	518.31	554.81	591.31	627.81	664.31	700.81	737.31	773.81	810.31	846.82	883.32	919.82	956.32	992.82	1029.32	1065.82	1102.32	1138.82	1175.32
32A	144.51	A	7.76	8.41	9.06	9.71	10.36	11.01	11.66	12.31	12.96	13.61	14.26	14.91	15.56	16.21	16.86	17.51	18.16	18.81	19.46	20.11	20.76
		W	6.68	6.98	7.27	7.54	7.80	8.06	8.31	8.55	8.78	9.01	9.23	9.45	9.67	9.87	10.27	10.66	11.04	11.40	11.76	12.11	12.46
40A	179.7	S	669.42	724.29	779.16	834.03	888.90	943.77	998.64	1053.52	1108.39	1163.26	1218.13	1273.00	1327.87	1382.74	1437.61	1492.48	1547.35	1602.22	1657.09	1711.96	1766.83
		A	1166.89	1264.63	1362.36	1460.10	1557.84	1655.57	1753.31	1851.05	1948.78	2046.52	2144.26	2241.99	2339.73	2437.47	2535.20	2632.94	2730.68	2828.42	2926.15	3023.89	3121.63
50A	452.39	W	10.05	10.49	10.92	11.33	11.73	12.12	12.49	12.85	13.20	13.55	13.88	14.21	14.84	15.45	16.03	16.59	17.14	17.69	18.24	18.79	19.34
		S	832.43	900.67	968.90	1037.13	1105.36	1173.60	1241.83	1310.06	1378.29	1446.52	1514.76	1582.99	1651.23	1719.46	1787.70	1855.93	1924.17	1992.40	2060.64	2128.87	2197.10
100A	1797.7	A	1451.04	1572.58	1694.12	1815.65	1937.19	2058.73	2180.26	2301.80	2423.34	2544.87	2666.41	2787.95	3031.02	3274.10	3517.17	3760.24	4003.32	4246.40	4489.48	4732.56	4975.64
		W	12.49	13.05	13.58	14.09	14.59	15.07	15.53	15.98	16.42	16.85	17.26	17.67	18.45	19.21	19.93	20.63	21.31	22.00	22.68	23.36	24.04
200A	7032.8	S	2095.63	2267.40	2439.18	2610.95	2782.72	2954.49	3126.27	3298.04	3469.81	3641.59	3813.36	3985.13	4328.68	4672.22	5015.77	5359.32	5702.86	6046.41	6389.95	6733.50	7077.04
		A	3652.96	3958.92	4264.88	4570.84	4876.80	5182.76	5488.72	5794.68	6100.64	6406.60	6712.56	7018.52	7630.52	8242.52	8854.52	9466.52	10078.52	10690.52	11302.52	11914.52	12526.52
300A	10549.2	W	31.45	32.85	34.19	35.48	36.73	37.93	39.10	40.23	41.34	42.41	43.46	44.48	46.46	48.35	50.18	51.94	53.64	55.30	56.95	58.60	60.25

## ► Model (FSV-1F / 2F)

Size	Effective Area(m <sup>2</sup> )	Fluid	Set Pressure kg/cm <sup>2</sup>																
			1	2	3	4	5	6	7	8	9	10	11	12	14	16	18	19	20
15A	108.87	S	91.42	132.98	174.53	216.08	257.63	299.18	340.73	382.28	423.83	465.38	506.93	548.48	631.65	714.76	797.87	880.98	964.09
		A	143.53	217.55	291.57	365.59	439.61	513.63	587.65	661.67	735.69	809.71	883.73	957.75	1105.79	1253.84	1401.88	1549.92	1697.96
20A	176.71	W	2.18	3.08	3.77	4.35	4.87	5.33	5.76	6.16	6.53	6.89	7.22	7.54	8.15	8.71	9.24	9.49	9.74
		S	155.53	226.23	296.93	367.63	438.32	509.02	579.72	650.42	721.11	791.81	862.51	933.20	1074.60	1215.99	1357.39	1498.79	1640.19
25A	283.53	A	244.19	370.11	496.04	621.97	747.90	873.82	999.75	1125.68	1251.61	1377.53	1503.46	1629.39	1891.25	2153.10	2414.96	2676.81	2938.67
		W	3.70	5.24	6.42	7.41	8.28	9.07	9.80	10.48	11.11	11.71	12.29	12.83	13.86	14.82	15.72	16.15	16.57
32A~ 40A	706.86	S	249.55	362.99	476.42	589.85	703.29	816.72	930.15	1043.59	1157.02	1270.45	1383.89	1497.32	1724.9	1952.48	2179.96	2407.44	2634.92
		A	391.79	588.84	785.89	982.94	1179.99	1377.04	1574.09	1771.14	1968.19	2165.24	2362.29	2559.34	3068.45	3422.55	3776.65	4130.75	4484.85
50A	1134.11	W	5.94	8.41	10.29	11.89	13.29	14.56	15.72	16.81	17.83	18.79	19.71	20.59	22.24	23.77	25.22	26.59	27.88
		S	622.15	904.95	1187.75	1470.55	1753.34	2036.14	2318.94	2601.73	2884.53	3167.33	3450.13	3732.92	4298.52	4864.11	5429.71	5995.30	6560.90
65A	1885.74	A	976.77	1480.49	1984.22	2487.94	2991.67	3495.40	3999.12	4502.85	5006.57	5510.30	6014.02	6517.75	7525.20	8532.65	9540.10	10547.55	11555.00
		W	14.82	20.95	25.66	29.63	33.13	36.29	39.20	41.91	44.45	46.86	49.14	51.33	55.44	59.52	62.86	64.59	66.26
80A	2922.47	S	1639.76	2444.20	3188.64	3933.08	4677.52	5421.96	6166.40	6910.84	7655.28	8400.72	9145.16	9890.60	11674.45	12976.33	14278.21	15580.09	16881.97
		A	2605.80	3949.62	5293.44	6637.26	7981.09	9324.91	10668.73	12012.56	13356.38	14700.20	16044.03	17387.85	20755.50	22763.14	24770.78	26778.42	28786.06
100A	4536.46	W	39.53	55.90	68.47	79.08	88.39	96.92	104.58	111.59	118.59	125.00	131.10	136.93	147.90	158.91	167.71	172.30	176.78
		S	2572.26	3741.46	4910.67	6079.88	7249.09	8418.29	9587.50	10756.71	11925.92	13095.13	14264.33	15433.54	17719.6	20103.37	22487.14	24870.91	27254.68
125A	7088.22	A	4038.39	6121.01	8203.64	10286.26	12368.88	14451.50	16534.12	18616.74	20699.36	22781.98	24864.60	26947.22	31122.47	35297.71	39472.96	43648.21	47823.45
		W	61.26	86.64	106.11	122.52	136.98	150.06	162.08	173.27	183.78	193.72	203.18	212.14	222.21	229.21	245.04	258.91	271.91
150A	10886.89	S	3992.84	5807.76	7622.69	9437.61	11252.54	13067.46	14882.39	16697.31	18512.24	20327.16	22142.09	23957.01	27586.86	31216.71	34846.56	38476.41	42106.26
		A	6288.67	9501.46	12734.25	15967.04	19199.83	22432.62	25665.41	28898.20	32131.00								