

SAFETY VALVE FULL LIFT TYPE

CAST IRON / CARBON STEEL / STAINLESS STEEL



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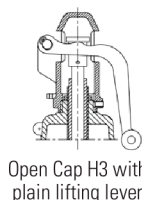


FIG 630-*1-*2-*3

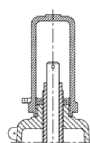
Note : *1 Class | *2 Material | *3 Connection



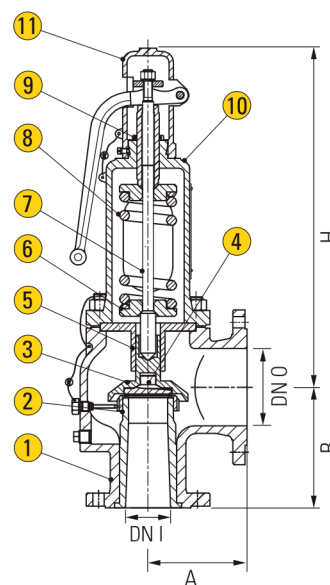
Tight Cap H4 with packed lifting lever



Open Cap H3 with plain lifting lever



Tight Cap H2 without lifting lever



APPLICATION

Suitable for water, steam, oil, gases and others non-abrasive media
(Refer to corrosion resistance table for valve materials selection).

SPECIFICATION

End Connection

Pressure Rating

Type-test Approved Acc. to

Flange end to ANSI 150, ANSI 300,
DIN PN16, PN40, JIS 10K, JIS 20K
DIN PN16, DIN PN40, Class 150 and 300
DIN EN ISO 4126, AD2000-A2,
TRD 421, ASME I, ASME IIIV and API 526

MATERIAL

Parts	Cast Iron Body	Carbon Steel Body	Stainless Steel Body
1 Valve Body	Cast Iron G250	Carbon Steel ASTM A216 WCB - EN 1.0619	Stainless Steel ASTM A351 CF8M - EN 1.4408
2 Full Nozzle (Seat)	Stainless Steel ASTM 316 - EN 1.4401	Stainless Steel ASTM 316 - EN 1.4401	Stainless Steel ASTM 316 - EN 1.4401
3 Disc	Stainless Steel ASTM 420 - EN 1.4028	Stainless Steel ASTM 420 - EN 1.4028	Stainless Steel ASTM 316 - EN 1.4401
4 Ball	Stainless Steel ASTM 420 - EN 1.4028	Stainless Steel ASTM 420 - EN 1.4028	Stainless Steel ASTM 316 - EN 1.4401
5 Complete Guide	Cast Iron GS450/10 with Bush ASTM 430F Tenifer	Cast Iron GS450/10 with Bush ASTM 430F Tenifer or Stainless Steel ASTM 316 - EN 1.4401	Stainless Steel ASTM 316 - EN 1.4401
6 Spring Plate	AVP Steel	AVP Steel	Stainless Steel ASTM 316 - EN 1.4401
7 Spindle	Stainless Steel ASTM 430F - EN 1.4104	Stainless Steel ASTM 430F - EN 1.4104	Stainless Steel ASTM 316 - EN 1.4401
8 Spring	Carbon Steel Alloy Steel	Carbon Steel Alloy Steel	Stainless Steel ASTM 316 S42
9 Pressure Adjusting Screw	Brass OT58 / AVP Steel	Brass OT58 / AVP Steel	Stainless Steel ASTM 316 - EN 1.4401 with Bush in PTFE
10 Bonnet	Cast Iron GS450/10	Cast Iron GS450/10 or Carbon Steel ASTM A216 WCB - EN 1.0619	Stainless Steel ASTM A351 CF8M - EN 1.4408
11 Tight Cap H4 with Lifting Lever	Cast Iron GS450/10	Cast Iron GS450/10	Stainless Steel ASTM A351 CF8M - EN 1.4408

DIMENSIONS

Unit : mm

Size	EN Flange PN16 / PN25 / PN40		ANSI / ASME Flange CL150 / CL150 CL300 / CL150		H	Actual Orifice Diameter	Actual Discharge Area	Size	Disc Lift	Max Set Pressure
	A	B	A	B		mm	cm ²	DN O	mm	barg
DN I										
20	95	85	94.5	82.9	215	18	2.54	40	5.5	40
25	100	105	99.5	104.5	265	23	4.15	40	6.9	40
32	110	115	109	116	330	29	6.61	50	7.5	40
40	115	140	117.2	142.6	375	37	10.75	65	10.2	40
50	120	150	121.3	151.2	420	46	16.62	80	13.5	40
65	136	172	139.8	175.4	525	60	28.27	100	17.0	40
80	173	197	157.8	201.6	600	74	43.00	125	21.5	40
100	188	220	179.4	227.7	655	92	66.48	150	27.6	40
125	198	246	202.6	254.9	665	98	75.43	200	29.4	30
150	216	288	223.2	296.5	780	125	122.72	250	37.5	30
200	345	350	349.9	357.3	1161	165	213.82	350	48	30
250	454	450	459.5	459.6	1161	200	314.16	400	58	20

*Specification given are subject to changed without further notice.

FLOW RATE TABLE

Unit : Kg/h

Set Pressure P	DN 20 - do 18mm			DN 25 - do 23mm			DN 32 - do 29mm			DN 40 - do 37mm			DN 50 - do 46mm			DN 65 - do 60mm		
	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam
	a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C	
	Bar	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h
0.25	3.822	145	94	6.241	242	156	9.922	371	239	16.152	583	376	24.965	884	570	42.474	1.447	933
0.5	5.005	196	123	8.173	331	208	12.993	509	319	21.151	814	511	32.692	1.236	776	55.620	2.029	1.274
0.75	5.958	243	153	9.728	410	259	15.466	632	399	25.176	1.012	639	38.914	1.564	988	66.206	2.573	1.624
1	6.778	290	185	11.067	488	312	17.595	752	481	28.641	1.206	772	44.270	1.835	1.174	75.318	3.122	1.998
1.5	8.302	382	241	13.555	643	405	21.550	993	625	35.080	1.641	1.033	54.222	2.500	1.574	92.249	4.190	2.638
2	9.587	475	300	15.652	788	498	24.884	1.235	781	40.508	2.039	1.252	62.611	3.107	1.965	106.522	5.286	3.343
2.5	10.718	565	355	17.500	936	589	27.822	1.488	936	45.290	2.423	1.524	70.002	3.745	2.356	119.097	6.283	3.952
3	11.741	657	412	19.171	1.088	683	30.478	1.730	1.086	49.613	2.817	1.768	76.685	4.355	2.733	130.466	7.409	4.650
4	13.558	837	522	22.137	1.367	865	35.193	2.173	1.356	57.289	3.587	2.238	88.549	5.544	3.460	150.651	9.433	5.886
5	15.159	1.022	634	24.750	1.668	1.036	39.348	2.653	1.647	64.052	4.318	2.682	99.002	6.675	4.146	168.435	11.357	7.053
6	16.606	1.195	739	27.113	1.951	1.207	43.104	3.103	1.918	70.166	5.051	3.123	108.452	7.807	4.828	184.513	13.282	8.214
7	17.936	1.368	843	29.285	2.235	1.377	46.558	3.553	2.189	75.788	5.784	3.564	117.143	8.940	5.508	199.298	15.210	9.372
8	19.175	1.542	947	31.308	2.518	1.546	49.773	4.004	2.459	81.022	6.518	4.003	125.232	10.075	6.187	213.060	17.140	10.527
9	20.338	1.716	1.051	33.207	2.802	1.716	52.792	4.455	2.728	85.937	7.253	4.441	132.829	11.210	6.865	225.986	19.073	11.680
10	21.439	1.890	1.154	35.003	3.086	1.885	55.648	4.907	2.997	90.586	7.988	4.879	140.015	12.347	7.542	238.211	21.007	12.831
12	23.485	2.239	1.360	38.345	3.656	2.221	60.960	5.812	3.531	99.233	9.462	5.748	153.380	14.625	8.895	260.950	24.882	15.117
14	25.367	2.589	1.566	41.418	4.227	2.557	65.846	6.720	4.065	107.185	10.939	6.617	165.672	16.908	10.228	281.861	28.767	17.402
16	27.119	2.939	1.771	44.278	4.799	2.892	70.393	7.629	4.599	114.587	12.419	7.486	177.112	19.196	11.571	301.326	32.659	19.686
18	28.764	3.290	1.977	46.964	5.372	3.229	74.663	8.541	5.133	121.539	13.913	8.357	187.858	21.489	12.917	319.607	36.561	21.976
20	30.320	3.642	2.183	49.505	5.947	3.565	78.703	9.454	5.667	128.115	15.390	9.226	198.021	23.788	14.260	336.899	40.471	24.261
22	31.801	3.995	2.387	51.922	6.522	3.897	82.545	10.369	6.196	134.369	16.880	10.086	207.689	26.091	15.590	353.346	44.389	26.523
24	33.215	4.348	2.593	54.231	7.099	4.233	86.216	11.287	6.730	140.346	18.373	10.956	216.926	28.399	16.935	369.061	48.317	28.812
26	34.572	4.702	2.799	56.446	7.678	4.571	89.738	12.206	7.267	146.078	19.870	11.829	225.786	30.713	18.284	384.135	52.252	31.108
28	35.877	5.057	3.006	58.577	8.257	4.909	93.126	13.128	7.805	151.593	21.370	12.705	234.311	33.031	19.638	398.639	56.197	33.411
30	37.137	5.413	3.213	60.634	8.838	5.245	96.396	14.051	8.339	156.916	22.873	13.575	242.537	35.354	20.983	412.635	60.149	35.700
32	38.355	5.769	3.419	62.623	9.420	5.582	99.558	14.976	8.875	162.063	24.379	14.447	250.494	37.682	22.330	426.171	64.110	37.991
34	39.536	6.127	3.625	64.551	10.003	5.919	102.623	15.904	9.410	167.053	25.889	15.318	258.206	40.015	23.677	439.292	68.080	40.283
36	40.682	6.485	3.830	66.423	10.588	6.254	105.599	16.833	9.943	171.897	27.401	16.185	265.694	42.353	25.017	452.032	72.057	42.563
38	41.798	6.843	4.038	68.244	11.174	6.593	108.494	17.764	10.482	176.609	28.917	17.063	272.977	44.696	26.374	464.423	76.043	44.872
40	42.884	7.203	4.246	70.017	11.761	6.934	111.313	18.697	11.023	181.199	30.436	17.944	280.071	47.044	27.736	476.492	80.037	47.188

FLOW RATE TABLE

Unit : Kg/h

Set Pressure P	DN 80 - do 74mm			DN 100 - do 92mm			DN 125 - do 98mm			DN 150 - do 125mm			DN 200 - do 165mm			DN 250 - do 200mm		
	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam	Water	Air	Sat. Steam
	a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C		a 25°C	a 25°C	
	Bar	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h	Kg/h
0.25	64.608	2.289	1.477	99.862	3.810	2.458	113.313	4.246	2.740	184.352	6.909	4.458	321.215	12.257	7.909	471.941	17.688	11.413
0.5	84.605	3.201	2.010	130.770	5.124	3.218	148.384	5.814	3.651	241.410	9.460	5.941	420.632	16.483	10.351	618.009	24.217	15.209
0.75	100.706	4.049	2.556	155.658	6.468	4.083	176.623	7.339	4.633	287.353	11.747	7.417	500.684	20.804	13.136	735.624	30.074	18.988
1	114.567	4.825	3.089	177.081	7.695	4.926	200.932	8.732	5.590	326.902	13.988	8.954	569.594	24.373	15.602	836.870	35.810	22.924
1.5	140.321	6.566	4.135	216.888	10.149	6.391	246.100	11.516	7.252	400.388	18.736	11.799	697.636	32.647	20.558	1,024.993	47.966	30.205
2	162.032	8.274	5.233	250.446	12.609	7.974	284.178	14.308	9.048	462.338	23.278	14.721	805.577	40.560	25.650	1,183.585	59.592	37.686
2.5	181.160	9.830	6.183	280.011	15.194	9.557	317.726	17.001	10.694	516.916	27.660	17.399	900.675	48.195	30.316	1,323.307	70.810	44.541
3	198.453	11.427	7.171	306.740	17.420	10.932	348.054	19.766	12.405	566.259	32.158	20.182	986.650	56.033	35.165	1,449.624	82.326	51.666
4	229.157	14.349	8.954	354.198	22.179	13.840	401.904	25.166	15.705	653.869	40.944	25.550	1,139.302	70.364	44.519	1,673.905	103.382	64.514
5	256.208	17.275	10.729	396.009	26.702	16.584	449.347	30.298	18.817	731.055	49.293	30.615	1,273.791	85.888	53.344	1,871.502	126.190	78.375
6	280.664	20.204	12.494	433.810	31.229	19.312	492.239	35.435	21.914	800.838	57.651	35.652	1,395.380	100.451	62.121	2,050.145	147.587	91.270
7	303.154	23.137	14.256	468.572	35.762	22.035	531.683	40.578	25.003	865.010	66.019	40.679	1,507.194	115.031	70.879	2,214.426	169.008	104.139
8	324.088	26.073	16.013	500.928	40.300	24.751	568.397	45.727	28.085	924.741	74.396	45.693	1,611.268	129.627	79.615	2,367.337	190.453	116.974
9	343.749	29.012	17.767	531.318	44.842	27.462	602.880	50.882	31.161	980.842	82.782	50.696	1,709.019	144.240	88.334	2,510.955	211.923	129.783
10	362.346	31.954	19.518	560.061	49.391	30.168	635.495	56.043	34.231	1,033.904	91.178	55.692	1,801.474	158.869	97.039	2,646.795	233.416	142.573
12	396.934	37.849	22.995	613.523	58.502	35.542	696.158	66.382	40.329	1,132.598	107.998	65.613	1,973.438	188.177	114.325	2,899.450	276.476	167.970
14	428.743	43.757	26.471	662.688	67.634	40.915	751.944	76.743	46.426	1,223.358	124.856	75.532	2,131.579	217.550	131.606	3,131.797	319.633	193.361
16	458.350	49.679	29.945	708.450	76.786	46.285	803.870	87.128	52.519	1,307.838	141.752	85.445	2,278.777	246.989	148.880	3,348.066	362.886	218.741
18	486.158	55.613	33.428	751.433	85.959	51.668	852.642	97.537	58.627	1,387.186	158.685	95.383	2,417.032	276.493	166.195	3,551.196	406.235	244.180
20	512.461	61.561	36.904	792.087	95.152	57.041	898.772	107.968	64.723	1,462.236	175.656	105.300	2,547.801	306.063	183.476	3,743.326	449.680	269.570
22	537.479	67.521	40.345	830.756	104.365	62.360	942.649	118.422	70.759	1,533.621	192.664	115.120	2,672.182	335.698	200.585	3,926.071	493.220	294.708
24	561.384	73.495	43.827	867.705	113.598	67.741	984.574	128.899	76.865	1,601.830	209.709	125.054	2,791.030	365.397	217.895	4,100.687	536.856	320.140
26	584.312	79.482	47.319	903.144	122.852	73.139	1,024.787	139.398	82.990	1,667.254	226.791	135.019	2,905.023	395.161	235.258	4,268.170	580.586	345.650
28	606.375	85.481	50.821	937.246	132.125	78.553	1,063.482	149.921	89.133	1,730.207	243.910	145.013	3,014.714	428.989	252.671	4,429.332	624.411	371.234
30	627.664	91.494	54.303	970.151	141.418	83.934	1,100.819	160.465	95.239	1,790.952	261.066	154.948	3,120.554	454.881	269.982	4,584.837	668.329	396.668
32	648.254	97.519	57.789	1,001.977	150.731	89.323	1,136.932	171.033	101.353	1,849.704	278.258	164.895	3,222.925	484.837	287.313	4,735.243	712.340	422.131
34	668.212	103.557	61.275	1,032.824	160.063	94.710	1,171.933	181.622	107.466	1,906.649	295.486	174.840	3,322.146	514.855	304.641	4,881.021	756.444	447.590
36	687.590	109.607	64.743	1,062.777	169.415	100.071	1,205.920	192.233	113.550	1,961.944	312.750	184.737	3,418.492	544.936	321.886	5,022.578	800.640	472.928
38	706.439	115.670	68.255	1,091.910	178.786	105.499	1,238.977	202.867	119.709	2,015.725	330.049	194.758	3,512.199	575.078	337.347	5,160.256	844.927	498.581
40	724.797	121.745	71.778	1,120.286	188.177	110.945	1,271.175	213.522	125.888	2,068.109	347.384	204.810	3,603.473	605.283	356.862	5,290.360	889.305	524.314