

6301S TYPE CAST IRON GS SAFETY VALVES

FEATURES

The 6301 S type safety valve is a device designed to protect installations against possible overpressure. It operates automatically and closes when pressure conditions return to normal. The 6301 S safety valve is a spring-loaded type safety valve, with offset orifices and instantaneous exhaust, made of cast iron GS of pressure class PN 40. As a standard, it is delivered sealed with a closed cover, a leak-tight plug, and a test lever. The seat and the disc are heat hardened providing high resistance to erosion. The 6301 S safety valve is approved by UDV 1413 and Veritas, and can be used with steam, gas and liquids. Calibration certificate and manufacturer dossier according to the 20th of November 2017 order concerning the monitoring of safety valve upon simple request.



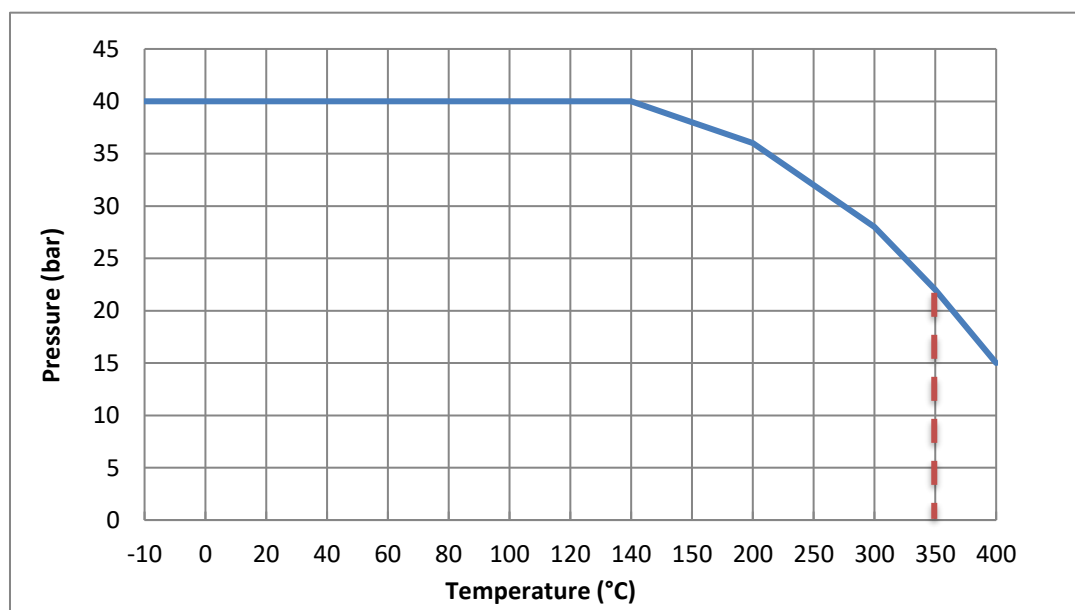
AVAILABLE MODELS

6301S : DN 20 to DN 100.

Connection with PN 40 flanges and PN 10/16 outlet flanges.

LIMITES D'EMPLOI

Fluid WP :	40 bar
Test pressure	60 bar
Fluid WT° :	-10° C / +350° C



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HYDRAULIC FEATURES

Inlet DN	20	25	32	40	50	65	80	100
Outlet DN	32	40	50	65	80	100	125	150
Do orifice (mm)	16	20	25	32	40	50	63	77
Calibration minimum (bar)	0,5							
Calibration maximum (bar)	40	40	40	32	32	32	25	20
Flow-rate coefficient	Fluid			Calibration pressure			Coefficient	
	Gas and steam			≤ 1,4 bar			0,72	
	Gas and steam			> 1,4 bar			0,78	
	Liquids for b1= 10%			≤ 6 bar			0,01	
	Liquids for b1= 10%			> 6 bar			0,28	
	Liquids for b1= 25%			All pressure			0,28	
For usual fluids (water, compressed air and steam), please refer to our flow-rate graphs.								

DIRECTIVES AND MANUFACTURING STANDARDS

OBJET	Standard	O.N.
Pressure Equipment Directive 2014/68/EC	Category IV	1413
Construction standard	ISO 4126-1	
Approval for Russia	GOST-R	
Approval UDV	1413	
VERITAS (Use at sea and offshore)	22324592B00	
Flange connections:	EN 1092-1	
CALIBRATION CERTIFICATE – TEST AND MATERIAL EN 10 204 3.1 certificate for calibration and standard compliance, with the serial number engraved on the safety valve.		

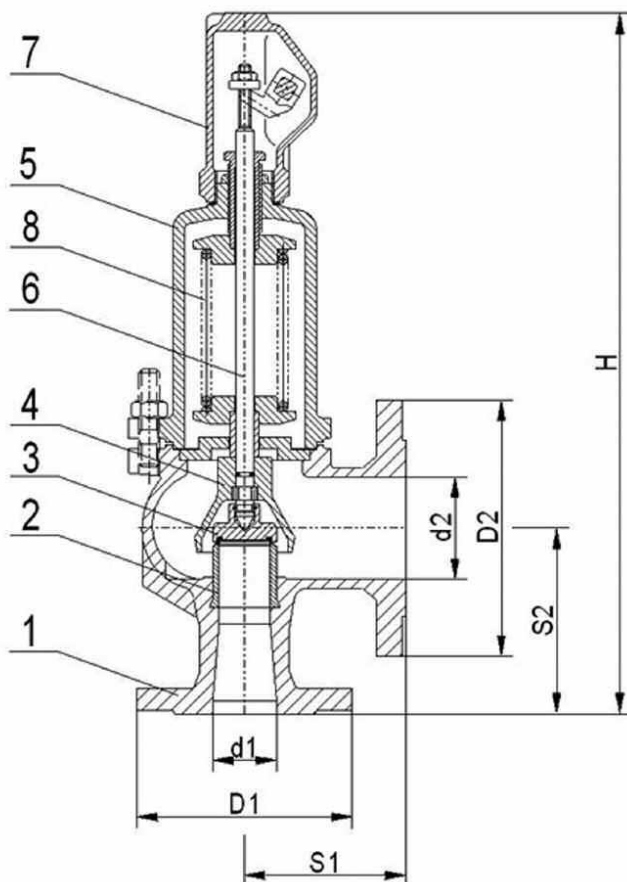
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CONSTRUCTION

No.	Name	Material
1	Body	EN GJS-400-18 cast iron
2	Seat	X39 Cr Mo 17-1
3	Disc	X39 Cr Mo 17-1
4	Deflector	EN GJS 400-15 cast iron
5	Bonnet	EN GJS 400-15 cast iron
6	Stem	X20 Cr13
7	Cap	EN GJS 400-15 cast iron
8	Spring	Alloy steel



DIMENSIONS (mm) AND WEIGHT (Kg)

DN	d1	d2	Fo (mm ²)	D1 (Ø Inlet flange)	D2 (Ø Outlet flange PN)		S1	S2	H	Weight (Kg)
				PN 40	PN 10	PN 16				
20	20	32	201	105	140		85	95	345	7,5
25	25	40	314	115	150		95	105	395	9
32	32	50	491	140	165		100	110	420	13
40	40	65	804	150	185		115	130	495	19
50	50	80	1257	165	200		125	145	550	25
65	65	100	1964	185	220		140	150	660	37
80	80	125	3117	200	250		155	170	710	52
100	100	150	4657	235	285		175	180	810	77

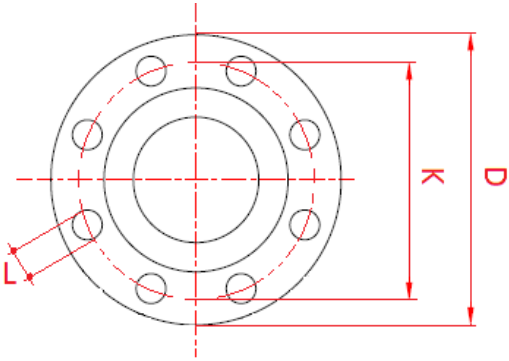
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DN (Inlet/Outlet)		D	K	L	Qty	ø	ISO PN 10/16/40 flange dimensions
20	PN 40	105	75	14	4	M12	
25	PN 40	115	85	14	4	M12	
32	PN 10/16/40	140	100	19	4	M16	
40	PN 10/16/40	150	110	19	4	M16	
50	PN 10/16/40	165	125	19	4	M16	
65	PN 10/16/40	185	145	19	4	M16	
80	PN 10/16/40	200	160	19	8	M16	
100	PN 10/16	220	180	19	8	M16	
	PN 40	235	190	23	8	M20	
125	PN 10/16	250	210	19	8	M16	
150	PN 10/16	285	240	23	8	M20	

INSTALLATION

The safety valve has to be positioned as close as possible to the volume to protect. It must always be installed in the vertical position. No valve must be installed in-between the volume to protect and the safety valve. The outlet flange of the safety valve must not support the exhaust piping. No foreign body must block the discharge orifice of the safety valve. The exhaust has to be connected to piping without counter-pressure, discharging into a hazard free location. The safety valve installation and servicing have to be carried out according to state-of-the-art rules, following the instruction leaflet provided with the device.

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SATURATED STEAM FLOW-RATE IN Kg/h (According to the ISO 4126-1 standard)

	DN							
P (bar)	20	25	32	40	50	65	80	100
0,45	115	180	282	461	721	1127	1788	2672
0,5	120	187	293	479	749	1171	1858	2777
0,55	124	194	304	497	777	1214	1927	2879
0,6	129	201	314	514	804	1257	1994	2980
0,7	137	215	336	550	859	1343	2131	3184
0,8	147	230	359	588	919	1436	2280	3406
0,9	158	246	385	630	985	1540	2444	3651
1	164	256	401	656	1026	1603	2545	3802
1,1	171	268	419	686	1072	1675	2659	3972
1,2	179	280	437	716	1120	1749	2776	4148
1,3	187	292	457	748	1169	1826	2898	4330
1,4	195	305	476	780	1220	1906	3025	4519
1,6	230	360	562	921	1439	2249	3569	5332
1,8	251	392	613	1004	1569	2452	3891	5813
2	268	418	654	1071	1674	2615	4150	6201
2,2	285	445	695	1138	1780	2781	4413	6594
2,4	303	473	739	1210	1892	2956	4691	7009
2,6	322	502	786	1286	2011	3142	4987	7451
2,8	340	532	831	1361	2128	3326	5278	7885
3	357	558	872	1428	2233	3489	5537	8273
3,5	402	628	982	1609	2515	3929	6236	9317
4	446	697	1090	1784	2790	4359	6918	10336
4,5	492	768	1201	1967	3075	4805	7626	11393
5	535	835	1306	2139	3344	5225	8292	12389
5,5	580	906	1417	2320	3627	5667	8993	13437
6	623	973	1521	2491	3895	6086	9658	14430
6,5	667	1042	1630	2669	4173	6520	10348	15461
7	711	1110	1736	2843	4445	6945	11021	16467
8	798	1247	1950	3193	4993	7801	12381	18498
9	886	1384	2165	3545	5542	8659	13742	20531
10	974	1521	2378	3894	6089	9513	15098	22558
11	1060	1657	2590	4242	6631	10361	16444	24568
12	1147	1792	2802	4588	7173	11208	17787	26575
14	1321	2063	3227	5283	8260	12906	20483	30603
16	1494	2334	3650	5976	9344	14599	23169	34616
18	1668	2605	4074	6671	10429	16295	25861	38638
20	1842	2877	4499	7366	11517	17995	28559	42669
23	2101	3282	5132	8403	13138	20527	32578	48673
25	2275	3553	5556	9098	14224	22225	35272	52699
30	2711	4235	6622	10843	16953	26488	42038	62808
32	2884	4506	7046	11538	18038	28184	44730	66830
38	3407	5322	8322	13627	21305	33288	52830	-
40	3583	5597	8752	14331	22406	35008	55560	-

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SATURATED STEAM FLOW-RATE IN kW (According to the ISO 4126-1 standard)

	DN Puissance (kW)							
P (bar)	20	25	32	40	50	65	80	100
0,45	71,2	111,4	174,5	285,3	446,2	697,5	1106,6	1653,7
0,5	74,2	115,6	181,1	296	462,9	723,7	1148,3	1716,3
0,55	76,5	119,7	187,6	306,8	479,6	749,3	1189,4	1777
0,6	79,6	124	193,6	317	495,8	775,2	1229,6	1837,7
0,7	84,3	132,3	206,7	338,4	528,5	826,3	1311,2	1959
0,8	90,2	141,2	220,4	361	564,2	881,5	1399,7	2090,9
0,9	96,8	150,7	235,8	385,9	603,3	943,3	1497	2236,2
1	100,3	156,5	245,2	401,1	627,3	980,1	1556	2324,5
1,1	104,4	163,6	255,7	418,7	654,2	1022,2	1622,7	2424
1,2	109	170,5	266,1	436	682	1064,9	1690,3	2525,7
1,3	113,7	177,5	277,8	454,6	710,5	1109,8	1761,3	2631,7
1,4	118,3	185	288,8	473,2	740,1	1156,3	1835,2	2741,5
1,6	139,1	217,7	339,9	556,9	870,2	1360	2158,3	3224,4
1,8	151,3	236,3	369,5	605,2	945,8	1478	2345,4	3503,9
2	161	251,1	392,9	643,5	1005,8	1571,2	2493,5	3725,8
2,2	170,7	266,5	416,2	681,5	1066	1665,5	2642,9	3949,1
2,4	181	282,5	441,3	722,6	1129,9	1765,4	2801,6	4185,9
2,6	191,8	299	468,1	765,9	1197,7	1871,2	2970	4437,5
2,8	202	316,1	493,8	808,7	1264,4	1976,2	3136	4685
3	211,5	330,6	516,7	846,1	1323,1	2067,2	3280,7	4901,8
3,5	236,7	369,8	578,3	947,5	1481,1	2313,7	3672,3	5486,7
4	261,2	408,1	638,3	1044,6	1633,7	2552,4	4050,9	6052,3
4,5	286,5	447,1	699,2	1145,2	1790,3	2797,6	4440	6633,3
5	310	483,8	756,8	1239,4	1937,7	3027,6	4804,8	7178,7
5,5	336,1	525	821,1	1344,3	2101,6	3283,7	5210,9	7786
6	359,1	560,8	876,7	1435,8	2245	3507,9	5566,8	8317,3
6,5	380,9	595,1	930,9	1524,3	2383,2	3723,6	5909,9	8829,9
7	404,3	631,2	987,1	1616,6	2527,5	3949	6266,7	9363,3
8	450	703,2	1099,6	1800,5	2815,5	4398,9	6981,5	10430,8
9	495,9	774,7	1211,8	1984,2	3102	4846,6	7691,7	11491,7
10	543	848	1325,7	2170,9	3394,6	5303,5	8417,1	12576,1
11	584,8	914,1	1428,8	2340,2	3658,1	5715,8	9071,6	13553,3
12	628,3	981,6	1534,9	2513,2	3929,2	6139,5	9743,3	14557,2
14	714,4	1115,7	1745,3	2857,2	4467,3	6980	11077,9	16551,1
16	798	1246,7	1949,7	3192,2	4991,3	7798,3	12376,1	18490,7
18	880,8	1375,6	2151,3	3522,7	5507,1	8604,7	13656	20403
20	961,9	1502,4	2349,5	3846,7	6014,4	9397,4	14914,1	22282,7
23	1079,7	1686,6	2637,3	4318,2	6751,5	10548,6	16741,5	25012,5
25	1157,1	1807,1	2825,8	4627,3	7234,5	11303,9	17939,7	26803,3
30	1345,7	2102,2	3287,1	5382,3	8415,3	13148,3	20867,2	31177,2
32	1418	2215,5	3464,3	5672,9	8868,7	13857,1	21992,3	32858,1
38	1628,7	2544,2	3978,4	6514,5	10185	15913,5	25255,7	-
40	1697,9	2652,4	4147,5	6791,3	10618	16589,9	26329,3	-

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WATER FLOW-RATE IN kg/h AT 20°C (According to the ISO 4126-1 standard)

P (bar)	DN							
	20	25	32	40	50	65	80	100
0,45	70,7	111	176	290	456	716	1141	1711
0,5	74	117	184	303	477	748	1193	1789
0,55	77,2	122	191	316	496	779	1243	1863
0,6	80,2	126	199	328	516	810	1290	1934
0,7	86	135	213	351	552	867	1381	2070
0,8	91,4	144	226	373	586	920	1466	2198
0,9	96,5	152	239	394	619	971	1547	2318
1	101	160	251	413	650	1019	1624	2433
1,1	106	168	264	434	682	1070	1704	2553
1,2	111	175	276	454	713	1118	1781	2668
1,3	116	183	287	473	742	1165	1855	2779
1,4	121	190	298	491	771	1209	1926	2885
1,6	129	203	319	526	825	1294	2061	3087
1,8	137	216	339	558	876	1374	2188	3277
2	145	228	358	589	924	1449	2307	3456
2,2	152	239	376	618	970	1521	2422	3627
2,4	159	250	393	646	1014	1590	2531	3790
2,6	166	260	409	673	1056	1656	2635	3946
2,8	172	270	425	699	1097	1719	2736	4097
3	178	280	440	724	1136	1780	2833	4242
3,5	193	303	476	783	1228	1925	3063	4586
4	207	324	510	838	1314	2059	3277	4906
4,5	220	345	541	889	1395	2186	3478	5206
5	232	364	571	938	1471	2305	3668	5490
5,5	243	382	599	985	1544	2419	3849	5761
6	254	399	626	1029	1614	2528	4021	6019
6,5	7654	11957	18698	30617	47867	74790	118697	177341
7	7943	12409	19403	31772	49674	77613	123177	184035
8	8492	13265	20743	33966	53104	82972	131682	196742
9	9007	14070	22001	36027	56325	88005	139670	208676
10	9494	14831	23191	37975	59372	92766	147225	219964
11	9957	15555	24323	39829	62270	97293	154411	230700
12	10400	16247	25405	41600	65039	101620	161277	240959
14	11233	17548	27440	44933	70250	109762	174199	260265
16	12009	18760	29335	48035	75100	117340	186227	278235
18	12737	19898	31115	50949	79656	124458	197523	295113
20	13426	20974	32798	53705	83965	131190	208208	311076
23	14398	22493	35172	57592	90042	140686	223278	333592
25	15011	23450	36669	60044	93875	146675	232784	347794
30	16444	25688	40169	65775	102835	160675	255002	380989
32	16983	26531	41486	67932	106208	165944	263365	393484
38	18507	28911	45208	74028	115737	180833	286995	-
40	18988	29662	46383	75951	118744	185531	294451	-

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COMPRESSED AIR FLOW-RATE IN kg/h AT 20°C (According to the ISO 4126-1 standard)

P (bar)	DN							
	20	25	32	40	50	65	80	100
0,45	185	289	451	739	1156	1806	2866	4281
0,5	193	301	471	771	1205	1883	2988	4464
0,55	200	313	489	801	1252	1956	3105	4639
0,6	207	324	507	830	1297	2027	3217	4806
0,7	221	345	540	884	1382	2160	3428	5121
0,8	234	365	571	935	1461	2283	3624	5414
0,9	246	384	601	984	1538	2404	3815	5699
1	258	404	631	1033	1615	2524	4005	5984
1,1	272	425	664	1087	1700	2656	4215	6298
1,2	285	446	697	1141	1785	2788	4425	6611
1,3	299	467	730	1196	1869	2920	4635	6925
1,4	312	488	763	1250	1954	3053	4845	7238
1,6	368	575	898	1471	2300	3593	5703	8521
1,8	397	620	970	1588	2483	3880	6158	9200
2	426	666	1042	1706	2667	4166	6612	9879
2,2	456	712	1113	1823	2850	4453	7067	10558
2,4	485	758	1185	1940	3033	4739	7521	11237
2,6	514	803	1256	2057	3216	5026	7976	11917
2,8	544	849	1328	2175	3400	5312	8431	12596
3	573	895	1400	2292	3583	5598	8885	13275
3,5	646	1010	1579	2585	4041	6315	10022	14973
4	720	1124	1758	2878	4500	7031	11158	16671
4,5	793	1239	1937	3171	4958	7747	12295	18369
5	866	1353	2116	3464	5416	8463	13431	20067
5,5	939	1467	2295	3758	5875	9179	14567	21765
6	1013	1582	2474	4051	6333	9895	15704	23463
6,5	1086	1696	2653	4344	6791	10611	16840	25161
7	1159	1811	2832	4637	7250	11327	17977	26859
8	1306	2040	3190	5223	8166	12759	20250	30254
9	1452	2269	3548	5810	9083	14191	22523	33650
10	1599	2498	3906	6396	9999	15624	24796	37046
11	1746	2727	4264	6982	10916	17056	27069	40442
12	1892	2956	4622	7568	11833	18488	29342	43838
14	2185	3414	5338	8741	13666	21352	33887	50630
16	2478	3872	6054	9913	15499	24217	38433	57422
18	2772	4330	6770	11086	17332	27081	42979	64214
20	3065	4788	7486	12259	19166	29945	47525	71005
23	3504	5474	8560	14017	21915	34242	54344	81193
25	3798	5932	9276	15190	23749	37106	58890	87985
30	4530	7077	11067	18121	28332	44267	70254	104965
32	4823	7535	11783	19294	30165	47131	74800	111756
38	5703	8909	13931	22812	35665	55724	88438	-
40	5996	9367	14647	23984	37498	58588	92924	-

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COMPRESSED AIR FLOW-RATE IN Nm³/h AT 20°C (According to the ISO 4126-1 standard)

P (bar)	DN							
	20	25	32	40	50	65	80	100
0,45	44,4	69,3	108,2	177,3	277,3	433,3	687,5	1027
0,5	49,7	77,6	121,4	198,7	310,5	485,2	769,9	1150,2
0,55	54,9	85,9	134,1	219,7	343,4	536,5	851,7	1272,4
0,6	60	93,9	147	240,6	376	587,6	932,5	1393,1
0,7	70,3	109,8	171,9	281,4	439,9	687,5	1091,1	1630
0,8	80,4	125,4	196,2	321,2	501,9	784,3	1245	1860
0,9	90,1	140,6	220,1	360,3	563,1	880,2	1396,9	2086,7
1	99,7	156,1	243,9	399,3	624,2	975,5	1547,9	2312,8
1,1	110,1	172,1	268,9	440,1	688,3	1075,4	1706,7	2550,1
1,2	120,2	188	293,9	481,1	752,3	1175,5	1865,7	2787,4
1,3	130,6	204	318,9	522,5	816,6	1275,8	2025,1	3025,6
1,4	140,7	220	344	563,6	881,1	1376,6	2184,7	3263,7
1,6	175,1	273,5	427,2	699,7	1094,1	1709,2	2712,9	4053,3
1,8	197,3	308,1	482	789,1	1233,9	1928,1	3060,1	4571,7
2	219,5	343,1	537	879,2	1374,4	2146,9	3407,4	5090,9
2,2	242,3	378,4	591,5	968,8	1514,6	2366,5	3755,6	5610,9
2,4	264,6	413,6	646,6	1058,5	1654,9	2885,8	4103,8	6131,4
2,6	287	448,3	701,2	1148,4	1795,4	2805,9	4452,8	6653
2,8	309,8	483,6	756,4	1238,8	1936,6	3025,6	4802,1	7174,4
3	332,2	518,9	811,6	1328,8	2077,2	3245,4	5151	7696,1
3,5	388,4	607,2	949,3	1554,1	2429,5	3796,7	6025,4	9002
4	445,2	695,1	1087,1	1779,7	2782,8	4347,9	6900,1	10309,3
4,5	501,5	783,6	1225,1	2005,5	3135,7	4899,6	7776	11617,5
5	557,8	871,6	1363	2231,4	3488,8	5451,5	8651,7	12926,4
5,5	614,2	959,5	1501,1	2458	3842,7	6003,7	9527,9	14235,9
6	671,2	1048,2	1639,2	2684,1	4196	6556,1	10405	15545,8
6,5	727,5	1136,2	1777,3	2910,2	4549,5	7108,6	11281,6	16856,1
7	783,9	1224,9	1915,5	3136,3	4903,7	7661,2	12159,1	18166,6
8	897,4	1401,7	2191,9	3588,8	5610,9	8766,8	13913,9	20787,7
9	1010,1	1578,5	2468,3	4042	6319	9872,6	15669,1	23410,1
10	1123,7	1755,4	2744,8	4494,6	7026,5	10979,3	17424,7	26033,1
11	1237,2	1932,3	3021,4	4947,3	7734,8	12085,5	19180,5	28656,3
12	1350	2109,2	3298	5400	8443,2	13191,8	20936,5	31279,9
14	1576,4	2463,1	3851,2	6306,3	9859,5	15404,7	24448,2	36527,6
16	1802,8	2817	4404,4	7212	11275,9	17618,5	27961	41775,9
18	2030	3170,9	4957,7	-	-	-	-	-
20	2256,4	3524,9	5511,1	-	-	-	-	-
23	2595,7	4055,1	6341,1	-	-	-	-	-
25	2822,9	4409	6894,5	-	-	-	-	-
30	3388,7	5294	8278,8	-	-	-	-	-
32	3615,2	5648	8832,2	-	-	-	-	-
38	4295,4	6710	10492,5	-	-	-	-	-
40	4521,8	7064	11045,9	-	-	-	-	-

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6301S TYPE CAST IRON GS SAFETY VALVES

INSTALLATION AND SERVICING REGULATION

1 - DESCRIPTION

1.1 The SERIE 6300 spring loaded safety valves are designed for steam, gas, and liquids. They provide ultimate protection to devices under pressure. They are able to guarantee that the internal pressure does not exceed the authorized maximum, even if other safety systems installed upstream are faulty, insofar as they have been sized correctly.

1.2 The SERIE 6300 safety valves are made of cast iron, carbon steel or stainless steel. All safety valves are calibrated and lead sealed by us, for maximum safety and minimum maintenance.

1.3 As a standard solution, the 6300 safety valves are delivered with closed bonnet, leaktight plug and test lever. Other models are available upon request. The operation of the 6300 safety valves is of the “instantaneous exhaust” type which is particularly recommended on steam generators or gas containing enclosures. A model with progressive exhaust is available upon request.

1.4 The safety valve body has a boss which can be pierced to create a purging orifice for the downstream pipe.

2 - GUARANTEE

2.1 Before any contact with our services, please identify the type of safety valve and the individual number engraved on the safety valve body.

2.2 SERIE 6300 safety valves have a 12-month guarantee, as of the delivery date. Parts admitted as faulty by an assessment at our factory, will be replaced at our expense. Complaints resulting from the incorrect use, modification of the safety valve, a leak following the passage of impurities, shall not be accepted.

3 - TRANSPORT, INSPECTION AT ACCEPTANCE AND STORAGE

3.1 CAUTION: The safety valve can be damaged by vibrations, impacts and the contact with impurities. For this reason, the safety valve has to be handled with precaution, without removing the protective plugs before installation, and without manoeuvring the test lever.

3.2 At acceptance, check that:

- the packaging is in good condition,
- the delivered safety valve is as ordered,
- the equipment has not been damaged,
- the safety valve is delivered with a calibration certificate whose number must match that engraved on the safety valve body.

3.3 It is recommended to install the safety valve as of acceptance and not to leave it unused. If the equipment has to be stored, it must be in a dry place protected from the weather.

4 - PRECAUTIONS FOR OPERATION

4.1 Before installing, make sure that the installation is completely depressurized and brought to ambient temperature.

4.2 Any adjustment or any modification can only be made by technicians qualified for safety valves.

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6301S TYPE CAST IRON GS SAFETY VALVES

4.3 CAUTION WITH TOXIC GASES

If the safety valve is installed on an acid tank, wear gloves and safety glasses, and any other personal protection needed.

4.4 The safety valve cannot be commissioned unless it has been calibrated, lead sealed and certified by SECTORIEL or a body specially authorized to this end. The calibration certificate bears the indication of the exact pressure of its calibration.

4.5 When a safety valve with free exhaust in operation, has to be tested, make sure beforehand that nobody stays in the way of the exhaust. Do not let toxic, explosive or flammable products discharge into the atmosphere. Before testing, schedule a controlled degassing procedure in a confined volume.

4.6 Do not perform work on the safety valve, do not break its lead seal, and do not modify its calibration pressure.

4.7 Do not subject the safety valve to a hot or cold shock.

4.8 In case of malfunctioning, contact SECTORIEL immediately.

4.9 CAUTION: ONLY STAINLESS STEEL SAFETY VALVES MUST BE INSTALLED IN A CORROSIVE ENVIRONMENT.

4.10 The type of connection has to match the piping class of the installation.

4.11 If the safety valve discharges directly into the atmosphere, direct the exhaust so as not to cause any damage to equipment or persons.

5 - INSTALLATION

5.1 Check that the lead seal has not been damaged.

5.2 6300 safety valves have to be installed in the vertical position with the bonnet upwards, as close as possible to the volume to protect.

5.3 The inlet piping has to be as short as possible, with a diameter equal to or greater than that of the inlet flange of the safety valve, and with a length which cannot cause any pressure drop of more than 3% of the initial opening pressure, considering the maximum flow-rate to discharge.

5.4 6300 safety valves have metal-metal sealing which can be damaged by the entry of impurities between the seat and the disc. Pipes and tanks must be cleaned beforehand with the utmost care.

5.5 Be careful not to damage the seats, remove the protective plugs and install the safety valve on the installation according to its type of connection.

5.6 No isolation valve shall be placed in-between the volume to protect and the safety valve.

5.7 No fitting with a DN smaller than the DN of the inlet of the safety valve, shall be placed in-between the safety valve and the volume to protect.

5.8 Make sure that the discharge piping discharges into a location free of hazards for personnel and the environment.

5.9 If the safety valve exhaust has to be connected to a piping, make sure that the latter is as short as possible so as to create just a minimum counter-pressure.

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5.10 The piping connected to a channelled exhaust safety valve should not be supported by the safety valve itself. Otherwise, leaks may occur.

5.11 If a hydrostatic test of the installation has to be carried out after the safety valve is installed, it is preferable to remove it and replace it with a blind flange. Otherwise, close the safety valve disc with a mechanical stop. Do not forget to remove this stop after the test.

6 - CLEANING AND LUBRICATION

6.1 SERIE 6300 safety valves are designed not to require any lubrication.

6.2 Keep the safety valve clean and in running order. Check, in particular, that the exhaust stays clear and that no foreign body blocks the discharge piping.

7 - USUAL MAINTENANCE

7.1 The safety valve is a sensitive safety element which has to be checked periodically. In case of reported malfunctioning, please contact SECTORIEL.

7.2 CAUTION: SECTORIEL is no longer responsible for the proper operation of a safety valve which has been disassembled, modified or re-calibrated by a person not authorized by SECTORIEL.

8 - PERIODIC INSPECTION

8.1 To make sure that the safety valve is still operating, it has to be tested periodically. To carry out this test, the lever can be manually actuated, briefly. To protect the installation during this test, the test pressure must stay between 80 and 90% of the calibration pressure. The safety valve has to be wide open to allow a significant flow-rate to circulate.

At re-closing, make sure that the seat is again leak-tight. Caution, never manoeuvre the test lever under no-load.

8.2 If the safety valve has to be removed, the servicing and, if needed, the re-calibration of the safety valve have to be entrusted exclusively to a workshop qualified for this operation. The safety valve re-calibration has to be carried out on a test bench equipped with an inspected pressure gauge. In case of a leaking seat, grinding may be necessary. Please contact us.

8.3 For use on gas or steam on installations located on the French territory, comply with the prescriptions of the order of 20th November 2017 concerning the monitoring

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