

**Description:**

- standard safety valve
- SVA04: female-female thread
SVB04: female-male thread
- angular shape
- spring-loaded
- enlarged outlet
- female thread acc. to ISO228
- seal cap prevents unauthorized changing of set pressure
- cone liftable
- with lifting nut
- TÜV certified

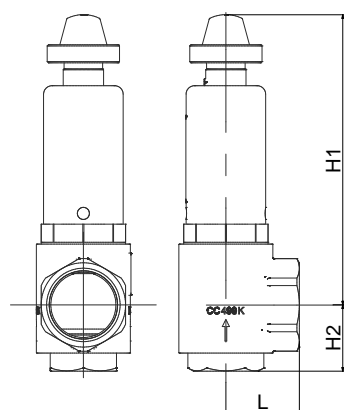
Range of application:

- Protection of systems from exceeding a defined maximum pressure
- reaction pressure is set by the manufacturer
- Fluid media: Boiling temperature of the medium under atmospheric pressure is prohibited!
- max. permitted medium temperature depending on sealing material:
NBR: 130°C
EPDM: 150°C
FKM: 200°C
FFKM: 260°C
PTFE: 225°C

Comments:

Threads according to EN 228: It describes the threaded connection of a parallel male thread with a parallel female thread and is marked with "G".

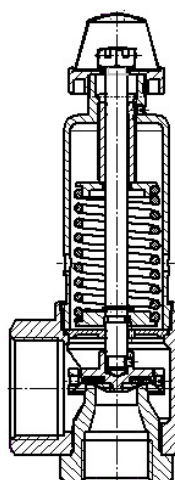
The following properties apply to all types of SVA04 / SVB04:



match code	connection size		L [mm]	H1 [mm]		H2 [mm]		weight [kg]
	[inch]			lifting nut	lifting lever	SVA04	SVB04	
	inlet	outlet						
SVx04-04/06xxx x	1/2	1	40	75	91	30	46	0.4
SVx04-05/07xxx x	3/4	1 1/4	43	140	158	39	53	1
SVx04-06/08xxx x	1	1 1/2	50	175	192	45	64	1.8
SVx04-07/09xxx x	1 1/4	2	61	240	264	55	76	4

options:

- FB: bellows
- LF: lifting lever
- OF: free of oil and grease
- ZG: certificate

design for neutral fluids:

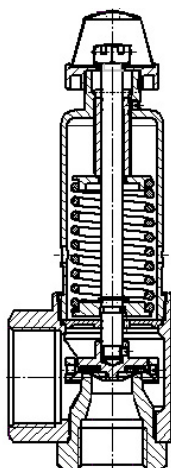
match code	connec- tion size [inch]	nominal size [mm]	setting range [bar]
SVx04-04/06xxx115	1/2	11.5	0.5 - 25
SVx04-05/07xxx150	3/4	15	0.5 - 25
SVx04-06/08xxx200	1	20	0.5 - 25
SVx04-07/09xxx280	1 1/4	28	0.5 - 25

range of application in detail:

- design only for neutral fluids
- max. 25bar

pos.	part	red brass	stainless steel	options
1	body	CC491K	B 1.4571 / 1.4408	0
2	interior	CW614N	A 1.4571	0
3	sealing	NBR	B NBR	B EPDM E FKM V

For details about the order code see "Order information". An overview of the complete material code you can find at the beginning of each product section of the product catalogue.



design for air, neutral gases and technical steam:

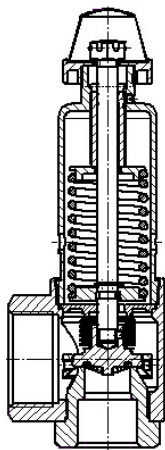
match code	nominal size [mm]	setting range [bar]
SVx04-04/06xxx150	15	0.5 - 25
SVx04-05/07xxx150	15	0.5 - 25
SVx04-06/08xxx200	20	0.5 - 25
SVx04-07/09xxx280	28	0.5 - 25

range of application in detail:

- protection of pressure tanks and systems
- protection of steam boilers with PTFE sealing up to 25bar
- EPDM up to max. 3bar

pos.	part	red brass		stainless steel	options	
1	body	CC491K	B	1.4571 / 1.4408	O	
2	interior	CW614N	A	1.4571	O	
3	sealing	NBR	B	NBR	B	PTFE T EPDM E

For details about the order code see "Order information". An overview of the complete material code you can find at the beginning of each product section of the product catalogue.



design with bellows for aggressive media

match code	nominal size [mm]	setting range [bar]
SVx04-04/06xxx150-FB	15	0.5 - 25
SVx04-05/07xxx150-FB	15	0.5 - 25
SVx04-06/08xxx200-FB	20	0.5 - 25
SVx04-07/09xxx280-FB	28	0.5 - 25

range of application in detail:

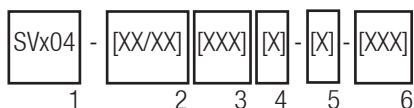
- toxic, flammable media
- protection of pressure tanks for granular or dusty media
- stationary pressure tanks
- vehicle tanks
- max. back pressure for design with bellows: 4 bar

The valve is equipped with bellows and metal-supported o-ring sealing.

further options:

- BAM approval for oxygen
- FFKM-sealing

pos.	part	red brass		stainless steel	options	
1	body	CC491K	B	1.4571 / 1.4408	O	
2	interior	CW614N	A	1.4571	O	
3	sealing	NBR (fluids)	B	NBR (fluids)	B	FKM V
4	bellows	EPDM (gases/vapours)	E	EPDM (gases/vapours)	E	FFKM
		bronze		stainless steel		



Order information:

1: type:

- SVA04 (female-female thread)
- SVB04 (female-male-thread)

2: connection size (see table):

- inlet: 04-07
- outlet: 06-09

3: materials:

- 1. digit: body material and 2. digit interior
A=brass
B=red brass
O=stainless steel

- 3. digit: sealing

B=NBR
E=EPDM
T=PTFE
E=EPDM

4. nominal size in 1/10mm (see table)

5: options (see "options")

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!

SUPPLEMENT: RELIEF CAPACITY

table:

Relief capacity depending on medium at 10% pressure surge in m³/h (water) for each set pressure and connection size at the inlet.

relief capacity for fluids safety valves without bellows safety valves with bellows

comment:

The **set pressure** is the gauge pressure at which a direct-loaded safety valve begins to open under test conditions (atmospheric pressure).

set pressure [bar]	relief capacity [m ³ /h] acc. to connection size [inch]				set pressure [bar]	relief capacity [m ³ /h] acc. to connection size [inch]			
	1/2	3/4	1	1 1/4		1/2	3/4	1	1 1/4
0.5	2.21	4.04	7.19	14.08	0.5	1.86	5.42	8.85	15.36
1	3	5.47	9.73	19.07	1	2.51	7.34	11.98	20.79
1.5	3.67	6.7	11.92	23.36	1.5	3.08	8.99	14.67	25.47
2	4.24	7.74	13.76	26.97	2	3.55	10.38	16.94	29.4
2.5	4.74	8.65	15.38	30.15	2.5	3.97	11.6	18.94	32.88
3	5.19	9.48	16.85	33.03	3	4.35	12.71	20.75	36.01
3.5	5.6	10.24	18.2	35.68	3.5	4.7	13.73	22.41	38.9
4	5.99	10.95	19.46	38.14	4	5.03	14.68	23.96	41.58
4.5	6.35	11.61	20.64	40.46	4.5	5.33	15.57	25.41	44.11
5	6.7	12.24	21.76	42.64	5	5.62	16.41	26.79	46.49
5.5	7.02	12.84	22.82	44.72	5.5	5.89	17.21	28.1	48.76
6	7.34	13.41	23.83	46.71	6	6.16	17.97	29.35	50.93
6.5	7.64	13.95	24.81	48.62	6.5	6.41	18.71	30.54	53.01
7	7.92	14.48	25.74	50.46	7	6.65	19.41	31.7	55.01
7.5	8.2	14.99	26.65	52.23	7.5	6.88	20.1	32.81	56.94
8	8.47	15.48	27.52	53.94	8	7.11	20.75	33.89	58.81
8.5	8.73	15.96	28.37	55.6	8.5	7.33	21.39	34.93	60.62
9	8.99	16.42	29.19	57.21	9	7.54	22.01	35.94	62.38
9.5	9.23	16.87	29.99	58.78	9.5	7.74	22.62	36.93	64.09
10	9.47	17.31	30.77	60.31	10	7.95	23.2	37.89	65.75
11	9.93	18.15	32.27	63.25	11	8.33	24.34	39.74	68.96
12	10.38	18.96	33.71	66.06	12	8.7	25.42	41.5	72.03
13	10.8	19.73	35.08	68.76	13	9.06	26.46	43.2	74.97
14	11.21	20.48	36.41	71.36	14	9.4	27.46	44.83	77.8
15	11.6	21.2	37.68	73.86	15	9.73	28.42	46.4	80.53
16	11.98	21.89	38.92	76.28	16	10.05	29.35	47.92	83.17
17	12.35	22.57	40.12	78.63	17	10.36	30.25	49.4	85.73
18	12.71	23.22	41.28	80.91	18	10.66	31.13	50.83	88.21
19	13.06	23.86	42.41	83.13	19	10.95	31.98	52.22	90.63
20	13.39	24.48	43.51	85.29	20	11.24	32.82	53.58	92.99
21	13.73	25.08	44.59	87.39	21	11.52	33.63	54.9	95.28
22	14.05	25.67	45.64	89.45	22	11.79	34.42	56.19	97.53
23	14.36	26.25	46.66	91.46	23	12.05	35.19	57.46	99.72
24	14.67	26.81	47.67	93.43	24	12.31	35.95	58.69	101.86
25	14.98	27.37	48.65	95.35	25	12.56	36.69	59.9	103.96

SUPPLEMENT: RELIEF CAPACITY

table:

Relief capacity depending on medium at 10% pressure surge in Nm³/h (air) for each set pressure and connection size at the inlet.

comment:

The **set pressure** is the gauge pressure at which a direct-loaded safety valve begins to open under test conditions (atmospheric pressure).

A **standard cubic meters** m³ acc. to DIN 1343 is the amount that is at a pressure $p_n = 1.01325$, a humidity of 0% (dry gas) and a temperature of $t_n = 0$ ° C a cubic meter.

relief capacity for gases

safety valves without

safety valves with bellows

bellows:

set pressure [bar]	relief capacity [m ³ /h] acc. to connection size [inch]				set pressure [bar]	relief capacity [m ³ /h] acc. to connection size [inch]			
	1/2	3/4	1	1 1/4		1/2	3/4	1	1 1/4
0.5	56	106	188	369	0.5	56	127	199	345
1	88	139	247	484	1	3	167	261	453
1.5	112	175	312	688	1.5	92	211	330	572
2	135	239	424	831	2	111	255	398	691
2.5	158	280	497	974	2.5	130	299	466	810
3	181	321	570	1117	3	189	447	681	1182
3.5	204	362	643	1260	3.5	214	504	768	1333
4	227	403	716	1403	4	238	561	855	1484
4.5	250	444	789	1546	4.5	262	618	942	1635
5	274	485	862	1689	5	286	675	1029	1786
5.5	297	526	934	1831	5.5	310	732	1116	1937
6	320	567	1007	1974	6	335	790	1203	2088
6.5	343	608	1080	2117	6.5	359	847	1290	2239
7	366	649	1153	2260	7	383	904	1377	2390
7.5	389	690	1226	2403	7.5	407	961	1464	2542
8	412	731	1299	2546	8	431	1018	1552	2693
8.5	436	772	1372	2689	8.5	456	1075	1639	2844
9	459	813	1445	2832	9	480	1132	1726	2995
9.5	482	854	1518	2974	9.5	504	1190	1813	3146
10	505	895	1590	3117	10	528	1247	1900	3297
11	551	977	1736	3403	11	577	1361	2071	3599
12	598	1059	1882	3689	12	625	1475	2248	3902
13	644	1141	2028	3975	13	674	1590	2422	4204
14	690	1223	2174	4260	14	722	1704	2596	4506
15	737	1305	2319	4546	15	770	1818	2771	4808
16	783	1387	2465	4832	16	819	1932	2945	5111
17	829	1469	2611	5118	17	867	2047	3119	5413
18	875	1551	2757	5403	18	916	2161	3293	5715
19	922	1633	2903	5689	19	964	2275	3467	6017
20	968	1715	3048	5975	20	1013	2390	3641	6320
21	1014	1797	3194	6261	21	1061	2504	3816	6622
22	1061	1879	3340	6546	22	1109	2618	3990	6924
23	1107	1961	3486	6832	23	1158	2732	4164	7226
24	1153	2043	3632	7118	24	1206	2847	4338	7529
25	1199	2125	3777	7404	25	1255	2961	4512	7831

SUPPLEMENT: RELIEF CAPACITY

table:

Relief capacity depending on medium at 10% pressure surge in Nm³/h (steam) for each set pressure and connection size at the inlet.

relief capacity for steam safety valves without bellows safety valves with bellows

comment:

The **set pressure** is the gauge pressure at which a direct-loaded safety valve begins to open under test conditions (atmospheric pressure).

set pressure [bar]	relief capacity kg ³ /h] acc. to connection size [inch]				set pressure [bar]	relief capacity kg ³ /h] acc. to connection size [inch]			
	1/2	3/4	1	1 1/4		1/2	3/4	1	1 1/4
0.5	42	80	142	278	0.5	42	96	150	260
1	71	111	197	387	1	58	134	209	362
1.5	89	139	248	547	1.5	73	168	262	454
2	106	188	334	655	2	87	201	314	544
2.5	124	219	390	764	2.5	102	234	366	635
3	141	251	446	873	3	148	349	532	924
3.5	159	281	500	980	3.5	166	392	597	1036
4	176	312	555	1088	4	184	435	663	1151
4.5	194	343	610	1196	4.5	203	478	729	1265
5	211	374	665	1303	5	221	521	794	1378
5.5	229	405	720	1411	5.5	239	564	860	1492
6	246	436	775	1519	6	257	608	926	1607
6.5	263	466	829	1625	6.5	275	650	990	1719
7	280	496	883	1730	7	293	692	1054	1830
7.5	298	527	937	1837	7.5	311	735	1119	1943
8	315	558	992	1944	8	329	777	1184	2056
8.5	332	588	1046	2050	8.5	347	820	1249	2168
9	349	619	1100	2156	9	365	862	1314	2281
9.5	366	649	1154	2262	9.5	383	905	1379	2392
10	384	679	1208	2368	10	401	947	1443	2504
11	418	740	1315	2578	11	437	1031	1571	2727
12	452	800	1422	2787	12	472	1115	1699	2948
13	486	861	1530	2998	13	508	1199	1827	3172
14	520	921	1638	3211	14	544	1284	1957	3396
15	554	982	1745	3421	15	580	1368	2085	3618
16	588	1042	1853	3632	16	616	1453	2214	3842
17	622	1101	1958	3837	17	650	1535	2339	4059
18	656	1162	2065	4047	18	686	1619	2467	4281
19	690	1222	2172	4257	19	721	1703	2594	4503
20	724	1282	2280	4468	20	757	1787	2723	4726
21	758	1343	2388	4680	21	793	1872	2852	4950
22	792	1404	2495	4891	22	829	1956	2981	5173
23	827	1464	2603	5102	23	865	2040	3109	5396
24	861	1525	2710	5313	24	900	2125	3238	5619
25	895	1585	2818	5523	25	936	2209	3366	5842