

## **Description**

1. Durable design.
2. Top guided pressure relief to protect the small sterilization tank, tank and so on.
3. High-performance full nozzle design, quick response to pressure to change.

## **Selection of possible applications**

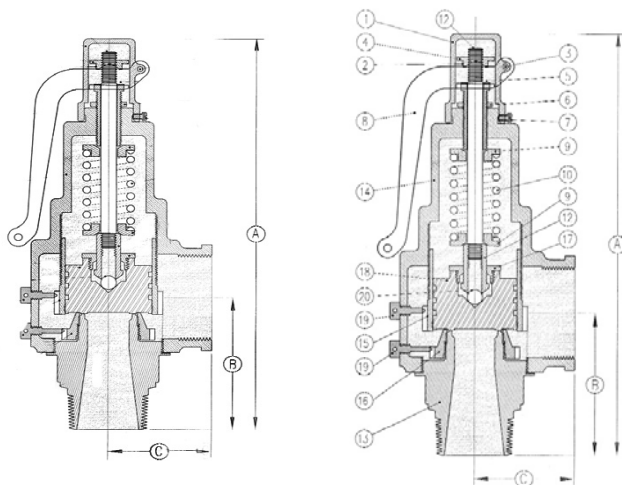
Protection of fired and unfired pressure vessels including steam generators, pipelines, compressors, receivers; downstream of pressure reducing valves; general industrial service applications.

## **Selection of possible flow media**

Steam, air, etc.

**Dimensions and Weights(mm/kg)**

		Connection			A	B	C	Weight
	Size	Inlet	Outlet					
Screwed BSPF x BSPF or NPTF x NPTF	DN15	½"	¾"	194	40	40	1.3	
	DN20	¾"	1¼"	229	44	55	2.4	
	DN25	1"	1½"	242	48	60	2.9	
	DN32	1¼"	2"	279	58	70	4.2	
	DN40	1½"	2½"	365	67	81	8.8	
Sanitary clamping	DN50	2"	3"	420	80	96	13.0	
	DN15	1"	¾"	209	55	40	1.4	
	DN20	1"	1¼"	245	60	55	2.6	
	DN25	1"	1½"	258	64	60	3.1	



**Size and connections**

DN15, DN20, DN25, DN32, DN40 and DN50.

**Inlet connections**

Screwed BSP (BS 21 parallel) or NPT male or female connections.  
ISO 2852 / DIN 32676 - Safety valves with these connections have a surface finish of 0.8 µm on primary wetted parts.

**Outlet connections**

Screwed BSP (BS 21 parallel) or NPT female connection.

Parts & Materials			
ITEM	PART NAME	MATERIAL	ASTM
1	HOOD	Stainless steel	
2	COTTER PIN		
3	LIFT LEVER PIN	Stainless steel	
4	LIFTER NUT	Stainless steel	B-16
5	PRESSURE SCREW	Stainless steel	B-16
6	LOCK NUT	Stainless steel	B-16
7	HOOD SCREW	Stainless steel	
8	LIFT LEVER	Stainless steel	
9	SPRING PLATE	Stainless steel	B-16
10	SPRING	STAINLESS STEEL	
11	NAMEPLATE	ALUMINUM	
12	SPRING POST	BRASS	B-16
13	BODY	BRASS/Cast steel	B-16
		Stainless steel	B-61, 62
14	BONNET	CAST BRASS	B-61, 62
15	UPPER RING	CAST BRASS	
16	LOWER RING	CAST BRASS	
17	DISC NUT	BRASS	B-16
18	DISC	BRASS	B-16
19	REGULATOR SCREW	BRASS	B-16
20	BALLBEARING	STAINLESS STEEL	

Body design conditions		PN25	
<b>Set pressure range</b>	Maximum	½" to 1¼"	18 bar g
	Minimum	1½" and 2"	14 bar g
<b>Temperature</b>	Metal seat	Minimum	-90°C
		Maximum	+230°C
	EPDM seat	Minimum	-50°C
		Maximum	+150°C
	Viton seat	Minimum	-20°C
		Maximum	+200°C
Overpressure	Steam	5%	
	Gas	10%	
	Liquid	10%	
<b>Performance data</b>	Blowdown limits	Steam, gas	10%
		Liquids	20%
Derated coefficient of discharge values	Steam, gas	0.71	
	Liquid	0.52	
<b>Maximum permitted backpressure</b>		10% of set pressure	

**Table 1 - SLV-15 flow capacity for saturated steam in kilogrammes per hour (kg/h)**  
(calculated in accordance with EN ISO 4126 : 2004 at 5% overpressure)  
Derated coefficient of discharge (Kdr) = 0.71

Valve size DN in/out	15/20	20/32	25/40	32/50	40/65	50/80
Flow area (mm <sup>2</sup> )	113	314	452	661	1075	1662

Set pressure (bar g)	Flow capacity for dry saturated steam kg/h					
0.5	71	198	285	417	678	1049
1.0	95	263	379	554	901	1393
1.5	118	328	472	690	1122	1734
2.0	141	392	564	824	1341	2073
2.5	164	455	655	959	1559	2410
3.0	187	519	747	1092	1776	2746
3.5	209	582	838	1225	1993	3081
4.0	232	645	929	1358	2008	3414
4.5	255	708	1019	1490	2424	3747
5.0	277	771	1109	1622	2638	4079
5.5	300	833	1199	1754	2853	4410
6.0	322	896	1289	1886	3067	4741
6.5	345	958	1379	2017	3280	5071
7.0	367	1020	1469	2148	3494	5401
7.5	390	1083	1559	2279	3707	5731
8.0	412	1145	1648	2410	3920	6060
8.5	434	1207	1737	2541	4132	6389
9.0	457	1269	1827	2672	4345	6717
9.5	479	1331	1916	2802	4557	7046
10.0	501	1393	2005	2933	4769	7374
11.0	546	1517	2184	3194	5194	8030
12.0	591	1641	2362	3454	5618	8685
13.0	635	1765	2540	3715	6042	9340
14.0	680	1888	2718	3975	-	-
15.0	724	2012	2897	4236	-	-
16.0	769	2136	3075	4496	-	-
17.0	813	2260	3253	4757	-	-
18.0	858	2384	3431	5018	-	-

**Table 2 - SLV-15flow capacity for air in litres per second (normal l/s) at 0°C and 1.013 bar a**  
(calculated in accordance with EN ISO 4126 : 2004 at 10% overpressure)  
Derated coefficient of discharge (Kdr) = 0.71

Valve size DN in/out	15/20	20/32	25/40	32/50	40/65	50/80
Flow area (mm <sup>2</sup> )	113	314	452	661	1075	1662

Set pressure (bar g)	Flow capacity for air l/s					
0.5	24	67	97	142	230	356
1.0	33	91	131	191	311	481
1.5	41	115	165	241	392	606
2.0	50	138	199	291	473	732
3.0	67	186	267	391	635	982
4.0	84	233	335	490	797	1233
5.0	101	280	403	590	959	1483
6.0	118	328	472	690	1121	1734
7.0	135	375	540	789	1283	1984
8.0	152	422	608	889	1446	2235
9.0	169	470	676	988	1608	2485
10.0	186	517	744	1088	1770	2736
11.0	203	564	812	1188	1932	2986
12.0	220	612	880	1287	2094	3237
13.0	237	659	948	1387	2256	3487
14.0	254	706	1017	1487	2418	3738
16.0	288	801	1153	1686	-	-
18.0	322	896	1289	1885	-	-

**Table 3 - SLV-15 flow capacity for water in kilogrammes per hour (kg/h) at 20°C**  
(calculated in accordance with EN ISO 4126 : 2004 at 10% overpressure)  
Derated coefficient of discharge (Kdr) = 0.52

Valve size DN in/out	15/20	20/32	25/40	32/50	40/65	50/80
Flow area (mm <sup>2</sup> )	113	314	452	661	1 075	1 662

Set pressure (bar g)	Flow capacity for water kg/h					
0.5	2 216	6 159	8 866	12 965	21 086	32 599
1.0	3 135	8 710	12 538	18 335	29 819	46 102
1.5	3 839	10 668	15 356	22 456	36 521	56 463
2.0	4 433	12 318	17 731	25 930	42 171	65 198
3.0	5 429	15 086	21 717	31 758	51 649	79 851
4.0	6 269	17 420	25 076	36 671	59 639	92 204
5.0	7 009	19 476	28 036	40 999	66 678	103 088
6.0	7 678	21 335	30 712	44 913	73 042	112 927
7.0	8 293	23 045	33 173	48 511	78 895	121 975
8.0	8 866	24 636	35 463	51 861	84 342	130 397
9.0	9 404	26 130	37 614	55 006	89 458	138 307
10.0	9 912	27 544	39 649	57 982	94 297	145 788
11.0	10 396	28 888	41 584	60 812	98 900	152 904
12.0	10 858	30 172	43 433	63 516	103 298	159 703
13.0	11 302	31 405	45 207	66 110	107 515	166 224
14.0	11 728	32 590	46 913	68 605	111 574	172 499
16.0	12 538	34 840	50 152	73 342	-	-
18.0	13 299	36 954	53 194	77 791	-	-

**Table 4 - SLV-15 flow capacities for hotwater in kilowatts (kW) at or above 100°C**  
(calculated in accordance with EN ISO 4126 : 2004)  
Derated coefficient of discharge (Kdr) = 0.52

Valve size DN in/out	15/20	20/32	25/40	32/50	40/65	50/80
Flow area (mm <sup>2</sup> )	113	314	452	661	1 075	1 662

Set pressure (bar g)	Flow capacity for hot water kW					
0.5	29.96	83.26	119.86	175.27	285.06	440.71
1.0	40.60	112.81	162.39	237.47	386.21	597.09
1.5	51.23	142.36	204.92	299.66	487.36	753.47
2.0	61.86	171.96	247.45	361.86	588.51	909.86
3.0	83.13	230.99	332.51	486.24	790.81	1 222.62
4.0	104.39	290.08	417.57	610.63	993.11	1 535.38
5.0	125.66	349.17	502.63	735.02	1 195.42	1 848.15
6.0	146.92	408.26	587.69	859.41	1 397.72	2 160.91
7.0	168.19	467.36	672.75	983.80	1 600.12	2 473.67
8.0	189.45	526.45	757.81	1 108.18	1 802.32	2 786.43
9.0	210.72	585.54	842.88	1 232.57	2 004.62	3 099.20
10.0	231.98	644.63	927.94	1 356.96	2 206.92	3 411.96
11.0	253.25	703.72	1 013.00	1 481.35	2 409.22	3 724.72
12.0	274.51	762.81	1 098.06	1 605.74	2 611.52	4 037.49
13.0	295.78	821.90	1 183.12	1 730.12	2 813.82	4 350.25
14.0	317.04	880.99	1 268.18	1 854.51	3 016.12	4 663.01
16.0	359.58	999.17	1 438.30	2 103.29	-	-
18.0	402.11	1 117.36	1 608.42	2 352.06	-	-