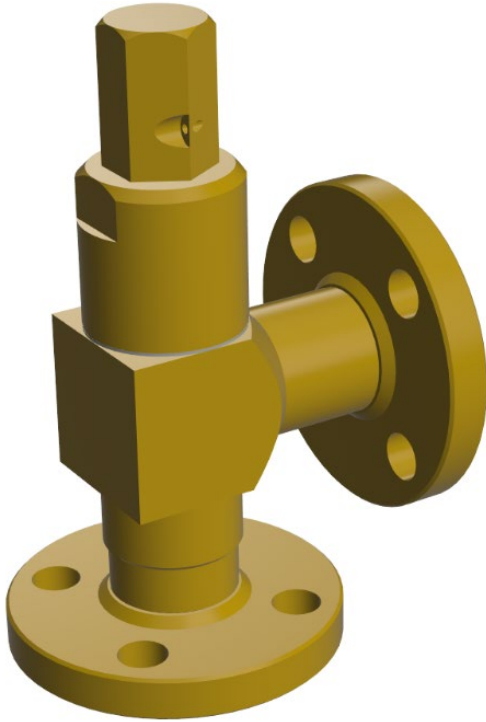
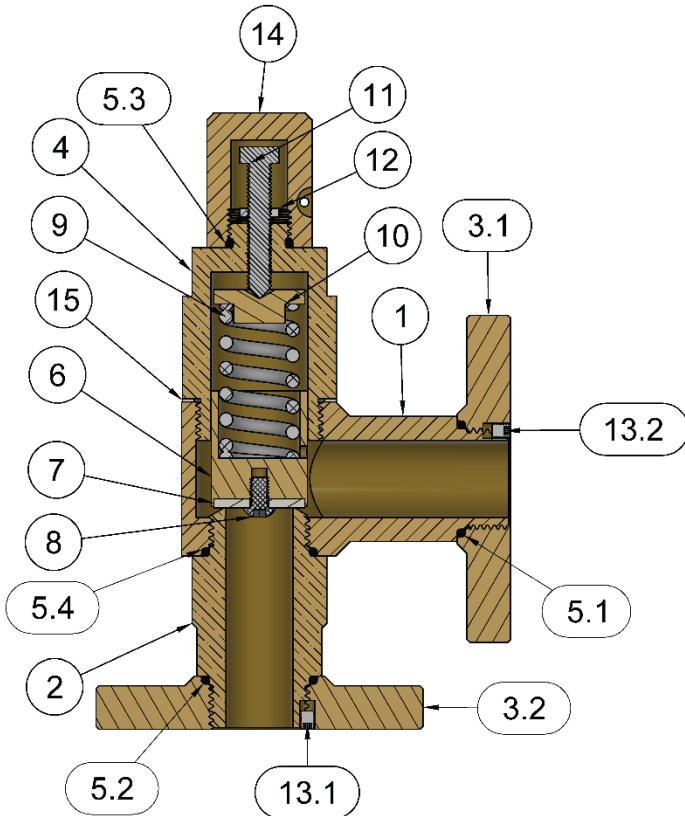


NV1 Angle Pattern Pressure Relief Valve



Main size (reference)	1" x 1"	
Available sizes	Carbon Steel Stainless Steel	½" to 4"
	Brass	½" to 2"
Description	Top guided design Unobstructed seat bore Conventional proportional lift design	
Connection types	Screwed on	
	Flanged	
In all cases, valves are made using solid bar stock and fitted with S/S 316L springs		
Seal type	Metal seal – S/S 316L	Choice depending on pressure and product type
	Soft seal options: Nitrile, Viton or PTFE	
Medium	Water, Steam or Air	
Operating characteristics (Reference size 1" x 1")	Bore size 7/8"	Max. 18 Bar
	Bore size 3/4"	Max. 24 Bar
Min-max operating temp.	-20° to 225°	

General Assembly



Parts list			
Item	Qty	Part name	Material
1	1	Body	Brass*, S/S 316L, C/S*
2	1	Inlet nozzle	Brass*, S/S 316L, C/S*
3		Flanges	Brass*, S/S 316L, C/S*
3.1	1	Front flange	Brass*, S/S 316L, C/S*
3.2	1	Bottom flange	Brass*, S/S 316L, C/S*
4	1	Bonnet	Brass*, S/S 316L, C/S*
5		O-rings	Nitrile, Viton
5.1	1	BS-125 O-ring	Nitrile, Viton
5.2	1	BS-125 O-ring	Nitrile, Viton
5.3	1	BS-115 O-ring	Nitrile, Viton
5.4	1	BS-125 O-ring	Nitrile, Viton
6	1	Piston	Brass*, S/S 316L, C/S*
7	1	Seat	Rigid: S/S 316L Soft: Nitrile, Viton, PTFE
8	1	Seat screw	S/S 316L
9	1	Spring	S/S 316L
10	1	Spring button	Brass*, S/S 316L, C/S*
11	1	Adjustment screw	S/S 316L
12	1	Locknut	S/S 316L
13		Grub screws	S/S 316L
13.1	1	Grub screw M6 x 5	S/S 316L
13.2	1	Grub screw M6 x 5	S/S 316L
14	1	Bonnet cap	Brass*, S/S 316L, C/S*
15	1	Gasket	PTFE

* Brass specification BS 2874 CZ121
* C/S – carbon steel 080A15

Water (25% overpressure)

Pressure		½"		¾"		1"		1 ¼"		1. ½"		2"		2 ½"		3"		4"	
P.S.I	BAR	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM	GPM	LPM
5	.34	.75	3.41	1.7	7.73	3.1	14.09	4.8	21.82	7.0	31.9	12.6	57.3	19.8	90.11	28.0	127.3	50.0	227.3
10	.68	1.1	5.0	2.6	11.8	4.7	21.37	7.3	33.19	10.7	48.7	19.2	87.3	30.1	136.8	42.8	194.6	76.0	345.5
15	1.03	1.3	5.91	3.1	14.09	5.6	25.46	8.8	40.0	12.7	57.7	23.0	104.6	35.8	162.7	51.0	231.8	90.0	409.1
25	1.72	1.7	7.73	4.0	18.18	7.2	32.73	11.3	51.37	16.5	75.0	29.7	135.0	46.5	211.4	66.0	300.0	120.0	545.5
50	3.45	2.4	10.91	5.6	25.46	10.0	45.46	15.8	71.83	23.0	104.6	41.5	188.7	65.0	295.5	92.0	418.2	165.0	750.1
75	5.17	3.0	13.64	6.9	31.37	12.4	56.37	19.4	88.19	28.1	127.7	51.0	231.8	80.0	363.7	113.0	513.7	200.0	909.0
100	6.89	3.4	15.46	7.8	35.46	14.2	64.55	22.4	101.83	32.5	147.7	58.5	265.9	91.5	415.9	135.0	613.7	240.0	1091.0
150	10.34	4.2	19.09	9.9	45.0	17.5	79.56	27.2	123.65	40.0	181.8	71.5	325.0	112.0	509.0	165.0	750.0	290.0	1318.5
200	13.79	5.0	22.73	11.5	52.28	20.7	94.10	32.3	146.8	47.0	213.6	84.7	385.0						
250	17.24	5.5	25.00	12.8	58.9	23.0	104.6	36.0	163.6	52.0	236.4	95.0	431.9						
300	20.69	6.1	27.73	14.2	64.55	25.5	115.9	39.5	179.6	57.5	261.4	105.0	477.3						
350	24.13	6.6	30.00	15.3	69.55	27.5	125.0	42.8	194.6	62.0	281.8	112.0	509.2						

Saturated Steam (10% overpressure)

Pressure		½"		¾"		1"		1 ¼"		1. ½"		2"		2 ½"		3"		4"	
P.S.I	BAR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR	LB/HR	KG/HR
5	0.34	18	8.17	42	19.05	74	33.6	116	52.6	166	75.4	296	134.4	465	210.9	670	304.0	1180	536
10	0.68	23	10.43	52	23.59	93	42.2	145	65.8	210	95.3	372	168.9	580	263.1	837	380.0	1480	672
15	1.03	28	12.7	62	28.12	112	50.9	175	79.5	250	113.5	446	202.5	698	316.9	1010	458.6	1780	808
25	1.72	37	16.78	84	34.10	150	68.1	233	105.8	335	152.1	600	272.5	935	424.5	1350	612.9	2380	1080
50	3.45	60	27.22	136	61.74	244	110.8	380	172.5	546	247.9	975	442.6	1520	690.1	2180	989.7	3900	1771
75	5.17	85	38.56	190	86.26	337	153.0	525	238.4	757	343.7	1350	613.0	2100	953.4	3040	1380.2	5400	2452
100	6.89	107	48.5	240	108.96	430	195.2	672	305.1	970	440	1730	705.3	2700	1225.8	3880	1761.5	6900	3132
150	10.34	155	70.31	346	157.08	620	281.5	968	439.5	1390	631.1	2480	1126.0	3880	1761.5	5600	2542.4	9900	4494
200	13.79	200	90.72	452	205.2	805	365.5	1260	572.0	1810	821.7	3220	1461.9						
250	17.24	250	113.4	560	254.2	990	449.5	1550	703.7	2230	1012.4	3980	1806.9						
300	20.69	295	133.81	662	300.5	1180	535.7	1840	835.4	2650	1203.1	4740	2151.9						
350	24.13	340	154.2	770	349.6	1370	622.0	2140	971.6	3070	1393.8	5480	2487.9						

Compressed air

Pressure		½"		¾"		1"		1 ¼"		1. ½"		2"		2 ½"		3"		4"	
P.S.I	BAR	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec	ft³/min	L/sec
5	0.34	6.5	3.07	14.7	6.94	26.5	12.51	42	19.82	60	28.32	106	50.03	166	78.35	240	113.28	425	200.6
10	0.68	8.2	3.87	18.5	8.73	33	15.58	52	24.54	75	35.40	133	62.78	215	101.48	300	141.60	530	250.16
15	1.03	10	4.72	22.2	10.48	40	18.88	62	29.26	90	42.48	160	75.52	248	117.06	362	170.86	640	302.08
25	1.72	13.2	6.23	30	14.16	53	25.02	83	39.18	120	56.64	215	101.48	334	157.65	482	227.50	850	401.2
50	3.45	22	10.38	49	23.13	88	41.54	136	64.19	195	92.04	348	164.26	545	257.24	780	368.16	1380	651.36
75	5.17	30	14.16	68	32.10	120	56.64	188	88.74	270	127.44	485	228.92	750	354	1090	514.48	1930	910.96
100	6.89	38	17.94	86	40.59	155	73.16	240	113.28	346	163.31	620	292.64	965	455.48	1395	658.44	2460	1161.12
150	10.34	55	25.96	124	58.53	220	103.84	345	162.84	500	236.00	890	420.08	1390	656.08	2000	944.00	2540	1198.88
200	13.79	72	33.98	162	76.46	288	135.94	450	212.40	650	306.80	1150	542.80						
250	17.24	90	42.48	198	93.46	355	167.56	552	260.54	800	377.60	1420	670.24						
300	20.69	100	47.20	236	111.39	422	199.18	662	312.46	950	448.40	1690	797.68						
350	24.13	122	57.58	275	129.80	490	231.28	765	361.08	1100	519.20	1960	925.12						