



**618**  
**Bronze**  
**Overflow & Pressure Control Valve**  
**Suitable for Steam, Water,**  
**Liquids, Air & Gases\***



The compact 618 overflow and pressure control valve is designed for pump protection and bypass control applications.

The valve is supplied with a gastight spring housing dome and PTFE disc as standard with options of a non-gastight lever dome and NBR or FKM discs.

User pressure adjustment is achievable on site or these valves can be set to your requirements and issued with fully traceable test certification prior to despatch.

**Approvals, Features & Benefits**

- Lloyds, DNV, BV, ABS & GL type approved\*
- PTFE disc with option of NBR or FKM
- Gastight spring housing dome as standard
- Set, tested and certified prior to dispatch
- BSP female connections to DIN EN ISO 228
- Quality & reliable product
- User adjustable if necessary

**Pressure & Temperature**

Pressure range:-  
Standard: 0.2 to 12 bar  
HP Option\*\*: 12 to 20 bar

Temperature range:-  
PTFE disc: -60°C to 225°C  
NBR disc: -30°C to 130°C  
FKM disc: -20°C to 200°C

\* Dependent on valve version, please check compatibility \*\* On request, PTFE seals only

Size	DN10	DN15	DN20	DN25	DN32	DN40	DN50
<b>G</b>	3/8	1/2	3/4	1	1 1/4	1 1/2	2
<b>L</b>	27	30	33	40	45	50	60
<b>Lmax</b>	84	84	84	84	120	120	120
<b>H</b>	55	62	73	90	110	130	135
<b>H1</b>	66	74	83	100	117	136	146
<b>H2</b>	73	82	89	108	127	149	158
<b>Hmax</b>	100	108	117	134	168	190	197
<b>h</b>	26	30	35	41	45	51	60
<b>do</b>	10	13	19	25	30	38	50
<b>Weight Kg</b>	0.3	0.4	0.6	1.0	1.6	2.3	3.2
<b>Range of Adjustment</b>	0.2 - 0.8 bar   0.5 - 2.5 bar   2 - 12 bar   12 - 20 bar** (Specify when ordering)						

Materials	
<b>Body</b>	Bronze
<b>Internal Parts</b>	Brass/Bronze
<b>Disc</b>	PTFE, NBR or FKM
<b>Spring</b>	Stainless Steel

**618**

**Capacity Charts/Sizing**

AIR CAPACITY (m <sup>3</sup> /h) @ 10% overpressure and 15°C							
Set Pressure (bar)	DN10	DN15	DN20	DN25	DN32	DN40	DN50
0.5	1.7	2.9	6.4	17.0	23.2	73.0	132.5
1.0	2.3	3.9	8.5	22.6	31.0	97.4	176.6
1.5	2.9	4.8	10.7	28.3	38.7	121.7	220.8
2.0	3.5	5.8	12.8	34.0	46.5	146.1	264.9
2.5	4.1	6.8	14.9	39.6	54.2	170.4	309.1
3.0	4.7	7.7	17.1	45.3	62.0	194.8	353.3
3.5	5.2	8.7	19.2	51.0	69.7	219.1	397.4
4.0	5.8	9.7	21.3	56.6	77.4	243.5	441.6
4.5	6.4	10.6	23.4	62.3	85.2	267.8	485.7
5.0	7.0	11.6	25.6	67.9	92.9	292.1	529.9
5.5	7.6	12.6	27.7	73.6	100.7	316.5	574.0
6.0	8.2	13.5	29.8	79.3	108.4	340.8	618.2
6.5	8.7	14.5	32.0	84.9	116.2	365.2	662.4
7.0	9.3	15.5	34.1	90.6	123.9	389.5	706.5
7.5	9.9	16.4	36.2	96.3	131.7	413.9	750.7
8.0	10.5	17.4	38.4	101.9	139.4	438.2	794.8
8.5	11.1	18.4	40.5	107.6	147.1	462.6	839.0
9.0	11.7	19.3	42.6	113.2	154.9	486.9	883.1
9.5	12.2	20.3	44.8	118.9	162.6	511.2	927.3
10	12.8	21.3	46.9	124.6	170.4	535.6	971.5
11	14.0	23.2	51.2	135.9	185.9	584.3	1059.8
12	15.0	25.0	54.9	147.2	200.1	640.0	1149.8
13	16.2	26.9	59.1	158.5	215.5	689.2	1238.3
14	17.3	28.8	63.4	169.9	230.9	738.5	1326.7
15	18.5	30.8	67.6	181.2	246.3	787.7	1415.2
16	19.6	32.7	71.8	192.5	261.7	836.9	1503.6
17	20.8	34.6	76.0	203.8	277.1	886.1	1592.1
18	21.9	36.5	80.3	215.2	292.5	935.4	1680.5
19	23.1	38.5	84.5	226.5	307.8	984.6	1769.0
20	24.2	40.4	88.7	237.8	323.2	1033.8	1857.4

STEAM CAPACITY (kg/h) @ 10% overpressure							
Set Pressure (bar)	DN10	DN15	DN20	DN25	DN32	DN40	DN50
0.5	1.4	2.3	5.1	15.3	20.9	61.2	112.2
1.0	1.9	3.1	6.7	20.2	27.7	81.1	148.8
1.5	2.3	3.9	8.4	25.1	34.4	100.8	184.9
2.0	2.8	4.6	10.0	29.9	40.9	120.0	220.1
2.5	3.2	5.3	11.6	34.7	47.5	139.3	255.5
3.0	3.7	6.1	13.2	39.6	54.1	158.8	291.2
3.5	4.1	6.8	14.8	44.3	60.6	177.7	325.8
4.0	4.6	7.5	16.4	49.1	67.1	196.9	361.1
4.5	5.0	8.3	18.0	53.9	73.7	216.0	396.2
5.0	5.5	9.0	19.6	58.6	80.2	235.0	431.0
5.5	5.9	9.7	21.2	63.4	86.7	254.2	466.2
6.0	6.4	10.5	22.8	68.2	93.3	273.5	501.6
6.5	6.8	11.2	24.3	72.9	99.7	292.2	536.0
7.0	7.2	11.9	25.9	77.5	106.0	310.9	570.2
7.5	7.7	12.6	27.5	82.3	112.5	329.9	605.1
8.0	8.1	13.3	29.0	87.0	119.0	348.9	639.8
8.5	8.6	14.1	30.6	91.7	125.4	367.8	674.5
9.0	9.0	14.8	32.2	96.4	131.9	386.6	709.1
9.5	9.4	15.5	33.7	101.1	138.3	405.4	743.6
10	9.9	16.2	35.3	105.8	144.7	424.2	778.0
11	10.7	17.6	38.4	115.1	157.4	461.5	846.5
12	12.0	20.0	44.0	129.9	179.5	529.8	950.2
13	12.9	21.5	47.3	139.7	193.1	569.7	1021.7
14	13.8	23.0	50.6	149.5	206.6	609.7	1093.5
15	14.7	24.5	53.9	159.3	220.1	649.4	1164.6
16	15.6	26.0	57.2	169.0	233.6	689.3	1236.2
17	16.5	27.4	60.4	178.5	246.7	728.0	1305.5
18	17.4	28.9	63.7	188.3	260.1	767.6	1376.7
19	18.3	30.4	67.0	198.0	273.5	807.2	1447.6
20	19.2	31.9	70.3	207.8	287.1	847.1	1519.2

WATER CAPACITY (m <sup>3</sup> /h) @ 10% overpressure							
Set Pressure (bar)	DN10	DN15	DN20	DN25	DN32	DN40	DN50
0.5	-	0.05	0.12	0.42	0.59	1.43	2.47
1.0	0.05	0.08	0.16	0.60	0.83	2.02	3.50
1.5	0.06	0.09	0.20	0.73	1.01	2.47	4.29
2.0	0.13	0.21	0.47	1.70	2.34	5.72	10.04
2.5	0.14	0.24	0.52	1.90	2.62	6.39	11.22
3.0	0.16	0.26	0.57	2.08	2.87	7.00	12.29
3.5	0.17	0.28	0.62	2.24	3.10	7.56	13.28
4.0	0.18	0.30	0.66	2.40	3.31	8.08	14.20
4.5	0.19	0.32	0.70	2.54	3.51	8.57	15.06
5.0	0.20	0.34	0.74	2.68	3.70	9.04	15.87
5.5	0.21	0.35	0.77	2.81	3.88	9.48	16.65
6.0	0.22	0.37	0.81	2.94	4.06	9.90	17.39
6.5	0.23	0.39	0.84	3.06	4.22	10.30	18.10
7.0	0.24	0.40	0.87	3.17	4.38	10.69	18.78
7.5	0.25	0.41	0.90	3.29	4.53	11.07	19.44
8.0	0.25	0.43	0.93	3.39	4.68	11.43	20.08
8.5	0.26	0.44	0.96	3.50	4.83	11.78	20.69
9.0	0.27	0.45	0.99	3.60	4.97	12.12	21.29
9.5	0.28	0.47	1.01	3.70	5.10	12.46	21.88
10	0.28	0.48	1.04	3.79	5.24	12.78	22.45
11	0.30	0.50	1.09	3.98	5.49	13.40	23.54
12	0.31	0.52	1.14	4.16	5.74	14.00	24.93
13	0.32	0.54	1.19	4.33	5.97	14.57	25.95
14	0.34	0.56	1.23	4.49	6.19	15.12	26.93
15	0.35	0.58	1.27	4.65	6.41	15.65	27.88
16	0.36	0.60	1.32	4.80	6.62	16.17	28.79
17	0.37	0.62	1.36	4.95	6.83	16.66	29.68
18	0.38	0.64	1.40	5.09	7.02	17.15	30.54
19	0.39	0.65	1.43	5.23	7.22	17.62	31.37
20	0.40	0.67	1.47	5.37	7.40	18.07	32.19