

2700

• Safety Valves



Consolidated®

CONSOLIDATED Type 2700 safety valve is designed to meet the fast growing co-generation and waste-to-energy markets.

2700



INLET SIZES — 1-1/2" through 6" in either flanged or weld neck design.

INLET RATINGS — ANSI Class 600, 900 & 1500

OUTLET SIZES — 3" through 8" flanged

OUTLET RATINGS — ANSI Class 150 and 300

ORIFICE SIZES — Seven sizes: 1 through Q

TEMPERATURE RANGE — -20°F to 1050°F

MATERIALS — Alloy and carbon steel cast body with stainless steel trim is standard. Special alloys are available for specific applications.

CERTIFICATION — ASME B&PVC Section I and VIII

BLOWDOWN — 4%

BACK PRESSURE LIMIT — 25% of Set Pressure

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Flanged Inlet - Class 600 Type 27_5

Inlet (Note 2)		Outlet ANSI Std. R.F. Flange		Type Numbers		Orifice		Designation
				Maximum Temperature (Note 1)		Discharge Area		
Size	Class	Size	Class	750°F (399°C)	1050°F (566°C)	in²	cm²	
1-1/2"	600	3"	150	2715B	2715D	.994	6.413	1
2"	600	3"	150	2725B	2725D	1.431	9.232	2
2-1/2"	600	6"	150	2735B	2735D	2.545	16.420	3
3"	600	6"	150	2755B	2755D	3.341	21.555	5
3"	600	6"	150	2745B	2745D	3.976	25.652	4
4"	600	6"	150	2765B	2765D	7.070	45.613	6
6"	600	8"	150	2775QB	2775QD	12.250	79.032	Q

Flanged Inlet (Studded) - Class 600 Type 27_5

Inlet (Note 2)		Outlet ANSI Std. R.F. Flange		Type Numbers		Orifice		Designation
				Maximum Temperature (Note 1)		Discharge Area		
Size	Class	Size	Class	750°F (399°C)	1050°F (566°C)	in²	cm²	
1-1/4"	600	3"	150	2715B	2715D	.994	6.413	1
1-1/2"	600	3"	150	2725B	2725D	1.431	9.232	2
2"	600	6"	150	2735B	2735D	2.545	16.420	3
2-1/2"	600	6"	150	2755B	2755D	3.341	21.555	5

Notes:

1. To determine the maximum allowable pressure at a given temperature refer to the appropriate pressure/temperature table.
2. Available with ANSI B16.5 inlet flange facings. See page G1.22 for selections.

Flanged Inlet - Class 900 Type 27_6

Inlet (Note 2)		Outlet		Type Numbers		Orifice		Designation
Size	Class	ANSI Std. R.F. Flange		Maximum Temperature (Note 1)		Discharge Area		
		Size	Class	750°F (399°C)	1050°F (566°C)	in ²	cm ²	
1-1/2"	900	3"	150	2716B	2716D	.994	6.413	1
2"	900	3"	150	2726B	2726D	1.431	9.232	2
2-1/2"	900	6"	150	2736B	2736D	2.545	16.420	3
3"	900	6"	150	2756B	2756D	3.341	21.555	5
3"	900	6"	150	2746B	2746D	3.976	25.652	4
4"	900	6"	150	2766B	2766D	7.070	45.613	6
6"	900	8"	150	2776QB	2776QD	12.250	79.032	Q

Flanged Inlet (Studded) - Class 900 Type 27_6

Inlet (Note 2)		Outlet		Type Numbers		Orifice		
		ANSI Std. R.F. Flange		Maximum Temperature (Note 1)		Discharge Area		Designation
Size	Class	Size	Class	750°F (399°C)	1050°F (566°C)	in²	cm²	
1-1/4"	900	3"	150	2716B	2716D	.994	6.413	1
1-1/2"	900	3"	150	2726B	2726D	1.431	9.232	2
2"	900	6"	150	2736B	2736D	2.545	16.420	3
2-1/2"	900	6"	150	2756B	2756D	3.341	21.555	5

Flanged Inlet - Class 1500 Type 27_7

Inlet (Note 2)		Outlet		Type Numbers		Orifice		Designation
Size	Class	ANSI Std. R.F. Flange		Maximum Temperature (Note 1)		Discharge Area		
		Size	Class	750°F (399°C)	1050°F (566°C)	in²	cm²	
1-1/2"	1500	3"	150	2717B	2717D	.994	6.413	1
2"	1500	3"	150	2727B	2727D	1.431	9.232	2
2-1/2"	1500	6"	150	2737B	2737D	2.545	16.420	3
3"	1500	6"	150	2757B	2757D	3.341	21.555	5
3"	1500	6"	150	2747B	2747D	3.976	25.652	4
4"	1500	6"	150	2767B	2767D	7.070	45.613	6
6"	1500	8"	150	2777QB	2777QD	12.250	79.032	Q

Welded Inlet - Class 1500 Type 27_7

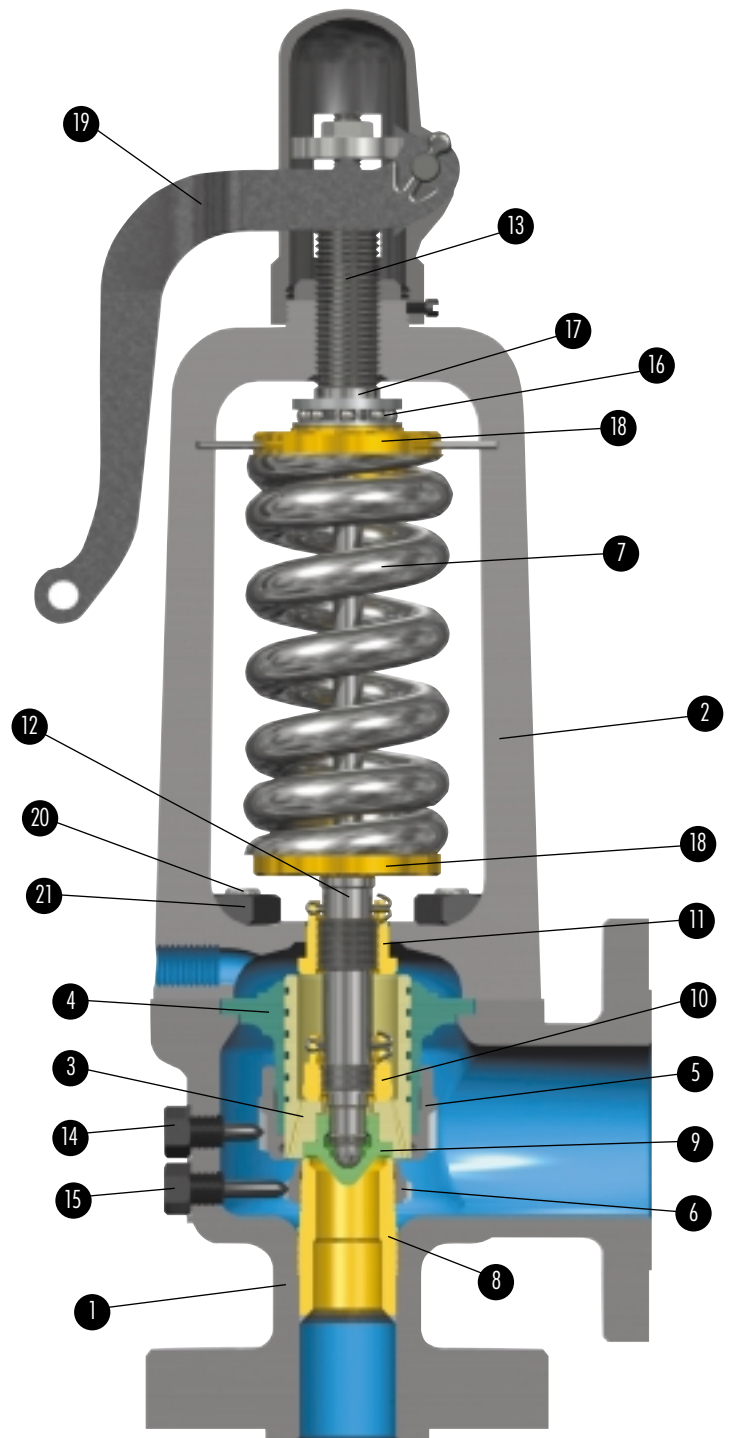
Inlet		Outlet		Type Numbers		Orifice		Designation
Buttweld		ANSI Std. R.F. Flange		Maximum Temperature (Note 1)		Discharge Area		
Size	Class	Size	Class	750°F (399°C)	1050°F (566°C)	in²	cm²	
1-1/2"	1500	3"	150	2717WB	2717WD	.994	6.413	1
2"	1500	3"	150	2727WB	2727WD	1.431	9.232	2
2-1/2"	1500	6"	150	2737WB	2737WD	2.545	16.420	3
3"	1500	6"	150	2757WB	2757WD	3.341	21.555	5
3"	1500	6"	150	2747WB	2747WD	3.976	25.652	4
4"	1500	6"	150	2767WB	2767WD	7.070	45.613	6
6"	1500	8"	150	2777QWB	2777QWD	12.250	79.032	Q

Notes:

1. To determine the maximum allowable pressure at a given temperature refer to the appropriate pressure/temperature table.
2. Available with ANSI B16.5 inlet flange facings. See page GI.22 for selections.



Buttweld Inlet

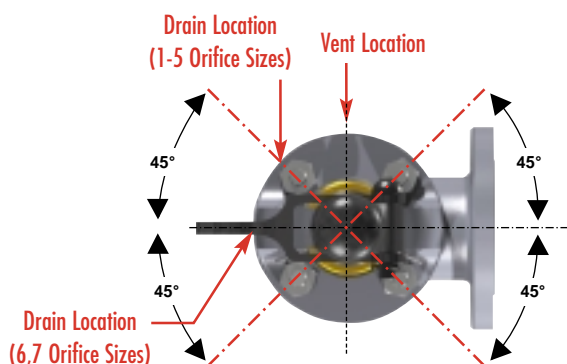
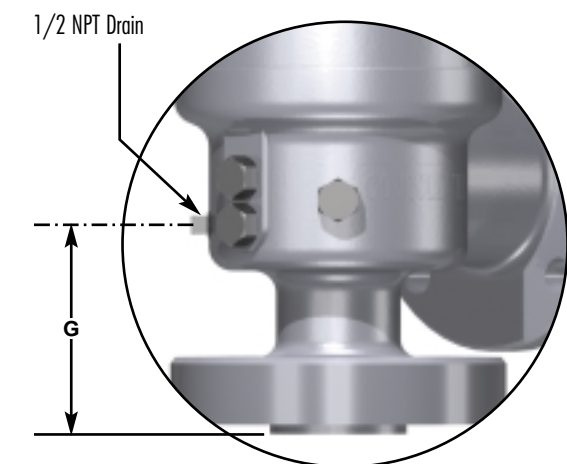


Flanged Inlet

Ref. No.	Part	Material
1	Body	
	2700B - Flanged	ASME SA217 WC6
	2700D - Flanged	ASME SA217 WC6
	2700B - Buttweld	ASME SA216 WCC
	2700D - Buttweld	ASME SA217 WC6
2	Yoke	ASME SA216 WCC
3	Disc Holder	
	2700B	Leaded Nickel Silver
	2700D	Monel
4	Guide	
	2700B	Leaded Nickel Silver
	2700D	Monel
5	Upper Adjusting Ring	Stainless Steel
6	Lower Adjusting Ring	Stainless Steel
7	Spring	Alloy Steel
8	Seat Bushing	Stainless Steel
9	Disc	Inconel
10	Disc Collar	Stainless Steel
11	Lift Stop	Stainless Steel
12	Spindle	Stainless Steel
13	Compression Screw	Silicone Brass
14	Upper Adjusting Ring Pin	Stainless Steel
15	Lower Adjusting Ring Pin	Stainless Steel
16	Thrust Bearing	Steel
17	Compression Screw	
	Adaptor (orifice 5 through Q only)	Stainless Steel
18	Spring Washer	Carbon Steel
19	Lifting Gear	Malleable Iron
20	Studs	B7 Alloy Steel
21	Nuts	2H Steel

Notes:

1. When using the EVT-I or the hydroset device 15" clearance is required.
2. When using the EVT-II 17" clearance is required. When using the assisted closing device an additional 8" clearance is required.



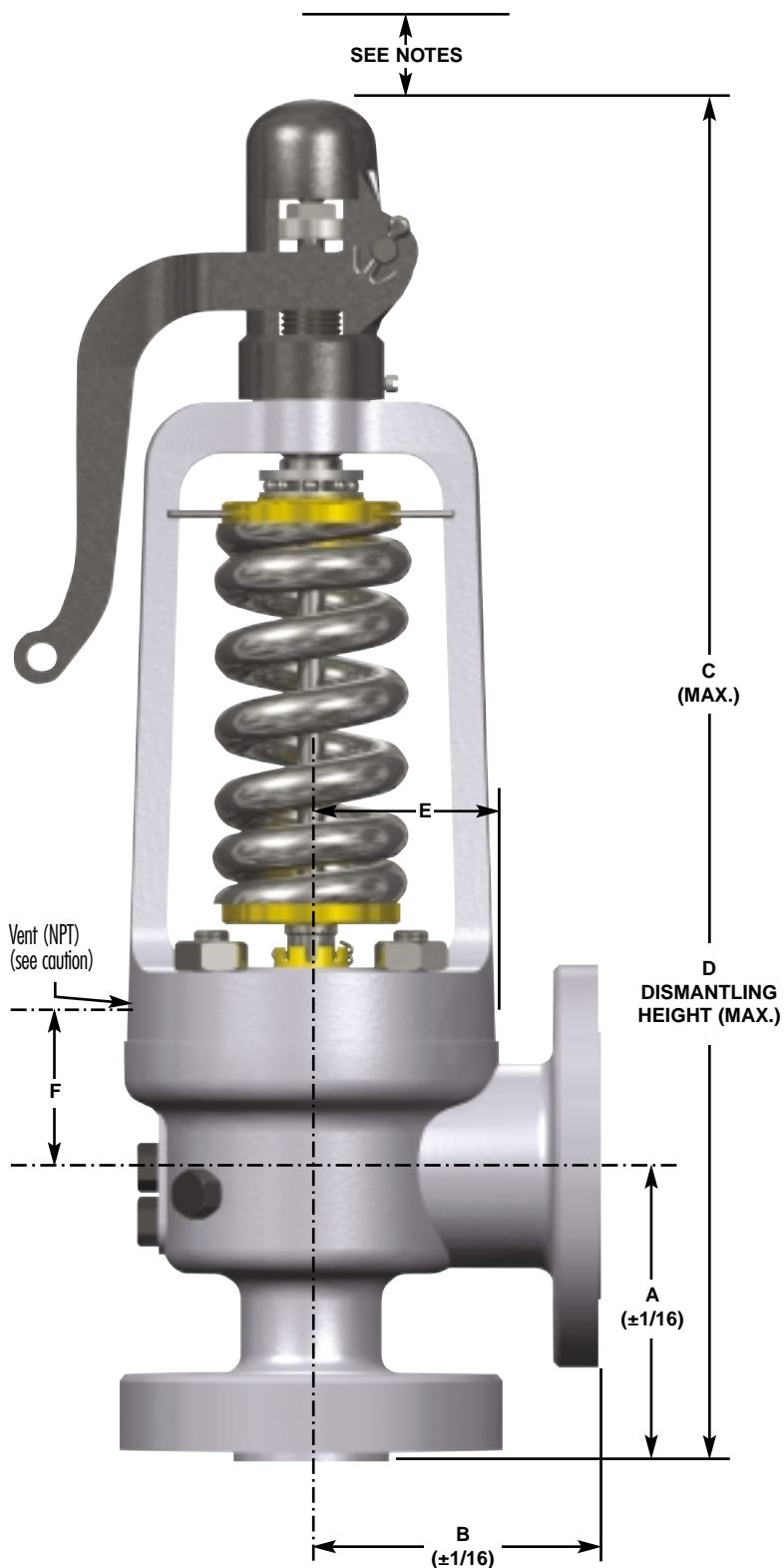
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

!

CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.



600 Class Flanged Inlet

Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.		
1-1/2" 2715	5-1/4	5-1/4	24-3/8	28-1/4	3-3/8	2-15/16	4-3/16	1/2	85
2" 2725	5-1/4	5-1/2	27-1/4	31-1/8	3-3/8	3-13/16	4-3/16	1/2	113
2-1/2" 2735	7-1/4	7	32-1/2	38-1/4	4-1/8	4-5/16	5-3/16	1/2	208
3" 2755	7-3/8	7-1/2	39-7/8	46-1/2	5-1/4	5-1/16	4-13/16	3/4	336
3" 2745	7-3/8	7-1/2	39-7/8	46-1/2	5-1/4	5-1/16	4-13/16	3/4	336
4" 2765	7-7/8	9	44-1/2	51-1/4	6-1/2	5-3/4	5-5/16	1	441
6" 2775Q	10-5/8	10-1/2	53-3/8	61-1/8	8-1/8	6-13/16	7-3/16	1	528

900 Class Flanged Inlet

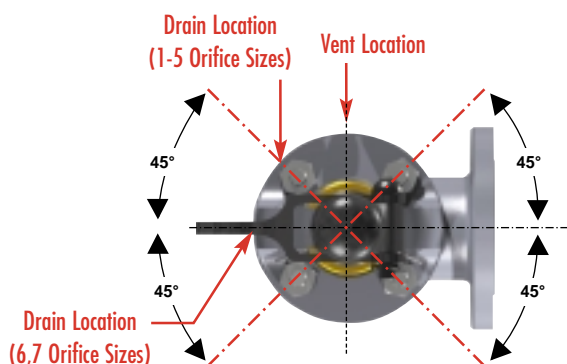
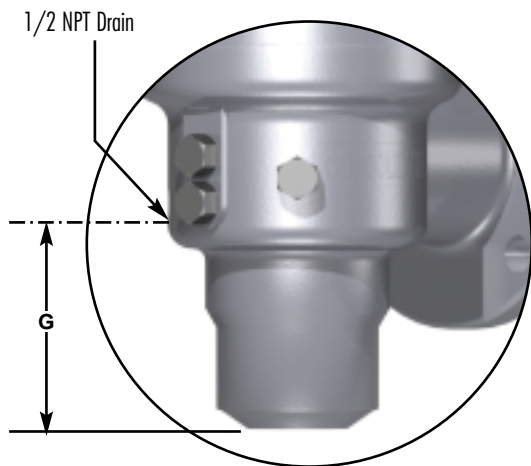
Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.		
1-1/2" 2716	5-1/2	5-1/4	24-5/8	28-1/2	3-3/8	2-15/16	4-7/16	1/2	87
2" 2726	5-3/4	5-1/2	27-3/4	31-5/8	3-3/8	3-13/16	4-11/16	1/2	126
2-1/2" 2736	7-3/4	7	33	38-3/4	4-1/8	4-5/16	5-11/16	1/2	225
3" 2756	7-5/8	7-1/2	40-1/8	46-3/4	5-1/4	5-1/16	5-1/16	3/4	347
3" 2746	7-5/8	7-1/2	40-1/8	46-3/4	5-1/4	5-1/16	5-1/16	3/4	347
4" 2766	8-1/8	9	44-3/4	51-1/2	6-1/2	5-3/4	5-9/16	1	450
6" 2776Q	11	10-1/2	53-3/4	61-1/2	8-1/8	6-13/16	7-9/16	1	576

1500 Class Flanged Inlet

Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.		
1-1/2" 2717	5-1/2	5-1/4	24-5/8	28-1/2	3-3/8	2-15/16	4-7/16	1/2	87
2" 2727	5-3/4	5-1/2	27-3/4	31-5/8	3-3/8	3-13/16	4-11/16	1/2	126
2-1/2" 2737	7-3/4	7	33	38-3/4	4-1/8	4-5/16	5-11/16	3/4	225
3" 2757	8	7-1/2	40-1/2	47-1/8	5-1/4	5-1/16	5-7/16	3/4	360
3" 2747	8	7-1/2	40-1/2	47-1/8	5-1/4	5-1/16	5-7/16	3/4	360
4" 2767	8-1/2	9	45-1/8	51-7/2	6-1/2	5-3/4	5-15/16	1	470
6" 2777Q	12	10-1/2	54-3/4	62-1/2	8-1/8	6-13/16	8-9/16	1	631

Notes:

1. When using the EVT-I or the hydroset device 15" clearance is required.
2. When using the EVT-II 17" clearance is required. When using the assisted closing device, an additional 8" clearance is required.



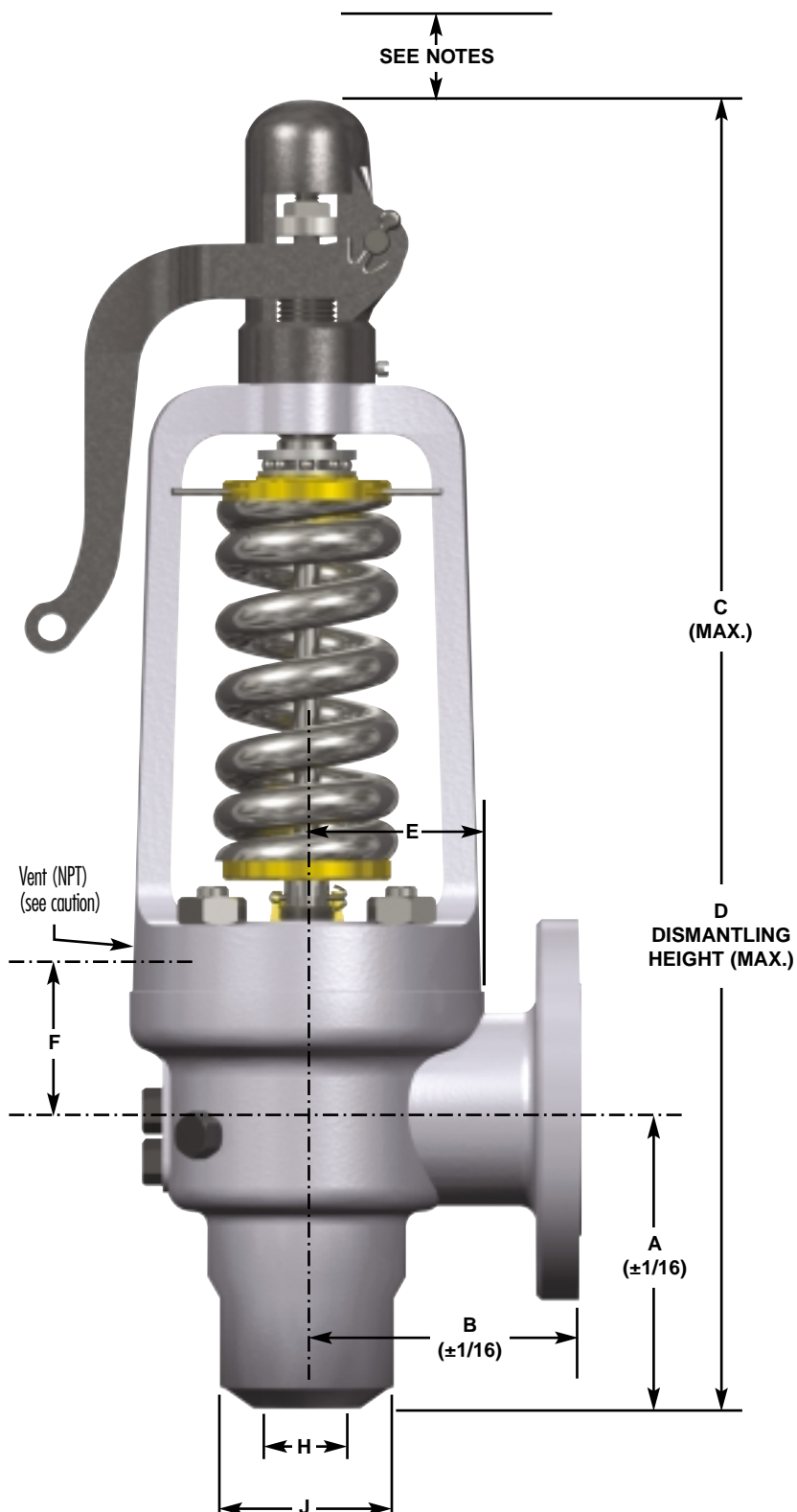
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

!

CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.

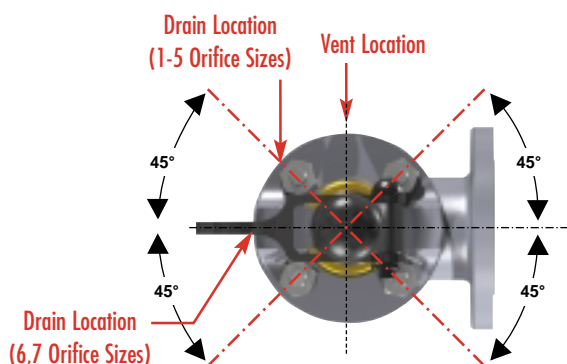
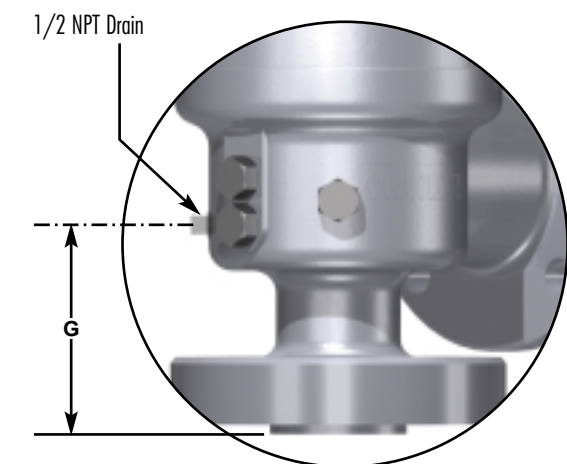


1500 Class Welded Inlet

Size & Type	All Temperature Classes										Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.	J in.			
1-1/2" 2717W	5-3/4	5-1/4	24-7/8	28-3/4	3-3/8	2-15/16	4-11/16	1-1/2	3-3/8	1/2	87	
2" 2727W	5-3/4	5-1/2	27-3/4	31-5/8	3-3/8	3-13/16	4-11/16	2	4	1/2	126	
2-1/2" 2737W	8	7	33-1/4	39	4-1/8	4-5/16	5-15/16	2-1/2	4-3/4	1/2	225	
3" 2757W	9	7-1/2	41-1/2	48-1/8	5-1/4	5-1/16	6-7/16	3	5-3/8	3/4	347	
3" 2747W	9	7-1/2	41-1/2	48-1/8	5-1/4	5-1/16	6-7/16	3	5-5/8	3/4	347	
4" 2767W	10	9	46-5/8	53-3/8	6-1/2	5-3/4	7-7/16	4	7	1	450	
6" 2777QW	12	10-1/2	54-3/4	62-1/2	8-1/8	6-13/16	8-9/16	6	8-1/2	1	576	

Notes:

1. When using the EVT-I or the hydrosset device 15" clearance is required.
2. When using the EVT-II 17" clearance is required. When using the assisted closing device, an additional 8" clearance is required.



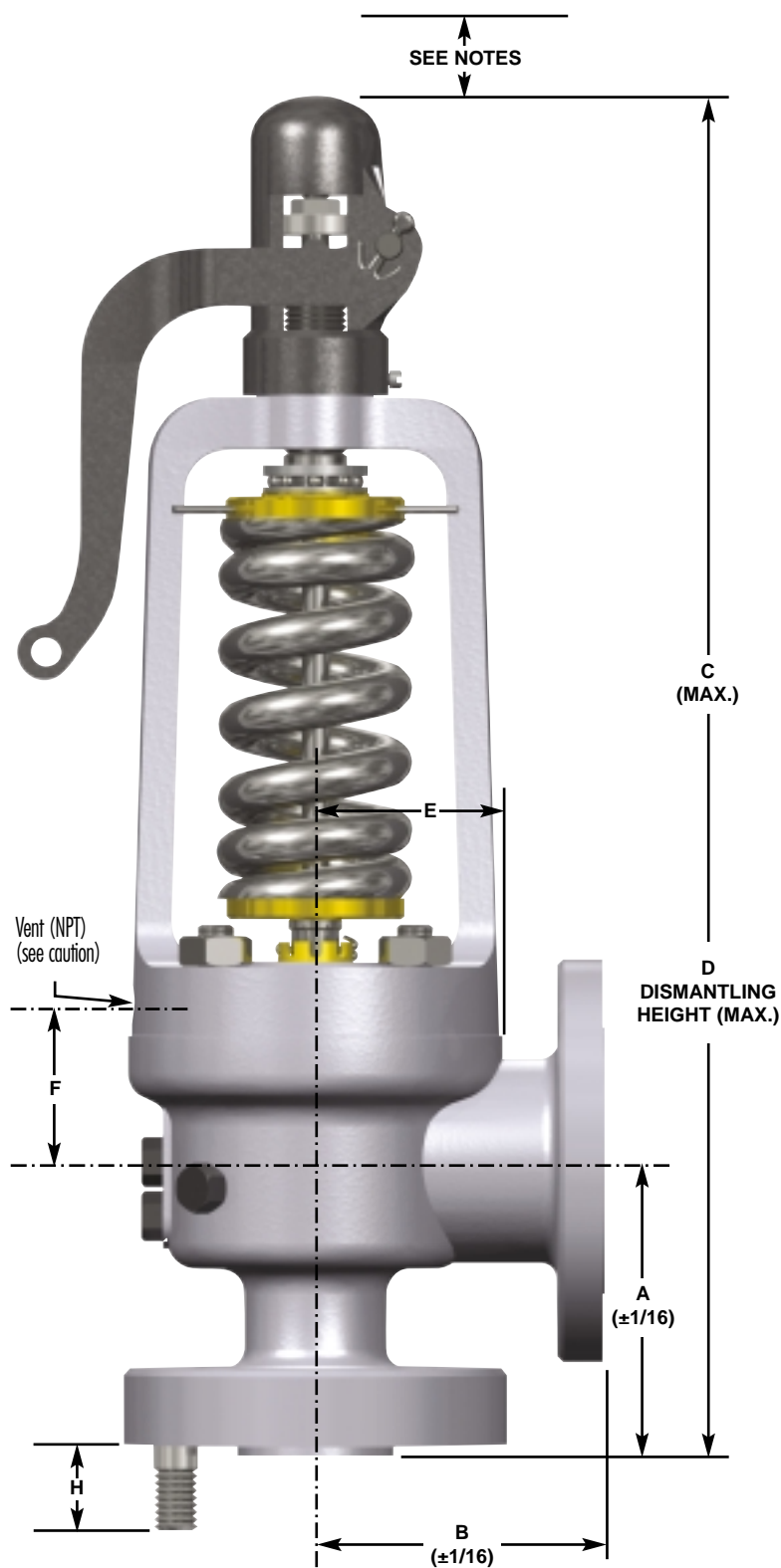
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

!

CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.



600 Class Alternate Studded Inlet

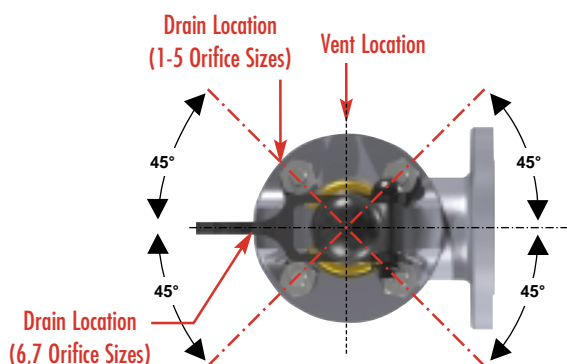
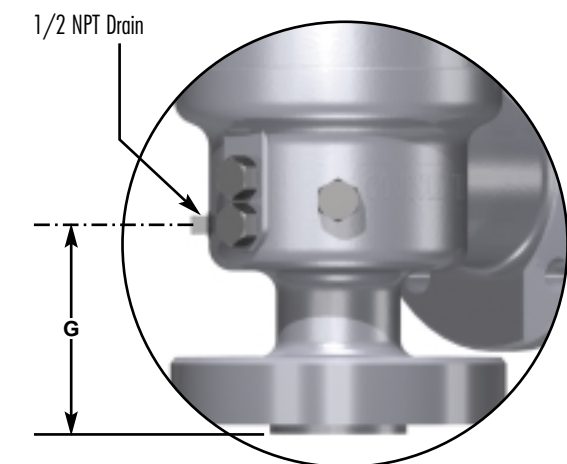
Size & Type	All Temperature Classes								Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.		
1-1/4" 2715	5-1/4	5-1/4	24-3/8	28-1/4	3-3/8	2-15/16	4-3/16	2-1/8	1/2	82
1-1/2" 2725	5-1/4	5-1/2	27-1/4	31-1/8	3-3/8	3-13/16	4-3/16	2-1/2	1/2	108
2" 2735	7-1/4	7	32-1/2	38-1/4	4-1/8	4-5/16	5-3/16	2-3/8	1/2	201
2-1/2" 2755	7-3/8	7-1/2	39-7/8	46-1/2	5-1/4	5-1/16	4-13/16	2-1/2	1/2	348

900 Class Alternate Studded Inlet

Size & Type	All Temperature Classes								Vent NPT (see caution)	Approx. Weight lbs.
	A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.		
1-1/4" 2716	5-1/2	5-1/4	24-5/8	28-1/2	3-3/8	2-15/16	4-7/16	2-3/4	1/2	82
1-1/2" 2726	5-3/4	5-1/2	27-3/4	31-5/8	3-3/8	3-13/16	4-9/16	2-7/8	1/2	108
2" 2736	7-3/4	7	33	38-3/4	4-1/8	4-5/16	5-11/16	3-1/8	1/2	201
2-1/2" 2756	7-5/8	7-1/2	40-1/8	46-3/4	5-1/4	5-1/16	5-1/16	3-1/8	1/2	348

Notes:

1. When using the EVT-I or the hydrosset device 381mm clearance is required.
2. When using the EVT-II 432mm clearance is required. When using the assisted closing device, an additional 203mm clearance is required.



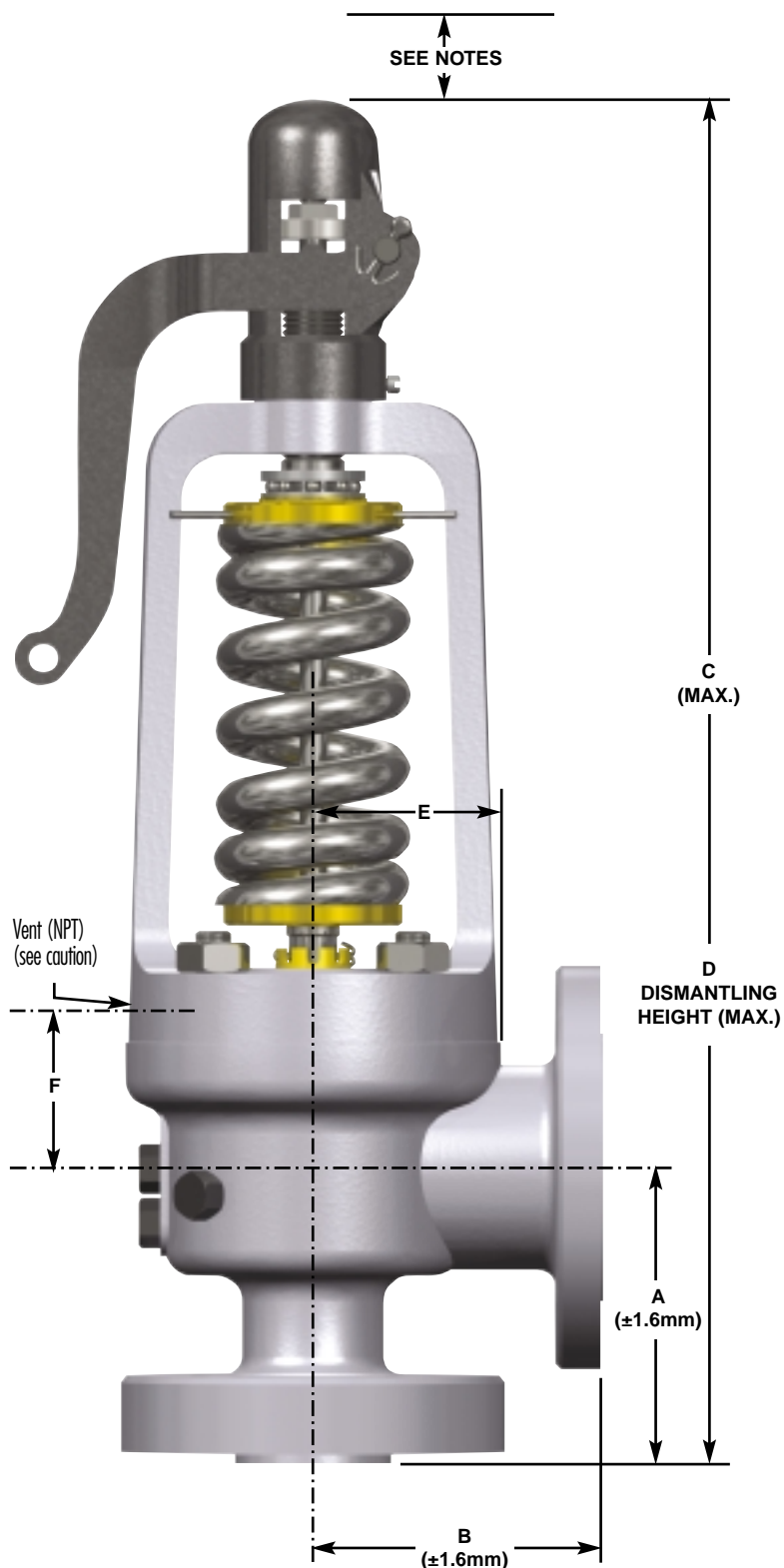
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

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CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.



600 Class Flanged Inlet

Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm		
1-1/2" 2715	133.4	133.4	619.1	717.6	85.7	74.6	106.4	1/2	39
2" 2725	133.4	139.7	692.2	790.6	85.7	96.8	106.4	1/2	51
2-1/2" 2735	184.2	177.8	825.5	971.6	104.8	109.5	131.8	1/2	95
3" 2755	187.3	190.5	1012.8	1181.1	133.4	128.6	122.2	3/4	153
3" 2745	187.3	190.5	1012.8	1181.1	133.4	128.6	122.2	3/4	153
4" 2765	200.0	228.6	1130.3	1301.8	165.1	146.1	134.9	1	201
6" 2775Q	269.9	266.7	1355.7	1552.6	206.4	173.0	182.6	1	240

900 Class Flanged Inlet

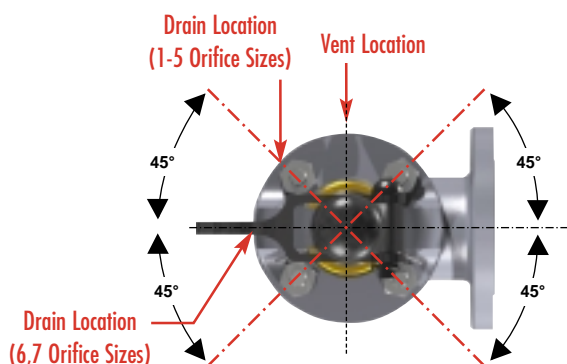
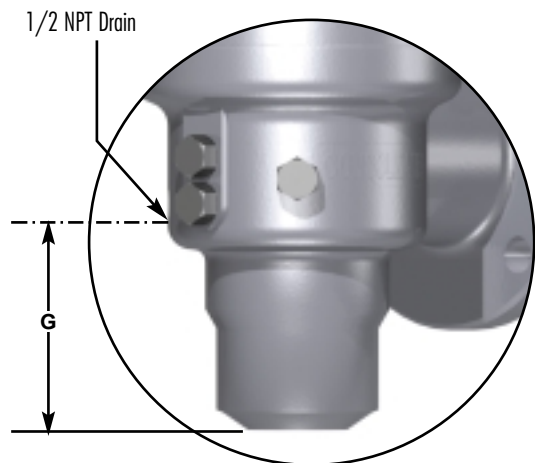
Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm		
1-1/2" 2716	139.7	133.4	625.5	723.9	85.7	74.6	112.7	1/2	40
2" 2726	146.1	139.7	704.9	803.3	85.7	96.8	119.1	1/2	58
2-1/2" 2736	196.9	177.8	838.2	984.3	104.8	109.5	144.5	1/2	102
3" 2756	193.7	190.5	1019.2	1187.5	133.4	128.6	128.6	3/4	158
3" 2746	193.7	190.5	1019.2	1187.5	133.4	128.6	128.6	3/4	158
4" 2766	206.4	228.6	1136.7	1308.1	165.1	146.1	141.3	1	204
6" 2776Q	279.4	266.7	1365.3	1562.1	206.4	173.0	192.1	1	261

1500 Class Flanged Inlet

Size & Type	All Temperature Classes							Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm		
1-1/2" 2717	139.7	133.4	625.5	723.9	85.7	74.6	112.7	1/2	40
2" 2727	146.1	139.7	704.9	803.3	85.7	96.8	119.1	1/2	58
2-1/2" 2737	196.9	177.8	838.2	984.3	104.8	109.5	144.5	3/4	102
3" 2757	203.2	190.5	1028.7	1197.0	133.4	128.6	138.1	3/4	163
3" 2747	203.2	190.5	1028.7	1197.0	133.4	128.6	138.1	3/4	163
4" 2767	215.9	228.6	1146.2	1317.6	165.1	146.1	150.8	1	214
6" 2777Q	304.8	266.7	1390.7	1587.5	206.4	173.0	217.5	1	287

Notes:

1. When using the EVT-I or the hydrosset device 381mm clearance is required.
2. When using the EVT-II 432mm clearance is required. When using the assisted closing device, an additional 203mm clearance is required.



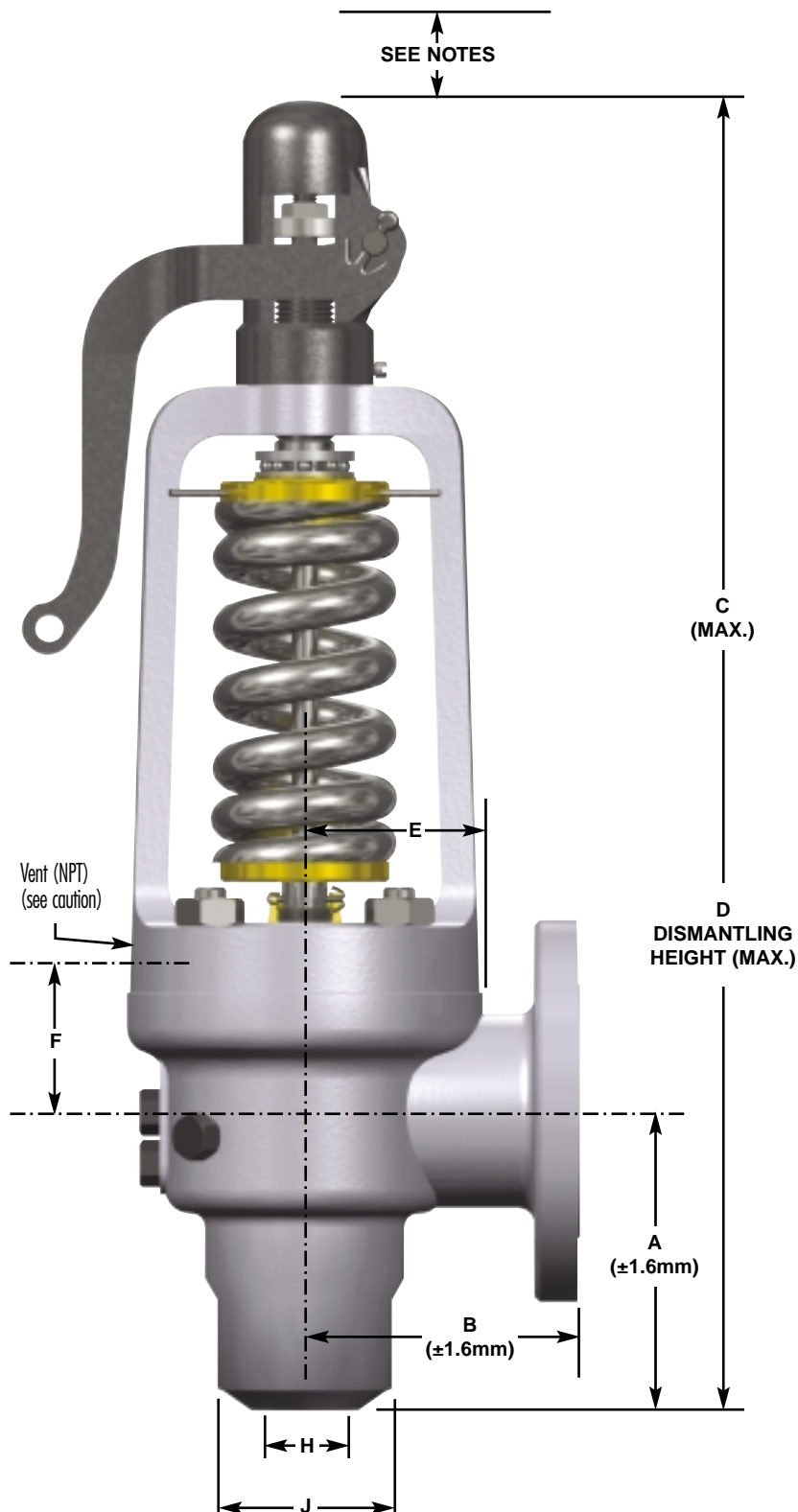
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

!

CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.

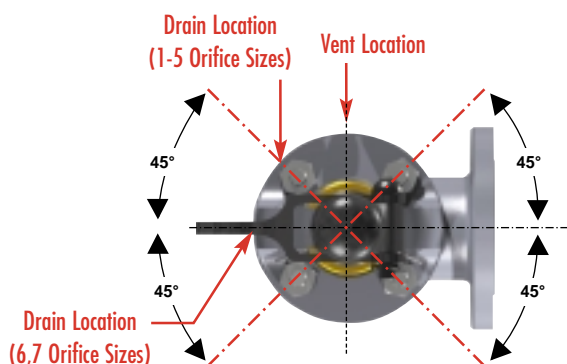
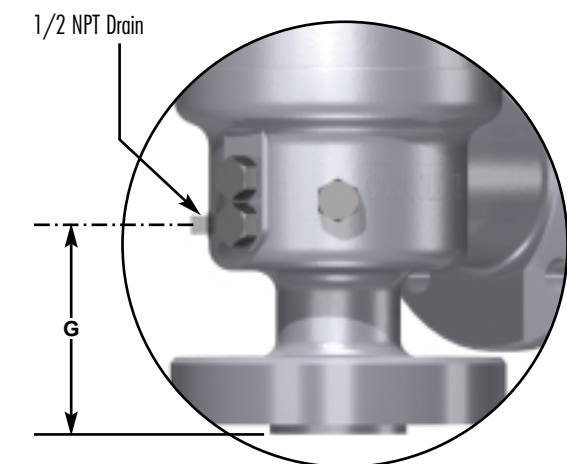


1500 Class Welded Inlet

Size & Type	All Temperature Classes										Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm			
1-1/2" 2717W	146.1	133.4	631.8	730.3	85.7	74.6	119.1	38.1	85.7	1/2	40	
2" 2727W	146.1	139.7	704.9	803.3	85.7	96.8	119.1	50.8	101.6	1/2	58	
2-1/2" 2737W	203.2	177.8	844.6	990.6	104.8	109.5	150.8	63.5	120.7	1/2	102	
3" 2757W	228.6	190.5	1054.1	1222.4	133.4	128.6	163.5	76.2	136.5	3/4	158	
3" 2747W	228.6	190.5	1054.1	1222.4	133.4	128.6	163.5	76.2	142.9	3/4	158	
4" 2767W	254.0	228.6	1184.3	1355.7	165.1	146.1	188.9	101.6	177.8	1	204	
6" 2777QW	304.8	266.7	1390.7	1587.5	206.4	173.0	242.9	152.4	215.9	1	261	

Notes:

1. When using the EVT-I or the hydrosset device 381 mm clearance is required.
2. When using the EVT-II 432 mm clearance is required. When using the assisted closing device, an additional 203 mm clearance is required.



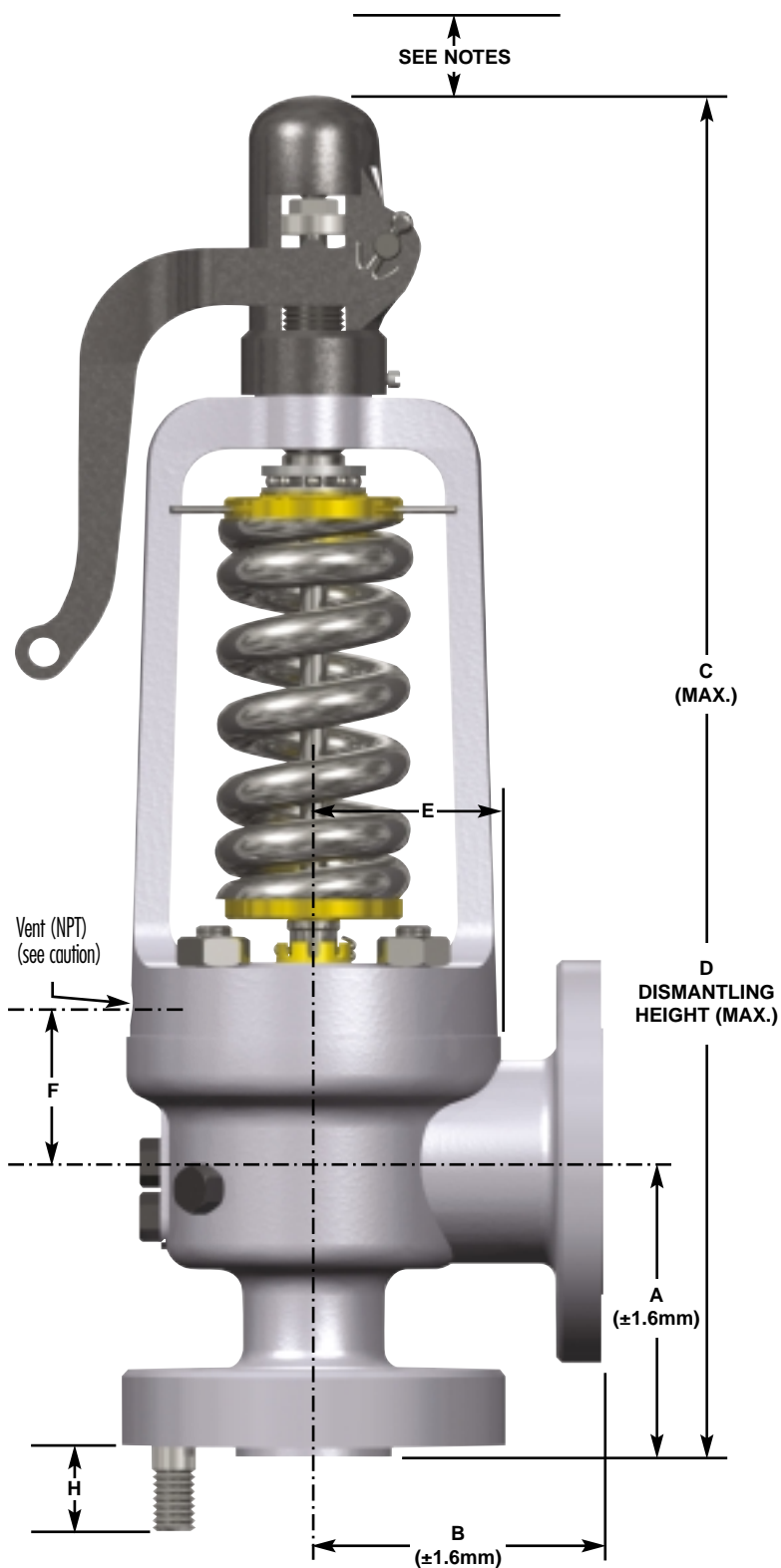
Cap and lever may be rotated horizontally 45° to either side of outlet centerline.

!

CAUTION

Steam flow will occur through the coverplate vent when the valve is in the open position. Do not plug. Pipe to safe location. Refer to maintenance manual for instructions.

For lever clearance dimensions see page 2700.17 and 2700.18.

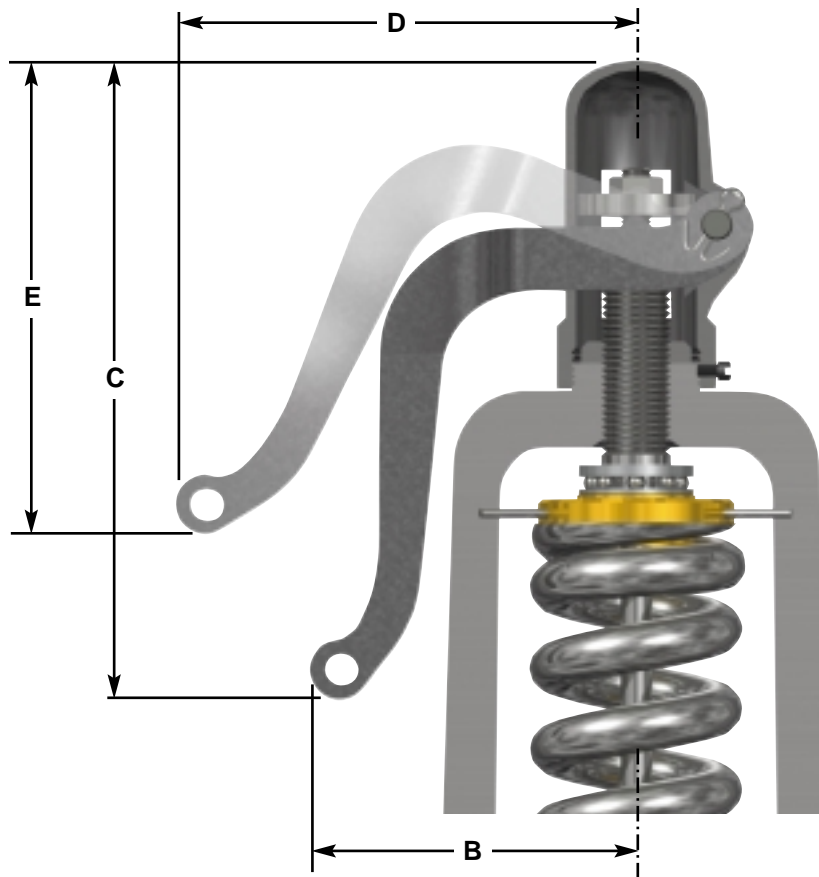


600 Class Alternate Studded Inlet

Size & Type	All Temperature Classes								Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm		
1-1/4" 2715	133.4	133.4	619.1	717.6	85.7	74.6	106.4	54.0	1/2	37
1-1/2" 2725	133.4	139.7	692.2	790.6	85.7	96.8	106.4	63.5	1/2	50
2" 2735	184.2	177.8	825.5	971.6	104.8	109.5	131.8	60.3	1/2	92
2-1/2" 2755	187.3	190.5	1012.8	1181.1	133.4	128.6	122.2	63.5	1/2	160

900 Class Alternate Studded Inlet

Size & Type	All Temperature Classes								Vent NPT (see caution)	Approx. Weight kg
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm		
1-1/4" 2716	139.7	133.4	625.7	724.1	85.7	74.6	112.8	69.9	1/2	37
1-1/2" 2726	146.1	139.7	705.1	803.6	85.7	96.8	115.9	73.1	1/2	50
2" 2736	196.9	177.8	838.5	984.6	104.8	109.5	144.5	79.4	1/2	92
2-1/2" 2756	193.7	190.5	1019.5	1187.9	133.4	128.6	128.6	79.4	1/2	160



Lever Clearance Dimensions

Size & Type	All Temperature Classes			
	B in.	C in.	D in.	E in.
1-1/2" 2715	5-7/8	10-3/4	6-5/8	10-1/16
1-1/2" 2716				
1-1/2" 2717				
2" 2725	5-7/8	10-3/4	6-5/8	10-1/16
2" 2726				
2" 2727				
2-1/2" 2735	5-7/8	16-1/8	12-3/8	11-1/2
2-1/2" 2736				
2-1/2" 2737				
3" 2755	8-5/16	23-3/4	14-9/16	20
3" 2756				
3" 2757				
3" 2745	8-5/16	23-3/4	14-9/16	20
3" 2746				
3" 2747				
4" 2765	8-5/16	23-3/4	14-9/16	20
4" 2766				
4" 2767				
6" 2775Q	8-5/16	29	14-9/16	22
6" 2776Q				
6" 2777Q				

Lever Clearance Dimensions

Size & Type	All Temperature Classes			
	B mm	C mm	D mm	E mm
1-1/2" 2715	149.2	273.1	168.3	255.6
1-1/2" 2716				
1-1/2" 2717				
2" 2725	149.2	273.1	168.3	255.6
2" 2726				
2" 2727				
2-1/2" 2735	149.2	409.6	314.3	292.1
2-1/2" 2736				
2-1/2" 2737				
3" 2755	211.1	603.3	369.9	508.0
3" 2756				
3" 2757				
3" 2745	211.1	603.3	369.9	508.0
3" 2746				
3" 2747				
4" 2765	211.1	603.3	369.9	508.0
4" 2766				
4" 2767				
6" 2775Q	211.1	736.6	369.9	558.8
6" 2776Q				
6" 2777Q				

Set pressure limits (psig) for 2700
flanged & buttweld safety valves
at designated temperature (°F)

Meets ASME B&PVC Section I, (2001 Edition), and ASME B16.34, (1996 Edition)

600 Pressure class																			
Temperature Class			B	B	B	B	B	B	B	B	B	B	D	D	D	D	D	D	
Base Material Flanged			WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	
Valve Type	Inlet CL_600	Outlet Flange	100-300°F	350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F
2715	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2725	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2735	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2755	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2745	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2765	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2775Q	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290

900 Pressure Class																			
Temperature Class			B	B	B	B	B	B	B	B	B	B	D	D	D	D	D	D	
Base Material Flanged			WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	
Valve Type	Inlet CL_900	Outlet Flange	100-300°F	350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F
2716	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2726	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2736	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2756	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2746	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2766	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
2776Q	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1525	1460	1350	955	650	562	430

Set pressure limits (psig) for 2700 flanged & buttweld safety valves at designated temperature (°F)

Meets ASME B&PVC Section I, (2001 Edition), and ASME B16.34, (1996 Edition)

1500 Pressure Class

			Temperature Class		B	B	B	B	B	B	B	B	D	D	D	D	D	D
			Base Material Flanged		WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6
			Base Material Buttweld (Note 1)		WCC	WCC	WCC	WCC	WCC	WCC	WCC	WCC	WC6	WC6	WC6	WC6	WC6	WC6
Valve Type	Inlet CL_1500	Outlet Flange	100-350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F
2717	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
2727	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1500
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1500
2737	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1400
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1400 *1550
2757	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1325
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1325 *1550
2747	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1325
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1325 *1550
2767	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1540	1175
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1540 *1550	*1550 1175 *1550
2777Q	Flange	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1595	1080	936	720
	ButtWeld	CL_150	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1200	1040	800
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	*1550 1200 *1550	*1550 1040 *1550	*1550 800 *1550

Notes:

1. Consult the factory. Set pressure limits for butt weld valves can be further limited by butt weld dimensions.

*Meets ASME Section I, Code Case 1876-2, but does not meet ANSI B16.34 (1996 Edition)

Set pressure limits (psig) for 2700 flanged & buttweld safety valves at designated temperature (°F)

Meets ASME B&PVC Section I, (2001 Edition), ASME B16.34 and Non-Mandatory Code ASME B31.1-Appendix II — (Note 1)

600 Pressure Class

Temperature Class Base Material Flanged			B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	D WC6	D WC6	D WC6	D WC6	D WC6	D WC6	
Valve Type	Inlet CL_600	Outlet Flange	100-300°F	350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F
2715	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	812	637	430	374	275
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2725	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	863	734	624	510	417	308	267	206
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2735	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	275
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2755	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	275
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2745	Flange	CL_150	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	812	637	430	374	275
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2765	Flange	CL_150	1020	1020	1020	1020	1020	1020	1020	863	745	663	576	490	409	321	242	210	161
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290
2775Q	Flange	CL_150	1020	1020	1020	1020	1020	1020	1020	863	745	663	576	490	409	321	242	210	161
		CL_300	1445	1415	1385	1357	1330	1270	1210	1175	1135	1065	1015	975	900	640	430	374	290

900 Pressure Class

Temperature Class Base Material Flanged			B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	B WC6	D WC6	D WC6	D WC6	D WC6	D WC6	D WC6	D WC6
Valve Type	Inlet CL_900	Outlet Flange	100-300°F	350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F
2716	Flange	150#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1489	1241	1056	812	637	480	409	314
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2726	Flange	150#	1389	1389	1389	1389	1389	1389	1389	1192	1035	863	734	624	510	417	308	267	206
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2736	Flange	150#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	410
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2756	Flange	150#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1346	1077	796	588	510	392
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2746	Flange	150#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1459	1241	1035	812	637	480	409	314
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2766	Flange	150#	1020	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430
2776Q	Flange	150#	1020	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161
		300#	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1525	1460	1350	955	650	562	430

Notes:

- ASME B31.1 - Appendix II analysis is limited to calculating valve outlet pressure and temperature.
The calculated outlet pressure and temperature, using ASME B31.1 Appendix II analysis, complies with ASME B16.34.
The valve inlet pressure/temperature rating is in compliance with ASME B16.34.

Set pressure limits (psig) for 2700 flanged & buttweld safety valves at designated temperature (°F)

Meets ASME B&PVC Section I, (2001 Edition), ASME B16.34 and Non-Mandatory Code ASME B31.1-Appendix II) — (Note 1)

1500 Pressure Class

Temperature Class			B	B	B	B	B	B	B	B	B	D	D	D	D	D	D		
Base Material Flanged			WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6	WC6		
Base Material Buttweld (Note 2)			WCC	WCC	WCC	WCC	WCC	WCC	WCC	WCC	WCC	WC6	WC6	WC6	WC6	WC6	WC6		
Valve Type	Inlet CL_1500	Outlet Flange	100-350°F	400°F	450°F	500°F	550°F	600°F	650°F	700°F	750°F	800°F	850°F	900°F	950°F	1000°F	1020°F	1050°F	
2717	Flange	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1489	1241	1056	812	637	480	409	314	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1489	1241	1056	812	637	480	409	314	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1550
2727	Flange	CL_150	1389	1389	1389	1389	1389	1389	1192	1035	863	734	624	510	417	308	267	206	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1389	1389	1389	1389	1389	1389	1192	1035	863	734	624	510	417	308	267	206	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1485
2737	Flange	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1216	829	600	553
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1216	829	600	553
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1380
2757	Flange	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1346	1077	796	588	510	392	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1346	1077	796	588	510	392	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1305
2747	Flange	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1459	1241	1035	812	637	480	409	314	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1550	1550	1550	1550	1550	1550	1550	1550	1459	1241	1035	812	637	480	409	314	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1305
2767	Flange	CL_150	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1150
2777Q	Flange	CL_150	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161	
		CL_300	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1080	936	720	
	ButtWeld	CL_150	1020	1020	1020	1020	1020	1020	863	749	663	576	490	409	321	242	210	161	
		CL_300	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1550	1550	760	

Notes:

- ASME B31.1 - Appendix II analysis is limited to calculating valve outlet pressure and temperature.
The calculated outlet pressure and temperature, using ASME B31.1 Appendix II analysis, complies with ASME B16.34.
The valve inlet pressure/temperature rating is in compliance with ASME B16.34.
- Consult the factory. Set pressure limits for buttweld valves can be further limited by buttweld dimensions.

ASME, B & PVC, Section I rating - 2001 Edition

pounds per hour saturated steam at 3% overpressure,
90% of actual capacity

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W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation Orifice Area Sq.In. Set Pressure (psig)	1	2	3	5	4	6	Q
	0.994	1.431	2.545	3.341	3.976	7.07	12.25
100	5290	7615	13544	17780	21160	37626	65195
105	5521	7949	14137	18558	22086	39273	68047
110	5753	8282	14729	19336	23012	40919	70900
115	5984	8615	15322	20114	23938	42565	73752
120	6215	8948	15915	20892	24863	44212	76605
125	6447	9282	16507	21670	25789	45858	79458
130	6678	9615	17100	22449	26715	47505	82310
135	6910	9948	17693	23227	27641	49151	85163
140	7141	10281	18285	24005	28567	50797	88016
145	7373	10614	18878	24783	29493	52444	90868
150	7604	10948	19471	25561	30419	54090	93721
155	7836	11281	20063	26339	31345	55736	96573
160	8067	11614	20656	27117	32271	57383	99426
165	8299	11947	21249	27895	33196	59029	102279
170	8530	12281	21841	28673	34122	60676	105131
175	8762	12614	22434	29451	35048	62322	107984
180	8993	12947	23026	30229	35974	63968	110837
185	9225	13280	23619	31007	36900	65615	113689
190	9456	13614	24212	31785	37826	67261	116542
195	9688	13947	24804	32563	38752	68907	119394
200	9919	14280	25397	33341	39678	70554	122247
205	10150	14613	25990	34119	40603	72200	125100
210	10382	14946	26582	34897	41529	73847	127952
215	10613	15280	27175	35675	42455	75493	130805
220	10845	15613	27768	36453	43381	77139	133658
225	11076	15946	28360	37231	44307	78786	136510
230	11308	16279	28953	38009	45233	80432	139363
235	11539	16613	29546	38787	46159	82078	142215
240	11771	16946	30138	39565	47085	83725	145068
245	12002	17279	30731	40343	48010	85371	147921
250	12234	17612	31324	41121	48936	87018	150773
255	12465	17946	31916	41899	49862	88664	153626
260	12697	18279	32509	42677	50788	90310	156479
265	12928	18612	33101	43455	51714	91957	159331
270	13160	18945	33694	44233	52640	93603	162184
275	13391	19279	34287	45011	53566	95249	165036
280	13623	19612	34879	45789	54492	96896	167889
285	13854	19945	35472	46567	55418	98542	170742
290	14085	20278	36065	47345	56343	100189	173594
295	14317	20611	36657	48123	57269	101835	176447
300	14548	20945	37250	48901	58195	103481	179300
305	14780	21278	37843	49679	59121	105128	182152
310	15011	21611	38435	50457	60047	106774	185005
315	15243	21944	39028	51235	60973	108420	187857
320	15474	22278	39621	52013	61899	110067	190710
325	15706	22611	40213	52791	62825	111713	193563
330	15937	22944	40806	53569	63750	113360	196415
335	16169	23277	41399	54347	64676	115006	199268
340	16400	23611	41991	55125	65602	116652	202121
345	16632	23944	42584	55903	66528	118299	204973
350	16863	24277	43176	56681	67454	119945	207826
355	17095	24610	43769	57459	68380	121591	210679
360	17326	24943	44362	58237	69306	123238	213531
365	17558	25277	44954	59015	70232	124884	216384

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K= .878

A= flow area in sq. in.

P= (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
370	17789	25610	45547	59793	71158	126531	219236
375	18020	25943	46140	60571	72083	128177	222089
380	18252	26276	46732	61349	73009	129823	224942
385	18483	26610	47325	62127	73935	131470	227794
390	18715	26943	47918	62905	74861	133116	230647
395	18946	27276	48510	63683	75787	134762	233500
400	19178	27609	49103	64461	76713	136409	236352
405	19409	27943	49696	65239	77639	138055	239205
410	19641	28276	50288	66017	78565	139701	242057
415	19872	28609	50881	66795	79490	141348	244910
420	20104	28942	51474	67573	80416	142994	247763
425	20335	29276	52066	68351	81342	144641	250615
430	20567	29609	52659	69129	82268	146287	253468
435	20798	29942	53252	69907	83194	147933	256321
440	21030	30275	53844	70685	84120	149580	259173
445	21261	30608	54437	71463	85046	151226	262026
450	21493	30942	55029	72241	85972	152872	264878
455	21724	31275	55622	73019	86898	154519	267731
460	21955	31608	56215	73797	87823	156165	270584
465	22187	31941	56807	74575	88749	157812	273436
470	22418	32275	57400	75353	89675	159458	276289
475	22650	32608	57993	76131	90601	161104	279142
480	22881	32941	58585	76909	91527	162751	281994
485	23113	33274	59178	77687	92453	164397	284847
490	23344	33608	59771	78465	93379	166043	287699
495	23576	33941	60363	79243	94305	167690	290552
500	23807	34274	60956	80021	95230	169336	293405
505	24039	34607	61549	80799	96156	170983	296257
510	24270	34940	62141	81577	97082	172629	299110
515	24502	35274	62734	82355	98008	174275	301963
520	24733	35607	63327	83133	98934	175922	304815
525	24965	35940	63919	83911	99860	177568	307668
530	25196	36273	64512	84689	100786	179214	310520
535	25428	36607	65104	85467	101712	180861	313373
540	25659	36940	65697	86245	102637	182507	316226
545	25890	37273	66290	87023	103563	184154	319078
550	26122	37606	66882	87801	104489	185800	321931
555	26353	37940	67475	88579	105415	187446	324784
560	26585	38273	68068	89357	106341	189093	327636
565	26816	38606	68660	90135	107267	190739	330489
570	27048	38939	69253	90913	108193	192385	333341
575	27279	39273	69846	91691	109119	194032	336194
580	27511	39606	70438	92469	110045	195678	339047
585	27742	39939	71031	93247	110970	197325	341899
590	27974	40272	71624	94025	111896	198971	344752
595	28205	40605	72216	94803	112822	200617	347605
600	28437	40939	72809	95581	113748	202264	350457
605	28668	41272	73402	96359	114674	203910	353310
610	28900	41605	73994	97138	115600	205556	356163
615	29131	41938	74587	97916	116526	207203	359015
620	29363	42272	75179	98694	117452	208849	361868
625	29594	42605	75772	99472	118377	210496	364720
630	29825	42938	76365	100250	119303	212142	367573
635	30057	43271	76957	101028	120229	213788	370426

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K= .878

A= flow area in sq. in.

P= (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
640	30288	43605	77550	101806	121155	215435	373278
645	30520	43938	78143	102584	122081	217081	376131
650	30751	44271	78735	103362	123007	218727	378984
655	30983	44604	79328	104140	123933	220374	381836
660	31214	44937	79921	104918	124859	222020	384689
665	31446	45271	80513	105696	125785	223667	387541
670	31677	45604	81106	106474	126710	225313	390394
675	31909	45937	81699	107252	127636	226959	393247
680	32140	46270	82291	108030	128562	228606	396099
685	32372	46604	82884	108808	129488	230252	398952
690	32603	46937	83477	109586	130414	231898	401805
695	32835	47270	84069	110364	131340	233545	404657
700	33066	47603	84662	111142	132266	235191	407510
705	33298	47937	85254	111920	133192	236838	410362
710	33529	48270	85847	112698	134117	238484	413215
715	33760	48603	86440	113476	135043	240130	416068
720	33992	48936	87032	114254	135969	241777	418920
725	34223	49270	87625	115032	136895	243423	421773
730	34455	49603	88218	115810	137821	245069	424626
735	34686	49936	88810	116588	138747	246716	427478
740	34918	50269	89403	117366	139673	248362	430331
745	35149	50602	89996	118144	140599	250009	433183
750	35381	50936	90588	118922	141525	251655	436036
755	35612	51269	91181	119700	142450	253301	438889
760	35844	51602	91774	120478	143376	254948	441741
765	36075	51935	92366	121256	144302	256594	444594
770	36307	52269	92959	122034	145228	258240	447447
775	36538	52602	93552	122812	146154	259887	450299
780	36770	52935	94144	123590	147080	261533	453152
785	37001	53268	94737	124368	148006	263180	456004
790	37233	53602	95330	125146	148932	264826	458857
795	37464	53935	95922	125924	149857	266472	461710
800	37695	54268	96515	126702	150783	268119	464562
805	37927	54601	97107	127480	151709	269765	467415
810	38158	54934	97700	128258	152635	271411	470268
815	38390	55268	98293	129036	153561	273058	473120
820	38621	55601	98885	129814	154487	274704	475973
825	38853	55934	99478	130592	155413	276350	478825
830	39084	56267	100071	131370	156339	277997	481678
835	39316	56601	100663	132148	157264	279643	484531
840	39547	56934	101256	132926	158190	281290	487383
845	39779	57267	101849	133704	159116	282936	490236
850	40010	57600	102441	134482	160042	284582	493089
855	40242	57934	103034	135260	160968	286229	495941
860	40473	58267	103627	136038	161894	287875	498794
865	40705	58600	104219	136816	162820	289521	501647
870	40936	58933	104812	137594	163746	291168	504499
875	41168	59267	105405	138372	164672	292814	507352
880	41399	59600	105997	139150	165597	294461	510204
885	41630	59933	106590	139928	166523	296107	513057
890	41862	60266	107182	140706	167449	297753	515910
895	42093	60599	107775	141484	168375	299400	518762
900	42325	60933	108368	142262	169301	301046	521615
905	42556	61266	108960	143040	170227	302692	524468

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K= .878

A= flow area in sq. in.

P= (1.03 x set pressure) + 14.7

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Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
910	42788	61599	109553	143818	171153	304339	527320
915	43019	61932	110146	144596	172079	305985	530173
920	43251	62266	110738	145374	173004	307632	533025
925	43482	62599	111331	146152	173930	309278	535878
930	43714	62932	111924	146930	174856	310924	538731
935	43945	63265	112516	147708	175782	312571	541583
940	44177	63599	113109	148486	176708	314217	544436
945	44408	63932	113702	149264	177634	315863	547289
950	44640	64265	114294	150042	178560	317510	550141
955	44871	64598	114887	150820	179486	319156	552994
960	45103	64931	115480	151598	180412	320803	555846
965	45334	65265	116072	152376	181337	322449	558699
970	45565	65598	116665	153154	182263	324095	561552
975	45797	65931	117257	153932	183189	325742	564404
980	46028	66264	117850	154710	184115	327388	567257
985	46260	66598	118443	155488	185041	329034	570110
990	46491	66931	119035	156266	185967	330681	572962
995	46723	67264	119628	157044	186893	332327	575815
1000	46954	67597	120221	157822	187819	333974	578667
1005	47186	67931	120813	158600	188744	335620	581520
1010	47417	68264	121406	159378	189670	337266	584373
1015	47649	68597	121999	160156	190596	338913	587225
1020	47880	68930	122591	160934	191522	340559	590078
1025	48112	69264	123184	161712	192448	342205	592931
1030	48343	69597	123777	162490	193374	343852	595783
1035	48575	69930	124369	163268	194300	345498	598636
1040	48806	70263	124962	164046	195226	347145	601488
1045	49038	70596	125555	164824	196152	348791	604341
1050	49269	70930	126147	165602	197077	350437	607194
1055	49500	71263	126740	166380	198003	352084	610046
1060	49732	71596	127332	167158	198929	353730	612899
1065	49963	71929	127925	167936	199855	355376	615752
1070	50195	72263	128518	168714	200781	357023	618604
1075	50426	72596	129110	169492	201707	358669	621457
1080	50658	72929	129703	170270	202633	360316	624309
1085	50889	73262	130296	171049	203559	361962	627162
1090	51121	73596	130888	171827	204484	363608	630015
1095	51352	73929	131481	172605	205410	365255	632867
1100	51584	74262	132074	173383	206336	366901	635720
1105	51815	74595	132666	174161	207262	368547	638573
1110	52047	74929	133259	174939	208188	370194	641425
1115	52278	75262	133852	175717	209114	371840	644278
1120	52510	75595	134444	176495	210040	373487	647131
1125	52741	75928	135037	177273	210966	375133	649983
1130	52972	76261	135630	178051	211891	376779	652836
1135	53204	76595	136222	178829	212817	378426	655688
1140	53435	76928	136815	179607	213743	380072	658541
1145	53667	77261	137408	180385	214669	381718	661394
1150	53898	77594	138000	181163	215595	383365	664246
1155	54130	77928	138593	181941	216521	385011	667099
1160	54361	78261	139185	182719	217447	386658	669952
1165	54593	78594	139778	183497	218373	388304	672804
1170	54824	78927	140371	184275	219299	389950	675657
1175	55056	79261	140963	185053	220224	391597	678509

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P= (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
1180	55287	79594	141556	185831	221150	393243	681362
1185	55519	79927	142149	186609	222076	394889	684215
1190	55750	80260	142741	187387	223002	396536	687067
1195	55982	80593	143334	188165	223928	398182	689920
1200	56213	80927	143927	188943	224854	399829	692773
1205	56445	81260	144519	189721	225780	401475	695625
1210	56676	81593	145112	190499	226706	403121	698478
1215	56907	81926	145705	191277	227631	404768	701330
1220	57139	82260	146297	192055	228557	406414	704183
1225	57370	82593	146890	192833	229483	408060	707036
1230	57602	82926	147483	193611	230409	409707	709888
1235	57833	83259	148075	194389	231335	411353	712741
1240	58065	83593	148668	195167	232261	413000	715594
1245	58296	83926	149260	195945	233187	414646	718446
1250	58528	84259	149853	196723	234113	416292	721299
1255	58759	84592	150446	197501	235039	417939	724151
1260	58991	84926	151038	198279	235964	419585	727004
1265	59222	85259	151631	199057	236890	421231	729857
1270	59454	85592	152224	199835	237816	422878	732709
1275	59685	85925	152816	200613	238742	424524	735562
1280	59917	86258	153409	201391	239668	426170	738415
1285	60148	86592	154002	202169	240594	427817	741267
1290	60380	86925	154594	202947	241520	429463	744120
1295	60611	87258	155187	203725	242446	431110	746972
1300	60842	87591	155780	204503	243371	432756	749825
1305	61074	87925	156372	205281	244297	434402	752678
1310	61305	88258	156965	206059	245223	436049	755530
1315	61537	88591	157558	206837	246149	437695	758383
1320	61768	88924	158150	207615	247075	439341	761236
1325	62000	89258	158743	208393	248001	440988	764088
1330	62231	89591	159335	209171	248927	442634	766941
1335	62463	89924	159928	209949	249853	444281	769793
1340	62694	90257	160521	210727	250779	445927	772646
1345	62926	90590	161113	211505	251704	447573	775499
1350	63157	90924	161706	212283	252630	449220	778351
1355	63389	91257	162299	213061	253556	450866	781204
1360	63620	91590	162891	213839	254482	452512	784057
1365	63852	91923	163484	214617	255408	454159	786909
1370	64083	92257	164077	215395	256334	455805	789762
1375	64315	92590	164669	216173	257260	457452	792615
1380	64546	92923	165262	216951	258186	459098	795467
1385	64777	93256	165855	217729	259111	460744	798320
1390	65009	93590	166447	218507	260037	462391	801172
1395	65240	93923	167040	219285	260963	464037	804025
1400	65472	94256	167633	220063	261889	465683	806878
1405	65703	94589	168225	220841	262815	467330	809730
1410	65935	94923	168818	221619	263741	468976	812583
1415	66166	95256	169410	222397	264667	470623	815436
1420	66398	95589	170003	223175	265593	472269	818288
1425	66629	95922	170596	223953	266519	473915	821141
1430	66861	96255	171188	224731	267444	475562	823993
1435	67092	96589	171781	225509	268370	477208	826846
1440	67324	96922	172374	226287	269296	478854	829699
1445	67555	97255	172966	227065	270222	480501	832551

ASME, B & PVC, Section I rating - 2001 Edition

pounds per hour saturated steam at 3% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [1.906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.03 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
1450	67787	97588	173559	227843	271148	482147	835404
1455	68018	97922	174152	228621	272074	483794	838257
1460	68250	98255	174744	229399	273000	485440	841109
1465	68481	98588	175337	230177	273926	487086	843962
1470	68712	98921	175930	230955	274851	488733	846814
1475	68944	99255	176522	231733	275777	490379	849667
1480	69175	99588	177115	232511	276703	492025	852520
1485	69407	99921	177708	233289	277629	493672	855372
1490	69638	100254	178300	234067	278555	495318	858225
1495	69870	100587	178893	234845	279481	496965	861078
1500	70101	100921	179486	235623	280407	498611	863930
1505	70333	101254	180078	236401	281333	500257	866783
1510	70564	101587	180671	237179	282258	501904	869635
1515	70796	101920	181263	237957	283184	503550	872488
1520	71027	102254	181856	238735	284110	505196	875341
1525	71279	102616	182501	239582	285117	506987	878443
1530	71531	102979	183146	240428	286125	508779	881548
1535	71783	103342	183791	241276	287134	510573	884656
1540	72035	103705	184438	242124	288143	512368	887767
1545	72288	104069	185084	242973	289154	514164	890879
1550	72541	104433	185732	243823	290165	515963	893995
1555	72794	104797	186379	244673	291177	517762	897113
1560	73047	105161	187028	245524	292190	519563	900233
1565	73300	105526	187676	246376	293203	521365	903356
1570	73554	105891	188326	247229	294218	523169	906482
1575	73808	106257	188976	248082	295233	524975	909610
1580	74062	106623	189626	248936	296249	526782	912741
1585	74316	106989	190277	249790	297266	528590	915874
1590	74571	107355	190929	250646	298284	530400	919010
1595	74825	107722	191581	251502	299303	532212	922149
1600	75080	108089	192233	252358	300323	534025	925291

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
100	5604	8068	14350	18838	22418	39864	69072
105	5851	8424	14983	19669	23407	41622	72118
110	6099	8780	15615	20500	24396	43381	75165
115	6346	9136	16248	21331	25385	45139	78211
120	6593	9492	16881	22161	26374	46897	81258
125	6840	9848	17514	22992	27362	48655	84304
130	7087	10204	18147	23823	28351	50414	87351
135	7335	10559	18780	24654	29340	52172	90397
140	7582	10915	19413	25485	30329	53930	93444
145	7829	11271	20046	26316	31318	55688	96490
150	8076	11627	20679	27147	32306	57447	99537
155	8323	11983	21312	27978	33295	59205	102583
160	8571	12339	21945	28809	34284	60963	105630
165	8818	12695	22578	29639	35273	62722	108676
170	9065	13051	23211	30470	36262	64480	111723
175	9312	13406	23844	31301	37250	66238	114769
180	9559	13762	24476	32132	38239	67996	117816
185	9807	14118	25109	32963	39228	69755	120862
190	10054	14474	25742	33794	40217	71513	123909
195	10301	14830	26375	34625	41206	73271	126955
200	10548	15186	27008	35456	42195	75029	130002
205	10795	15542	27641	36287	43183	76788	133048
210	11043	15898	28274	37117	44172	78546	136095
215	11290	16254	28907	37948	45161	80304	139141
220	11537	16609	29540	38779	46150	82062	142188
225	11784	16965	30173	39610	47139	83821	145234
230	12031	17321	30806	40441	48127	85579	148281
235	12279	17677	31439	41272	49116	87337	151327
240	12526	18033	32072	42103	50105	89095	154374
245	12773	18389	32704	42934	51094	90854	157420
250	13020	18745	33337	43764	52083	92612	160467
255	13267	19101	33970	44595	53071	94370	163513
260	13515	19456	34603	45426	54060	96129	166560
265	13762	19812	35236	46257	55049	97887	169606
270	14009	20168	35869	47088	56038	99645	172653
275	14256	20524	36502	47919	57027	101403	175699
280	14503	20880	37135	48750	58015	103162	178746
285	14751	21236	37768	49581	59004	104920	181792
290	14998	21592	38401	50412	59993	106678	184839
295	15245	21948	39034	51242	60982	108436	187885
300	15492	22303	39667	52073	61971	110195	190932
305	15739	22659	40300	52904	62959	111953	193978
310	15987	23015	40932	53735	63948	113711	197025
315	16234	23371	41565	54566	64937	115469	200071
320	16481	23727	42198	55397	65926	117228	203118
325	16728	24083	42831	56228	66915	118986	206164
330	16975	24439	43464	57059	67903	120744	209211
335	17223	24795	44097	57890	68892	122502	212257
340	17470	25151	44730	58720	69881	124261	215304
345	17717	25506	45363	59551	70870	126019	218350
350	17964	25862	45996	60382	71859	127777	221397
355	18211	26218	46629	61213	72847	129536	224443
360	18459	26574	47262	62044	73836	131294	227490
365	18706	26930	47895	62875	74825	133052	230536

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
370	18953	27286	48528	63706	75814	134810	233583
375	19200	27642	49161	64537	76803	136569	236629
380	19448	27998	49793	65367	77792	138327	239676
385	19695	28353	50426	66198	78780	140085	242722
390	19942	28709	51059	67029	79769	141843	245769
395	20189	29065	51692	67860	80758	143602	248815
400	20436	29421	52325	68691	81747	145360	251862
405	20684	29777	52958	69522	82736	147118	254908
410	20931	30133	53591	70353	83724	148876	257955
415	21178	30489	54224	71184	84713	150635	261001
420	21425	30845	54857	72015	85702	152393	264048
425	21672	31201	55490	72845	86691	154151	267094
430	21920	31556	56123	73676	87680	155909	270141
435	22167	31912	56756	74507	88668	157668	273187
440	22414	32268	57389	75338	89657	159426	276234
445	22661	32624	58021	76169	90646	161184	279280
450	22908	32980	58654	77000	91635	162943	282327
455	23156	33336	59287	77831	92624	164701	285373
460	23403	33692	59920	78662	93612	166459	288420
465	23650	34048	60553	79493	94601	168217	291466
470	23897	34403	61186	80323	95590	169976	294513
475	24144	34759	61819	81154	96579	171734	297559
480	24392	35115	62452	81985	97568	173492	300606
485	24639	35471	63085	82816	98556	175250	303652
490	24886	35827	63718	83647	99545	177009	306698
495	25133	36183	64351	84478	100534	178767	309745
500	25380	36539	64984	85309	101523	180525	312791
505	25628	36895	65617	86140	102512	182283	315838
510	25875	37250	66249	86970	103500	184042	318884
515	26122	37606	66882	87801	104489	185800	321931
520	26369	37962	67515	88632	105478	187558	324977
525	26616	38318	68148	89463	106467	189316	328024
530	26864	38674	68781	90294	107456	191075	331070
535	27111	39030	69414	91125	108444	192833	334117
540	27358	39386	70047	91956	109433	194591	337163
545	27605	39742	70680	92787	110422	196350	340210
550	27852	40098	71313	93618	111411	198108	343256
555	28100	40453	71946	94448	112400	199866	346303
560	28347	40809	72579	95279	113389	201624	349349
565	28594	41165	73212	96110	114377	203383	352396
570	28841	41521	73845	96941	115366	205141	355442
575	29088	41877	74478	97772	116355	206899	358489
580	29336	42233	75110	98603	117344	208657	361535
585	29583	42589	75743	99434	118333	210416	364582
590	29830	42945	76376	100265	119321	212174	367628
595	30077	43300	77009	101096	120310	213932	370675
600	30324	43656	77642	101926	121299	215690	373721
605	30572	44012	78275	102757	122288	217449	376768
610	30819	44368	78908	103588	123277	219207	379814
615	31066	44724	79541	104419	124265	220965	382861
620	31313	45080	80174	105250	125254	222723	385907
625	31560	45436	80807	106081	126243	224482	388954
630	31808	45792	81440	106912	127232	226240	392000
635	32055	46147	82073	107743	128221	227998	395047

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K=.878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/ temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
640	32302	46503	82706	108574	129209	229757	398093
645	32549	46859	83338	109404	130198	231515	401140
650	32796	47215	83971	110235	131187	233273	404186
655	33044	47571	84604	111066	132176	235031	407233
660	33291	47927	85237	111897	133165	236790	410279
665	33538	48283	85870	112728	134153	238548	413326
670	33785	48639	86503	113559	135142	240306	416372
675	34032	48995	87136	114390	136131	242064	419419
680	34280	49350	87769	115221	137120	243823	422465
685	34527	49706	88402	116051	138109	245581	425512
690	34774	50062	89035	116882	139097	247339	428558
695	35021	50418	89668	117713	140086	249097	431605
700	35268	50774	90301	118544	141075	250856	434651
705	35516	51130	90934	119375	142064	252614	437698
710	35763	51486	91566	120206	143053	254372	440744
715	36010	51842	92199	121037	144041	256130	443791
720	36257	52197	92832	121868	145030	257889	446837
725	36504	52553	93465	122699	146019	259647	449884
730	36752	52909	94098	123529	147008	261405	452930
735	36999	53265	94731	124360	147997	263164	455977
740	37246	53621	95364	125191	148985	264922	459023
745	37493	53977	95997	126022	149974	266680	462070
750	37740	54333	96630	126853	150963	268438	465116
755	37988	54689	97263	127684	151952	270197	468163
760	38235	55044	97896	128515	152941	271955	471209
765	38482	55400	98529	129346	153930	273713	474256
770	38729	55756	99162	130177	154918	275471	477302
775	38976	56112	99795	131007	155907	277230	480349
780	39224	56468	100427	131838	156896	278988	483395
785	39471	56824	101060	132669	157885	280746	486442
790	39718	57180	101693	133500	158874	282504	489488
795	39965	57536	102326	134331	159862	284263	492535
800	40212	57892	102959	135162	160851	286021	495581
805	40460	58247	103592	135993	161840	287779	498628
810	40707	58603	104225	136824	162829	289537	501674
815	40954	58959	104858	137654	163818	291296	504721
820	41201	59315	105491	138485	164806	293054	507767
825	41448	59671	106124	139316	165795	294812	510814
830	41696	60027	106757	140147	166784	296571	513860
835	41943	60383	107390	140978	167773	298329	516907
840	42190	60739	108023	141809	168762	300087	519953
845	42437	61094	108655	142640	169750	301845	523000
850	42684	61450	109288	143471	170739	303604	526046
855	42932	61806	109921	144302	171728	305362	529093
860	43179	62162	110554	145132	172717	307120	532139
865	43426	62518	111187	145963	173706	308878	535186
870	43673	62874	111820	146794	174694	310637	538232
875	43920	63230	112453	147625	175683	312395	541279
880	44168	63586	113086	148456	176672	314153	544325
885	44415	63942	113719	149287	177661	315911	547372
890	44662	64297	114352	150118	178650	317670	550418
895	44909	64653	114985	150949	179638	319428	553465
900	45156	65009	115618	151780	180627	321186	556511
905	45404	65365	116251	152610	181616	322944	559558

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review/pressure temperature limits.

Pressure/ temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
910	45651	65721	116883	153441	182605	324703	562604
915	45898	66077	117516	154272	183594	326461	565651
920	46145	66433	118149	155103	184582	328219	568697
925	46392	66789	118782	155934	185571	329978	571744
930	46640	67144	119415	156765	186560	331736	574790
935	46887	67500	120048	157596	187549	333494	577837
940	47134	67856	120681	158427	188538	335252	580883
945	47381	68212	121314	159257	189527	337011	583930
950	47628	68568	121947	160088	190515	338769	586976
955	47876	68924	122580	160919	191504	340527	590023
960	48123	69280	123213	161750	192493	342285	593069
965	48370	69636	123846	162581	193482	344044	596116
970	48617	69991	124479	163412	194471	345802	599162
975	48864	70347	125112	164243	195459	347560	602209
980	49112	70703	125744	165074	196448	349318	605255
985	49359	71059	126377	165905	197437	351077	608302
990	49606	71415	127010	166735	198426	352835	611348
995	49853	71771	127643	167566	199415	354593	614395
1000	50100	72127	128276	168397	200403	356351	617441
1005	50348	72483	128909	169228	201392	358110	620488
1010	50595	72839	129542	170059	202381	359868	623534
1015	50842	73194	130175	170890	203370	361626	626581
1020	51089	73550	130808	171721	204359	363385	629627
1025	51336	73906	131441	172552	205347	365143	632674
1030	51584	74262	132074	173383	206336	366901	635720
1035	51831	74618	132707	174213	207325	368659	638766
1040	52078	74974	133340	175044	208314	370418	641813
1045	52325	75330	133972	175875	209303	372176	644859
1050	52572	75686	134605	176706	210291	373934	647906
1055	52820	76041	135238	177537	211280	375692	650952
1060	53067	76397	135871	178368	212269	377451	653999
1065	53314	76753	136504	179199	213258	379209	657045
1070	53561	77109	137137	180030	214247	380967	660092
1075	53808	77465	137770	180861	215235	382725	663138
1080	54056	77821	138403	181691	216224	384484	666185
1085	54303	78177	139036	182522	217213	386242	669231
1090	54550	78533	139669	183353	218202	388000	672278
1095	54797	78888	140302	184184	219191	389758	675324
1100	55044	79244	140935	185015	220179	391517	678371
1105	55292	79600	141568	185846	221168	393275	681417
1110	55539	79956	142200	186677	222157	395033	684464
1115	55786	80312	142833	187508	223146	396792	687510
1120	56033	80668	143466	188338	224135	398550	690557
1125	56281	81024	144099	189169	225124	400308	693603
1130	56528	81380	144732	190000	226112	402066	696650
1135	56775	81736	145365	190831	227101	403825	699696
1140	57022	82091	145998	191662	228090	405583	702743
1145	57269	82447	146631	192493	229079	407341	705789
1150	57517	82803	147264	193324	230068	409099	708836
1155	57764	83159	147897	194155	231056	410858	711882
1160	58011	83515	148530	194986	232045	412616	714929
1165	58258	83871	149163	195816	233034	414374	717975
1170	58505	84227	149796	196647	234023	416132	721022
1175	58753	84583	150429	197478	235012	417891	724068

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K= .878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/ temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
1180	59000	84938	151061	198309	236000	419649	727115
1185	59247	85294	151694	199140	236989	421407	730161
1190	59494	85650	152327	199971	237978	423165	733208
1195	59741	86006	152960	200802	238967	424924	736254
1200	59989	86362	153593	201633	239956	426682	739301
1205	60236	86718	154226	202464	240944	428440	742347
1210	60483	87074	154859	203294	241933	430199	745394
1215	60730	87430	155492	204125	242922	431957	748440
1220	60977	87785	156125	204956	243911	433715	751487
1225	61225	88141	156758	205787	244900	435473	754533
1230	61472	88497	157391	206618	245888	437232	757580
1235	61719	88853	158024	207449	246877	438990	760626
1240	61966	89209	158657	208280	247866	440748	763673
1245	62213	89565	159289	209111	248855	442506	766719
1250	62461	89921	159922	209941	249844	444265	769766
1255	62708	90277	160555	210772	250832	446023	772812
1260	62955	90633	161188	211603	251821	447781	775859
1265	63202	90988	161821	212434	252810	449539	778905
1270	63449	91344	162454	213265	253799	451298	781952
1275	63697	91700	163087	214096	254788	453056	784998
1280	63944	92056	163720	214927	255776	454814	788045
1285	64191	92412	164353	215758	256765	456572	791091
1290	64438	92768	164986	216589	257754	458331	794138
1295	64685	93124	165619	217419	258743	460089	797184
1300	64933	93480	166252	218250	259732	461847	800231
1305	65180	93835	166885	219081	260721	463606	803277
1310	65427	94191	167517	219912	261709	465364	806324
1315	65674	94547	168150	220743	262698	467122	809370
1320	65921	94903	168783	221574	263687	468880	812417
1325	66169	95259	169416	222405	264676	470639	815463
1330	66416	95615	170049	223236	265665	472397	818510
1335	66663	95971	170682	224067	266653	474155	821556
1340	66910	96327	171315	224897	267642	475913	824603
1345	67157	96682	171948	225728	268631	477672	827649
1350	67405	97038	172581	226559	269620	479430	830696
1355	67652	97394	173214	227390	270609	481188	833742
1360	67899	97750	173847	228221	271597	482946	836789
1365	68146	98106	174480	229052	272586	484705	839835
1370	68393	98462	175113	229883	273575	486463	842882
1375	68641	98818	175745	230714	274564	488221	845928
1380	68888	99174	176378	231544	275553	489979	848975
1385	69135	99530	177011	232375	276541	491738	852021
1390	69382	99885	177644	233206	277530	493496	855068
1395	69629	100241	178277	234037	278519	495254	858114
1400	69877	100597	178910	234868	279508	497013	861161
1405	70124	100953	179543	235699	280497	498771	864207
1410	70371	101309	180176	236530	281485	500529	867254
1415	70618	101665	180809	237361	282474	502287	870300
1420	70865	102021	181442	238192	283463	504046	873347
1425	71120	102387	182094	239047	284482	505857	876485
1430	71389	102774	182782	239951	285557	507770	879799
1435	71658	103162	183472	240856	286634	509685	883117
1440	71928	103550	184162	241762	287712	511601	886438
1445	72197	103938	184852	242668	288791	513519	889761

ASME, B & PVC, Section VIII rating - 2001 Edition

pounds per hour saturated steam at 10% overpressure,
90% of actual capacity

W=51.5KAP for "P" less than or equal to 1580 psia

W=51.5KAP x [.1906P-1000/.2292P-1061] for "P" greater than 1580 psia

K=.878

A= flow area in sq. in.

P= (1.10 x set pressure) + 14.7

Apply correction factor for capacities on superheated steam. Correction factor tables begin on page 2700.35. Review pressure/temperature limits.

Pressure/ temperature tables begin on page 2700.19. The 2700 is certified as a restricted lift valve and capacities can be restricted down to 30% of its full rated capacity.

Orifice Designation & Area - Square Inches

Orifice Designation	1	2	3	5	4	6	Q
Orifice Area Sq.In.	0.994	1.431	2.545	3.341	3.976	7.07	12.25
Set Pressure (psig)							
1450	72467	104327	185543	243575	289870	515439	893087
1455	72737	104716	186235	244483	290951	517360	896416
1460	73008	105105	186927	245392	292032	519283	899748
1465	73278	105494	187620	246302	293115	521208	903083
1470	73549	105884	188313	247212	294198	523134	906421
1475	73820	106275	189007	248123	295282	525062	909762
1480	74092	106665	189702	249035	296368	526992	913106
1485	74363	107056	190397	249948	297454	528924	916453
1490	74635	107448	191093	250862	298541	530857	919803
1495	74907	107839	191790	251776	299630	532792	923155
1500	75179	108231	192487	252691	300719	534729	926511
1505	75452	108624	193185	253608	301809	536668	929870
1510	75725	109016	193883	254524	302900	538608	933232
1515	75998	109409	194582	255442	303992	540550	936597
1520	76271	109803	195282	256361	305086	542494	939966
1525	76545	110197	195983	257280	306180	544440	943337
1530	76818	110591	196684	258201	307275	546388	946711
1535	77092	110985	197385	259122	308371	548337	950089
1540	77367	111380	198088	260044	309469	550288	953470
1545	77641	111776	198791	260967	310567	552241	956854
1550	77916	112171	199495	261891	311667	554196	960241
1555	78191	112567	200199	262815	312767	556153	963632
1560	78467	112964	200904	263741	313868	558112	967025
1565	78742	113361	201610	264667	314971	560072	970422
1570	79018	113758	202316	265595	316075	562035	973823
1575	79294	114156	203023	266523	317179	563999	977226
1580	79571	114554	203731	267452	318285	565965	980633
1585	79848	114952	204440	268382	319392	567933	984044
1590	80125	115351	205149	269313	320500	569904	987457
1595	80402	115750	205859	270245	321609	571876	990874
1600	80679	116149	206569	271178	322719	573850	994295

Superheat Correction Factor

Flowing Pressure*	Superheat Correction Factor K _{sh} Total Temperature, °F, of Superheated Steam																
(psia)	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
50	0.987	0.957	0.930	0.905	0.882	0.861	0.841	0.823	0.805	0.789	0.774	0.759	0.745	0.732	0.719	0.708	0.696
100	0.998	0.963	0.935	0.909	0.885	0.864	0.843	0.825	0.807	0.790	0.775	0.760	0.746	0.733	0.720	0.708	0.697
150	0.984	0.970	0.940	0.913	0.888	0.866	0.846	0.826	0.808	0.792	0.776	0.761	0.747	0.733	0.721	0.709	0.697
200	0.979	0.977	0.945	0.917	0.892	0.869	0.848	0.828	0.810	0.793	0.777	0.762	0.748	0.734	0.721	0.709	0.698
250	-	0.972	0.951	0.921	0.895	0.871	0.850	0.830	0.812	0.794	0.778	0.763	0.749	0.735	0.722	0.710	0.698
300	-	0.968	0.957	0.926	0.898	0.874	0.852	0.832	0.813	0.796	0.780	0.764	0.750	0.736	0.723	0.710	0.699
350	-	0.968	0.963	0.930	0.902	0.877	0.854	0.834	0.815	0.797	0.781	0.765	0.750	0.736	0.723	0.711	0.699
400	-	-	0.963	0.935	0.906	0.880	0.857	0.836	0.816	0.798	0.782	0.766	0.751	0.737	0.724	0.712	0.700
450	-	-	0.961	0.940	0.909	0.883	0.859	0.838	0.818	0.800	0.783	0.767	0.752	0.738	0.725	0.712	0.700
500	-	-	0.961	0.946	0.914	0.886	0.862	0.840	0.820	0.801	0.784	0.768	0.753	0.739	0.725	0.713	0.701
550	-	-	0.962	0.952	0.918	0.889	0.864	0.842	0.822	0.803	0.785	0.769	0.754	0.740	0.726	0.713	0.701
600	-	-	0.964	0.958	0.922	0.892	0.867	0.844	0.823	0.804	0.787	0.770	0.755	0.740	0.727	0.714	0.702
650	-	-	0.968	0.958	0.927	0.896	0.869	0.846	0.825	0.806	0.788	0.771	0.756	0.741	0.728	0.715	0.702
700	-	-	-	0.958	0.931	0.899	0.872	0.848	0.827	0.807	0.789	0.772	0.757	0.742	0.728	0.715	0.703
750	-	-	-	0.958	0.936	0.903	0.875	0.850	0.828	0.809	0.790	0.774	0.758	0.743	0.729	0.716	0.703
800	-	-	-	0.960	0.942	0.906	0.878	0.852	0.830	0.810	0.792	0.774	0.759	0.744	0.730	0.716	0.704
850	-	-	-	0.962	0.947	0.910	0.880	0.855	0.832	0.812	0.793	0.776	0.760	0.744	0.730	0.717	0.704
900	-	-	-	0.965	0.953	0.914	0.883	0.857	0.834	0.813	0.794	0.777	0.760	0.745	0.731	0.718	0.705
950	-	-	-	0.969	0.958	0.918	0.886	0.860	0.836	0.815	0.796	0.778	0.761	0.746	0.732	0.718	0.705
1000	-	-	-	0.974	0.959	0.923	0.890	0.862	0.838	0.816	0.797	0.779	0.762	0.747	0.732	0.719	0.706
1050	-	-	-	-	0.960	0.927	0.893	0.864	0.840	0.818	0.798	0.780	0.763	0.748	0.733	0.719	0.707
1100	-	-	-	-	0.962	0.931	0.896	0.867	0.842	0.820	0.800	0.781	0.764	0.749	0.734	0.720	0.707
1150	-	-	-	-	0.964	0.936	0.899	0.870	0.844	0.821	0.801	0.782	0.765	0.749	0.735	0.721	0.708
1200	-	-	-	-	0.966	0.941	0.903	0.872	0.846	0.823	0.802	0.784	0.766	0.750	0.735	0.721	0.708
1250	-	-	-	-	0.969	0.946	0.906	0.875	0.848	0.825	0.804	0.785	0.767	0.751	0.736	0.722	0.709
1300	-	-	-	-	0.973	0.952	0.910	0.878	0.850	0.826	0.805	0.786	0.768	0.752	0.737	0.723	0.709
1350	-	-	-	-	0.977	0.958	0.914	0.880	0.852	0.828	0.807	0.787	0.769	0.753	0.737	0.723	0.710
1400	-	-	-	-	0.982	0.963	0.918	0.883	0.854	0.830	0.808	0.788	0.770	0.754	0.738	0.724	0.710
1450	-	-	-	-	0.987	0.968	0.922	0.886	0.857	0.832	0.809	0.790	0.771	0.754	0.739	0.724	0.711
1500	-	-	-	-	0.993	0.970	0.926	0.889	0.859	0.833	0.811	0.791	0.772	0.755	0.740	0.725	0.711
1550	-	-	-	-	-	0.972	0.930	0.892	0.861	0.835	0.812	0.792	0.773	0.756	0.740	0.726	0.712
1600	-	-	-	-	-	0.973	0.934	0.894	0.863	0.836	0.813	0.792	0.774	0.756	0.740	0.726	0.712
1650	-	-	-	-	-	0.973	0.936	0.895	0.863	0.836	0.812	0.791	0.772	0.755	0.739	0.724	0.710
1700	-	-	-	-	-	0.973	0.938	0.895	0.863	0.835	0.811	0.790	0.771	0.754	0.738	0.723	0.709
1750	-	-	-	-	-	0.974	0.940	0.896	0.862	0.835	0.810	0.789	0.770	0.752	0.736	0.721	0.707
1800	-	-	-	-	-	0.975	0.942	0.897	0.862	0.834	0.810	0.788	0.768	0.751	0.735	0.720	0.705

Notes:

1. For capacity on superheated steam, multiply saturated steam capacity by correction factor.
2. Convert set pressure from (psig) to (psia) flowing pressure.

* PSIA flowing=

[set pressure psig x overpressure] + 14.7

Hydrostatic Test Plugs

For butt weld inlet valves shipped, hydrostatic test plugs are normally installed to increase “set point” approximately 1.5 times the valve set pressure for hydrostatic testing. It is strongly recommended that hydrostatic test plugs be used, in conjunction with proper gag and gagging procedure, during hydrostatic testing to avoid valve component damage.

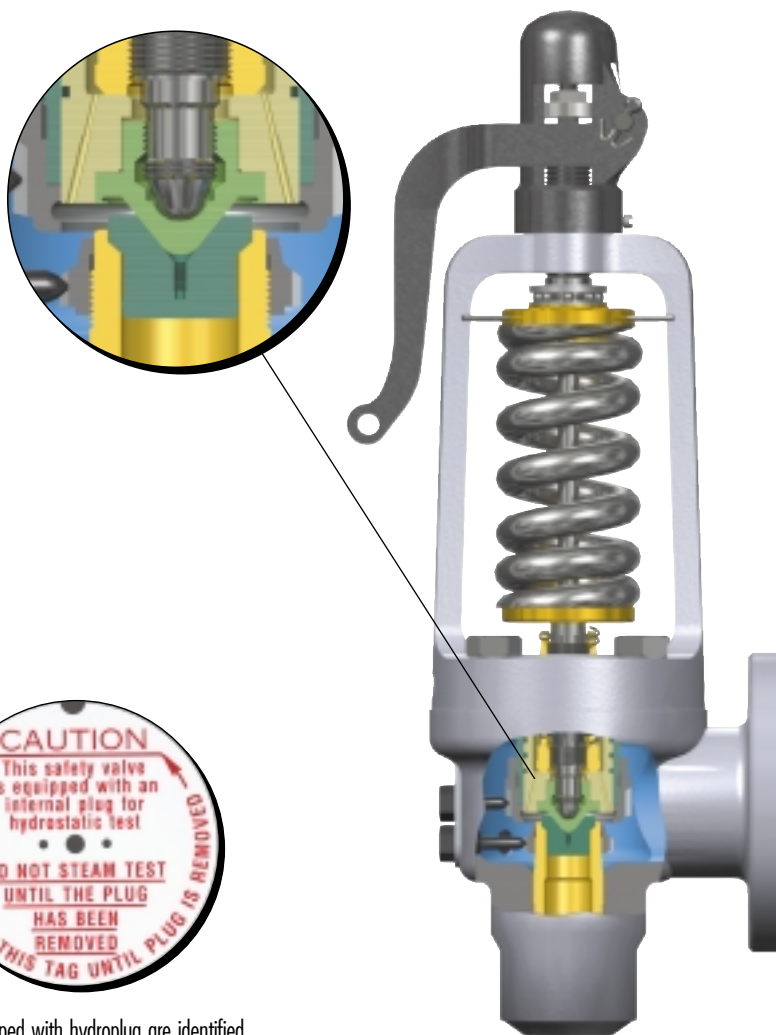
For flanged inlet valves shipped, hydrostatic test plugs are not normally installed. It is suggested that the valve not be installed until after the unit hydrostatic test has been performed utilizing “blind” flanges to blank-off the unit nozzles.

Note 1: Hydrostatic plugs may be added or deleted upon specific request.

Note 2: Consult maintenance manual for hydrostatic test and gag procedures.

2700

Hydrostatic Test Plugs (Note 1) Installed Before Shipping	
Inlet Type	
Flanged Inlet	No
Butt weld Inlet	Yes



2700

Valves shipped with hydroplug are identified by a Red on White Caution Tag which is attached to the valve by wires extending through the drain hole in the valve body.