



**Section IV  
Heating Boilers**

## 10-600 Series High Capacity Safety Relief Valves for Hot Water Heating Boilers

High-capacity heating system valves with female inlet, expanded or standard female outlet. Elevated seat for drainage of water away from seat area. Entire pressure range is National Board capacity certified.



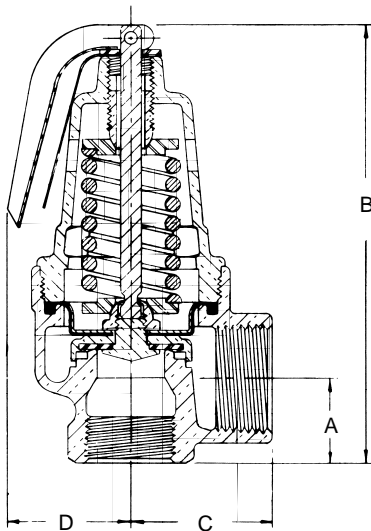
ASME Section IV  
Inlet Sizes 3/4" to 2"  
Pressures from 15-160 psig  
Maximum temperature service 250°F

**Applications:** Hot water heating boilers and hot water supply systems

**Features**

- High Btu capacity rating
- Silicone seat
- Fabric reinforced molded diaphragm isolates spring from water at all times
- Bronze body and spring cage
- Registered in Canadian provinces and territories CRN #0G8547.5C
- Protects against excessive water pressure due to failure of controls to regulate Btu input

**Dimensions and Weights**



Model Number	Size(in./mm.)		Certified Pressure Range psig	Wt./100 (lbs./kg.)	Dimensions (in./mm.)			
	Inlet NPT	Outlet NPT			A	B	C	D
10-604	3/4F	3/4F	15-160	232	1.06	5.25	1.62	1.56
	20	20		105.2	26	133	41	39
10-614	3/4F	1 F	15-160	226	1.25	5.25	1.72	1.56
	20	25		102.5	31	133	43	39
10-605	1F	1F	15-160	410	1.25	6.69	2.00	2.00
	25	25		185.9	31	169	50	50
10-615	1 F	1-1/4F	15-160	390	1.25	6.69	2.00	2.00
	25	32		176.9	31	169	50	50
10-606	1-1/4F	1-1/4F	15-160	795	1.25	6.37	2.44	2.62
	32	32		360.5	31	161	60	67
10-616	1-1/4F	1-1/2F	15-160	755	1.25	8.37	2.94	2.62
	32	40		342.4	31	212	62	67
10-607	1-1/2F	1-1/2F	15-160	1100	2.00	10.75	2.75	3.12
	40	40		498.9	50	273	69	79
10-617	1-1/2F	2F	15-160	1145	2.00	10.75	2.75	3.12
	40	50		519.3	50	273	69	79
10-608	2F	2F	15-160	2375	2.19	14.00	3.69	3.50
	50	50		1077.1	55	355	93	88
10-618	2F	2-1/2F	15-160	2315	2.19	14.00	3.66	3.50
	50	65		1049.9	55	355	92	88

**P/N Suffix Key**

Set Pressure psig	Suffix	Set Pressure psig	Suffix
15	-01	85	-17
20	-02	90	-18
22	-03	95	-19
25	-04	100	-20
30	-05	105	-21
35	-06	110	-22
40	-07	115	-23
43	-08	120	-24
45	-09	125	-25
50	-10	130	-30
55	-11	135	-31
60	-12	140	-32
65	-13	145	-33
70	-14	150	-34
75	-15	155	-35
80	-16	160	-36

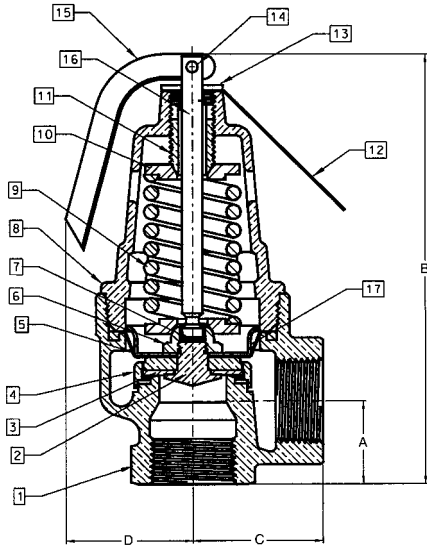
**ORDERING CODE:**

Use two-digit suffix number to indicate Inlet x Outlet size and set pressure.

**EXAMPLE:**

10-615-12 = 1"x1-1/4" 10-610 set 60 psig  
10-608-05 = 2"x2" 10-600 set 30 psig

## 10-600 Series ASME Section IV High Capacity Safety Relief Valves for Hot Water Heating Boilers



### Materials

Item	Component	Material
1	BODY	BRONZE ALLOY C84400
2	SEAT INSERT	BRASS ASTM B-16
3	SEAT	SILICONE
4	DISC	BRASS ASTM B-16
5	DIAPHRAGM	FABRIC REINFORCE EPDM
6	STEM NUT	STEEL PLATED
7	SPACER	SILICONE
8	CAP	BRONZE ALLOY C84400
9	SPRING	PLATED ASTM A228
10	SPRING WASHER	AISI 12L14 STEEL
11	ADJ. SCREW	BRASS ASTM B-16
12	NAMEPLATE	ALUMINUM
13	LIFT WASHER	STEEL PLATED
14	HANDLE RIVET	STEEL PLATED
15	LIFT HANDLE	STEEL PLATED
16	STEM NUT	STEEL PLATED
17	DIAPHRAGM RET.	STEEL PLATED



**ASME Section IV Hot Water**  
**BRITISH THERMAL UNITS PER HOUR (KILOCALORIES PER HOUR) AT 10% OVER-**  
**PRESSURE. NATIONAL BOARD CERTIFIED. RATINGS ARE 90% OF ACTUAL.**



U.S. Customary Units Btu/hr.						Metric Units Kcal/hr.					
Model	10-604	10-605	10-606	10-607	10-608	Model	10-604	10-605	10-606	10-607	10-608
Number	3/4x3/4	1x1	1-1/4x1-1/4	1-1/2x1-1/2	2x2	Number	3/4x3/4	1x1	1-1/4x1-1/4	1-1/2x1-1/2	2x2
Set Pressure						Set Pressure					
psig						barg					
15	541,000	876,000	1,515,000	2,061,000	3,397,000	1.03	136	221	382	520	857
20	636,000	1,030,000	1,782,000	2,424,000	3,996,000	1.38	160	260	449	611	1,008
25	732,000	1,185,000	2,049,000	2,788,000	4,595,000	1.72	185	299	517	703	1,159
30	827,000	1,339,000	2,316,000	3,151,000	5,193,000	2.07	209	351	584	795	1,310
35	923,000	1,493,000	2,583,000	3,514,000	5,792,000	2.41	233	377	651	886	1,461
40	1,018,000	1,648,000	2,850,000	3,878,000	6,391,000	2.76	257	416	719	978	1,612
45	1,113,000	1,802,000	3,117,000	4,241,000	6,990,000	3.10	281	454	786	1,070	1,763
50	1,209,000	1,956,000	3,384,000	4,604,000	7,589,000	3.45	305	493	853	1,161	1,914
55	1,304,000	2,111,000	3,651,000	4,968,000	8,188,000	3.79	329	532	921	1,253	2,065
60	13,99,000	2,265,000	3,918,000	5,331,000	8,786,000	4.14	353	571	988	1,344	2,219
65	1,495,000	2,420,000	4,185,000	5,694,000	9,385,000	4.48	377	610	1,055	1,436	2,367
70	1,590,000	2,574,000	4,453,000	6,058,000	9,984,000	4.83	401	649	1,123	1,528	2,518
75	1,686,000	2,728,000	4,720,000	6,421,000	10,583,000	5.17	425	688	1,190	1,619	2,669
80	1,781,000	2,883,000	4,987,000	6,784,000	11,182,000	5.51	449	727	1,258	1,711	2,820
85	1,876,000	3,037,000	5,254,000	7,148,000	11,780,000	5.86	473	766	1,325	1,803	2,971
90	1,972,000	3,192,000	5,521,000	7,511,000	12,379,000	6.20	497	805	1,393	1,894	3,122
95	2,067,000	3,346,000	5,788,000	7,874,000	12,978,000	6.55	521	844	1,560	1,986	3,273
100	2,162,000	3,500,000	6,055,000	8,238,000	13,577,000	6.89	545	883	1,527	2,076	3,424
105	2,258,000	3,655,000	6,322,000	8,601,000	14,176,000	7.24	569	922	1,594	2,169	3,575
110	2,353,000	3,809,000	6,589,000	8,964,000	14,775,000	7.58	593	961	1,662	2,261	3,726
115	2,449,000	3,963,000	6,856,000	9,327,000	15,373,000	7.93	618	999	1,729	2,352	3,877
120	2,544,000	4,118,000	7,123,000	9,691,000	15,972,000	8.27	642	1,039	1,796	2,444	4,028
125	2,639,000	4,272,000	7,390,000	10,054,000	16,571,000	8.62	666	1,077	1,864	2,536	4,179
130	2,735,000	4,427,000	7,657,000	10,417,000	17,170,000	8.96	690	1,116	1,931	2,627	4,330
135	2,830,000	4,581,000	7,924,000	10,781,000	17,769,000	9.31	714	1,155	1,998	2,719	4,481
140	2,925,000	4,735,000	8,191,000	11,144,000	18,368,000	9.65	738	1,194	2,066	2,811	4,632
145	3,021,000	4,890,000	8,458,000	11,507,000	18,966,000	10.00	762	1,233	2,133	2,902	4,783
150	3,116,000	5,044,000	8,725,000	11,871,000	19,565,000	10.34	786	1,272	2,200	2,994	4,934
155	3,212,000	5,199,000	8,992,000	12,234,000	20,164,000	10.69	810	1,311	2,268	3,085	5,085
160	3,307,000	53,53,000	9,260,000	12,597,000	20,763,000	11.03	834	1,350	2,335	3,177	5,236

# 10-610 Series

## ASME Section IV High Capacity Safety Relief Valves for Hot Water Heating Boilers

### ASME Section IV Hot Water

**BRITISH THERMAL UNITS PER HOUR (KILOCALORIES PER HOUR) AT 10% OVER-PRESSURE. NATIONAL BOARD CERTIFIED. RATINGS ARE 90% OF ACTUAL.**



U.S. Customary Units Btu/hr.						Metric Units Kcal/hr.					
Model Number	10-614 3/4x1	10-615 1x1-1/4	10-616 1-1/4x1-1/2	10-617 1-1/2x2	10-618 2x2-1/2	Model Number	10-614 3/4x1	10-615 1x1-1/4	10-616 1-1/4x1-1/2	10-617 1-1/2x2	10-618 2x2-1/2
Set Pressure						Set Pressure					
psig						barg					
15	635,000	1,027,000	1,777,000	2,417,000	3,984,000	1.03	160	259	448	610	1,005
20	746,000	1,208,000	2,090,000	2,843,000	4,686,000	1.38	188	305	527	717	1,182
25	858,000	1,389,000	2,403,000	3,270,000	5,389,000	1.72	216	350	606	825	1,359
30	970,000	1,570,000	2,716,000	3,696,000	6,091,000	2.07	245	396	645	932	1,536
35	1,082,000	1,751,000	3,030,000	4,122,000	6,793,000	2.41	273	442	765	1,040	1,713
40	1,194,000	1,933,000	3,343,000	4,548,000	7,496,000	2.76	301	488	843	1,147	1,890
45	1,306,000	2,114,000	3,656,000	4,974,000	8,198,000	3.10	329	533	922	1,254	2,067
50	1,418,000	2,295,000	3,969,000	5,400,000	8,900,000	3.45	358	579	932	1,362	2,244
55	1,529,000	2,476,000	4,283,000	5,826,000	9,603,000	3.79	386	624	1,080	1,469	2,422
60	1,641,000	2,657,000	4,596,000	6,252,000	10,305,000	4.14	414	670	1,159	1,577	2,599
65	1,753,000	2,838,000	4,909,000	6,679,000	11,007,000	4.48	442	716	1,238	1,684	2,776
70	1,865,000	3,019,000	5,222,000	7,105,000	11,710,000	4.83	470	761	1,317	1,792	2,953
75	1,977,000	3,200,000	5,535,000	7,531,000	12,412,000	5.17	498	807	1,396	1,899	3,130
80	2,089,000	3,381,000	5,849,000	7,957,000	13,114,000	5.51	527	827	1,475	2,007	3,307
85	2,201,000	3,562,000	6,162,000	8,383,000	13,817,000	5.86	555	898	1,554	2,114	3,485
90	2,313,000	3,743,000	6,475,000	8,809,000	14,519,000	6.20	583	944	1,633	2,222	3,662
95	2,424,000	3,924,000	6,788,000	9,235,000	15,221,000	6.55	611	990	1,712	2,329	3,839
100	2,536,000	4,105,000	7,101,000	9,661,000	15,924,000	6.89	640	1,035	1,791	2,437	4,016
105	2,648,000	4,286,000	7,415,000	10,088,000	16,626,000	7.24	668	1,081	1,870	2,544	4,193
110	2,760,000	4,468,000	7,728,000	10,514,000	17,328,000	7.58	696	1,127	1,949	2,652	4,370
115	2,872,000	4,649,000	8,041,000	10,940,000	18,031,000	7.93	724	1,172	2,028	2,759	4,547
120	2,984,000	4,830,000	8,354,000	11,366,000	18,733,000	8.27	752	1,218	2,107	2,866	4,724
125	3,096,000	5,011,000	8,668,000	11,792,000	19,435,000	8.62	781	1,264	2,186	2,974	4,901
130	3,207,000	5,192,000	8,981,000	12,218,000	20,138,000	8.96	809	1,309	2,265	3,081	5,079
135	3,319,000	5,373,000	9,294,000	12,644,000	20,840,000	9.31	837	1,355	2,344	3,189	5,256
140	3,431,000	5,554,000	9,607,000	13,070,000	21,543,000	9.65	865	1,401	2,423	3,296	5,433
145	3,543,000	5,735,000	9,920,000	13,497,000	22,245,000	9.10	893	1,446	2,502	3,404	5,610
150	3,655,000	5,916,000	10,234,000	13,923,000	22,947,000	10.34	922	1,492	2,581	3,511	5,787
155	3,767,000	6,097,000	10,547,000	14,349,000	23,650,000	10.69	950	1,538	2,660	3,619	5,964
160	3,879,000	6,278,000	10,860,000	14,775,000	24,352,000	11.03	978	1,583	2,739	3,726	6,141