

Series 4200

Safety Valves for ASME Section I and VIII
Boiler Applications



Type Numbering System

42				F	A				1	2-		1	7	0		
Series Number	Orifice Area			Seat Construction	Temp. & Materials				Inlet Class ¹		Inlet Facing		Cap Construction	Test Gag		
42	Orifice Letter	Actual Area Sq. In.	Actual Area m ²	A Metal Seat	Designation	Inlet Temperature	Material		0 150'	1 Raised Face	7 Open Lever	0 No Gag				
	F	0.316	204				Body & Bonnet	Spring					2 300	9 Ring Joint	1 Test Gag	
	G	0.518	334				1 up to 800 °F (427 °C)	Carbon Steel								Chrome Alloy
	H	0.809	522													
	J	1.325	855				3 801 to 1000 °F (427 to 538 °C)	Chrome Moly Steel ²								Chrome Alloy
	K	1.897	1224													
	L	2.938	1895													
	M	3.822	2466													
	N	4.471	2885													
	P	6.573	4241													
Q	11.39	7348														

Ordering Information

In order to assist you in the proper processing of your order, please specify the following information so that we may process your order as quickly and accurately as possible.

1. Quantity
2. Inlet and outlet sizes*
3. Farris type number*
4. Inlet and outlet flange class*
5. Set pressure*
6. Operating temperature*
7. Relieving temperature*
8. Allowable overpressure*
9. Fluid and state*
10. Required capacity*
11. Materials of construction if other than standard
12. Accessories, such as test gag
13. Code requirements
14. Any special testing or documentation requirements

*As a customer service, we verify your sizing and selection. To do this, we must have this information.

Parts Replacement

Valves – If an exact replacement valve is required, then the valve type, size and serial number must be specified to ensure proper dimensions and material being supplied. If a specific valve is obsolete, a recommendation of the current equivalent will be made if possible.

Spare Parts – When ordering parts, use part names as listed in the bills of materials. Specify valve type, size and serial number. If the serial number is not available, the original Farris factory order number will help us supply the proper part and material.

Springs – Order as an assembly to include spring with upper and lower spring buttons. Specify valve type, size, serial number, set pressure and backpressure, if any.

Note: If valve modification or set pressure changes are required, consideration must be given to correct the nameplate and other data.

General Notes:

1. Valves with 150# inlet flanges available on application. Consult the factory.
2. The 4200 Series uses a carbon steel open bonnet for all temperature ranges.

Features and Benefits

Open bonnet design: Ensures proper spring cooling for stability and alignment.

One piece guide: Ensures precise alignment of valve components.

Low stem bearing point: Ensures accurate transmission of spring forces to the disc for greater seat tightness.

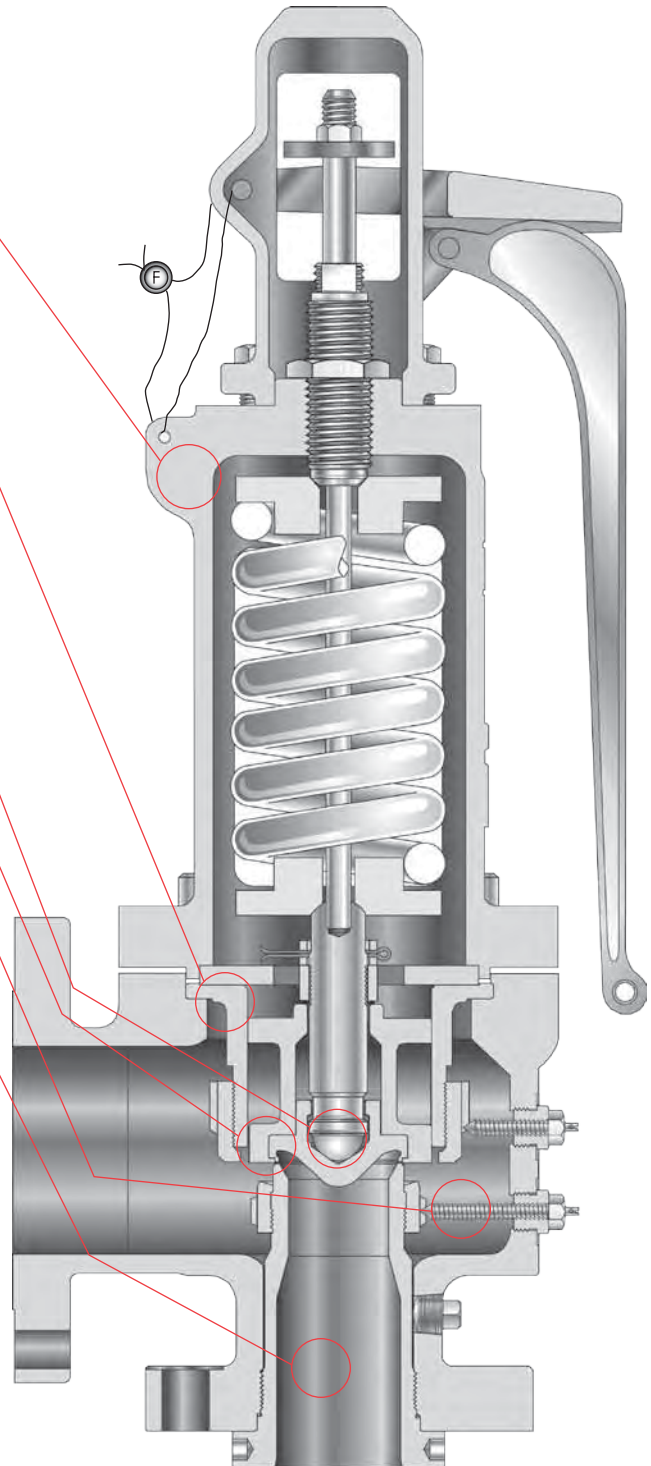
Temperature equalizing disc: Quickly conforms to any nozzle distortions experienced during a relief cycle and also assists in maintaining positive sealing.

Heavy stainless steel lock screw studs: For positive retention of adjusting ring positions.

Full nozzle design: For longer life and ease of maintenance. Nozzle easier to remove and service than designs using semi-nozzle construction.

FAST Centers

Look for the FAST tag on every 4200 series safety valve. This tag is your assurance that every valve has been assembled and tested to the highest quality standards. Farris FAST Centers also provide ready access to replacement parts and valves as well as factory trained personnel who can assist you with all of your pressure relief valve requirements.





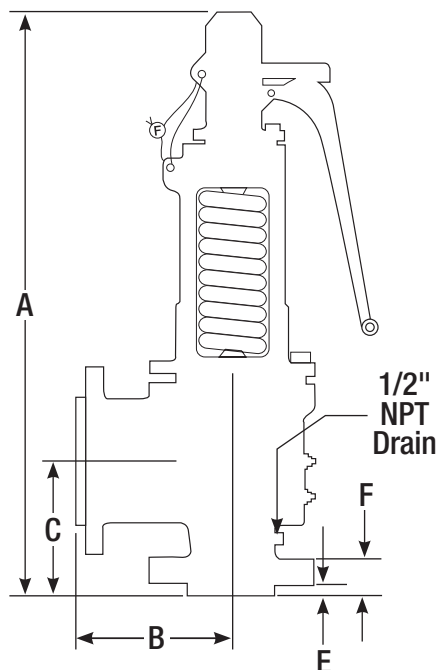
Selection Table – 4200 Series

US Customary System Units															
Orifice		Valve Size Inlet x Outlet	ANSI Flange Class		Type Number	Maximum Set Pressure, psig								Material	
Letter	Area sq. in.		Inlet RF	Outlet RF		300°F	400°F	500°F	600°F	700°F	800°F	900°F	1000°F	Body & Bonnet ²	Spring
F	0.316	1 1/4 x 1 1/2	300#	150#	42FA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		1 1/4 x 1 1/2	600#	150#	42FA13-170	1000	1000	1000	1000	1000	825	–	–		
		1 1/4 x 1 1/2	300#	150#	42FA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		1 1/4 x 1 1/2	600#	150#	42FA33-170	–	–	–	–	–	1000	900	430		
G	0.518	1 1/4 x 1 1/2	300#	150#	42GA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		1 1/4 x 1 1/2	600#	150#	42GA13-170	1000	1000	1000	1000	1000	825	–	–		
		1 1/4 x 1 1/2	300#	150#	42GA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		1 1/4 x 1 1/2	600#	150#	42GA33-170	–	–	–	–	–	1000	900	430		
H	0.809	1 1/2 x 2 1/2	300#	150#	42HA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		1 1/2 x 2 1/2	600#	150#	42HA13-170	1000	1000	1000	1000	1000	825	–	–		
		1 1/2 x 2 1/2	300#	150#	42HA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		1 1/2 x 2 1/2	600#	150#	42HA33-170	–	–	–	–	–	1000	900	430		
J	1.325	1 1/2 x 2 1/2	300#	150#	42JA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		1 1/2 x 2 1/2	600#	150#	42JA13-170	1000	1000	1000	1000	1000	825	–	–		
		1 1/2 x 2 1/2	300#	150#	42JA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		1 1/2 x 2 1/2	600#	150#	42JA33-170	–	–	–	–	–	1000	900	430		
K	1.897	2 x 3	300#	150#	42KA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		2 x 3	600#	150#	42KA13-170	1000	1000	1000	1000	1000	825	–	–		
		2 x 3	300#	150#	42KA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		2 x 3	600#	150#	42KA33-170	–	–	–	–	–	1000	900	430		
L	2.938	2 1/2 x 4	300#	150#	42LA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		2 1/2 x 4	600#	150#	42LA13-170	1000	1000	1000	1000	1000	825	–	–		
		2 1/2 x 4	300#	150#	42LA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		2 1/2 x 4	600#	150#	42LA33-170	–	–	–	–	–	1000	900	430		
M	3.822	3 x 4	300#	150#	42MA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		3 x 4	600#	150#	42MA13-170	1000	1000	1000	1000	1000	825	–	–		
		3 x 4	300#	150#	42MA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		3 x 4	600#	150#	42MA33-170	–	–	–	–	–	1000	900	430		
N	4.471	4 x 6	300#	150#	42NA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		4 x 6	600#	150#	42NA13-170	1000	1000	1000	1000	1000	825	–	–		
		4 x 6	300#	150#	42NA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		4 x 6	600#	150#	42NA33-170	–	–	–	–	–	1000	900	430		
P	6.573	4 x 6	300#	150#	42PA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		4 x 6	600#	150#	42PA13-170	1000	1000	1000	1000	1000	825	–	–		
		4 x 6	300#	150#	42PA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		4 x 6	600#	150#	42PA33-170	–	–	–	–	–	1000	900	430		
Q	11.39	6 x 8	300#	150#	42QA12-170	655	635	605	570	530	410	–	–	Carbon Steel	Chrome Alloy Steel
		6 x 8	600#	150#	42QA13-170	1000	1000	1000	1000	1000	825	–	–		
		6 x 8	300#	150#	42QA32-170	–	–	–	–	–	510	450	215	Chrome Moly Steel	
		6 x 8	600#	150#	42QA33-170	–	–	–	–	–	1000	900	430		

General Notes:

1. Class 150# inlet flanges available on application. Consult the factory.
2. The 4200 Series uses a carbon steel open bonnet for all temperature ranges.

Dimensions & Weights



Valve Size Inlet x Outlet	Type Number	ANSI Flange Class		U.S. Standard Dimensions (Inches)					Approx. Weight Lbs.	Metric Dimensions (millimeters)					Approx. Weight kg
		Inlet RF	Outlet RF	A	B	C	E	F		A	B	C	E	F	
1 1/4 x 1 1/2	42FA12-170	300#	150#	17 7/8	4 3/16	4 13/32	11/16	1 9/16	40	455	107	112	18	40	18
	42FA13-170	600#	150#	17 7/8	4 3/16	4 13/32	11/16	1 9/16	40	455	107	112	18	40	18
1 1/4 x 1 1/2	42GA12-170	300#	150#	17 7/8	4 3/16	4 13/32	11/16	1 9/16	40	455	107	112	18	40	18
	42GA13-170	600#	150#	17 7/8	4 3/16	4 13/32	11/16	1 9/16	40	455	107	112	18	40	18
1 1/2 x 2 1/2	42HA12-170	300#	150#	21 1/2	4 7/8	4 3/4	11/16	1 5/8	69	547	124	121	18	42	31
	42HA13-170	600#	150#	21 1/2	4 7/8	4 3/4	11/16	1 5/8	69	547	124	121	18	42	31
1 1/2 x 2 1/2	42JA12-170	300#	150#	21 1/2	4 7/8	4 3/4	11/16	1 5/8	71	547	124	121	18	42	32
	42JA13-170	600#	150#	21 1/2	4 7/8	4 3/4	11/16	1 5/8	71	547	124	121	18	42	32
2 x 3	42KA12-170	300#	150#	21 3/4	5 9/16	5 1/4	11/16	1 3/4	83	553	142	134	18	45	38
	42KA13-170	600#	150#	21 3/4	5 9/16	5 1/4	11/16	1 3/4	83	553	142	134	18	45	38
2 1/2 x 4	42LA12-170	300#	150#	28 1/4	6 5/16	6 1/8	11/16	1 15/16	138	718	161	156	18	50	63
	42LA13-170	600#	150#	28 1/4	6 5/16	6 1/8	11/16	1 15/16	138	718	161	156	18	50	63
3 x 4	42MA12-170	300#	150#	29 1/4	6 7/16	6 1/2	11/16	2	164	743	164	166	18	51	74
	42MA13-170	600#	150#	29 1/4	6 7/16	6 1/2	11/16	2	164	743	164	166	18	51	74
4 x 6	42NA12-170	300#	150#	33 1/4	7 7/16	7 11/16	11/16	2 1/4	250	845	189	196	18	58	113
	42NA13-170	600#	150#	33 1/4	7 7/16	7 11/16	11/16	2 1/4	250	845	189	196	18	58	113
4 x 6	42PA12-170	300#	150#	33 1/4	8 3/16	7 11/16	11/16	2 1/4	260	845	208	196	18	58	118
	42PA13-170	600#	150#	33 1/4	8 3/16	7 11/16	11/16	2 1/4	260	845	208	196	18	58	118
6 x 8	42QA12-170	300#	150#	41 1/8	9 3/8	10 5/16	11/16	2 5/8	438	1045	239	262	18	67	199
	42QA13-170	600#	150#	41 1/8	9 3/8	10 5/16	11/16	2 5/8	438	1045	239	262	18	67	199