



• Series 69 Brass/Bronze Safety Relief Valves

Series 69 is an industry standard relief valve used for **liquid relief** and by-pass.

Sizes from ½" to 3" (*Series 69C Available in ½", ¾" and 1" Only*)

Pressures: Series 69A to 600 PSI (4,136 kPa) See sizes for max pressures.

Temperatures to 450°F (232°C)

Model Choices:

69A – Brass/bronze valve with stainless steel springs

69B – Brass/bronze valve with stainless steel seating inserts, disk and springs

69C – Stainless steel body / disk with bronze bonnet, stainless steel springs

Include liquid by-pass, regulation, continuous relief and overprotection. Used on pumping



Series 69A



Series 51

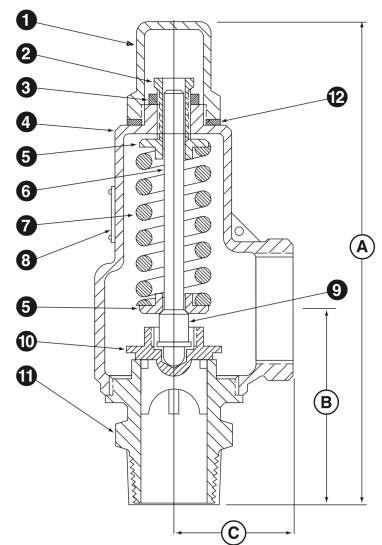
Options

- O-ring seating options (see charts)
- Packed lift lever
- BSPT connections
- Low lead option
- Viton embedded o-ring at hex cap
- Wide range WR adjustable (150 PSI increments)
- Stainless steel body, disk, and seating
- Adjustable wheel handle
- Female Inlet

Features

- Field adjustable by simple removal of the hex-cap
- Metal to metal precision lapped seating
- Back pressure tested at factory
- Ease of cleaning and maintenance with simple removal
- Stainless steel springs
- Single piece leak free bonnet

Materials	69A	69B	69C
1 Hex Cap	Brass	Brass	Brass
2 Pressure Screw	Brass	Brass	Brass
3 Lock Nut	Brass	Brass	Brass
4 Bonnet	Brass	Brass/Bronze	Brass/Bronze
5 Spring Plate	Brass	Brass	Brass
6 Spring Post	Brass	Brass	Brass
7 Spring	Stainless	Stainless	Stainless
8 Name Plate	Stainless	Stainless	Stainless
9 Spring Plate Support	Brass/Steel	Brass/Steel	Brass/Steel
10 Disk	Bronze	Stainless	Stainless
11 Body	Brass/Bronze	Brass/Stainless	Stainless
12 Hex Cap Seal/Disk	PTFE	PTFE	PTFE
13 Seating insert		Stainless	
14 Optional Seat Wire		Not Shown	
* CADIUM PLATED STEEL			



Series 51 materials & options not detailed
 ** A,B, & C Dimensions information on next page **



• Series 69 Brass/Bronze Safety Relief Valves

Dimensions / Liquid

Series	Size ID	Inlet Size	Outlet Size	Values In Inches			Max Set Pressure (PSI)	Weight (lb)
				A	B	C		
69	A1	½"	½"	6	2 ½"	1 ¾"	600	1.7
69	A2	½"	¾"	6	2 ½"	1 ¾"	600	1.7
69	B1	¾"	¾"	6 ¼"	2 ½"	1 ½"	600	2.2
69	B2	¾"	1"	6 ¼"	2 ½"	1 ½"	600	2.2
69	C1	1"	1"	7 ⅜"	2 ½"	1 ¾"	600	3
69	C2	1"	1 ¼"	7 ⅜"	2 ½"	1 ¾"	600	3
69	D1	1 ¼"	1 ¼"	8 ¼"	2 ½"	2"	500	4
69	D2	1 ¼"	1 ½"	8 ¼"	2 ½"	2"	500	4
69	E1	1 ½"	1 ½"	9 ½"	2 ½"	2 ⅛"	500	5.8
69	E2	1 ½"	2"	9 ½"	2 ½"	2 ⅛"	500	5.8
69	F1	2"	2"	11	2 ½"	2 ⅝"	400	9.7
69	F2	2"	2 ½"	11	2 ½"	2 ⅝"	400	9.7
69	G1	2 ½"	2 ½"	13	2 ½"	3 ⅝"	300	19
69	G2	2 ½"	3"	13	2 ½"	3 ⅝"	300	19
69	H1	3"	3"	13 3/16	2 ½"	3 ⅝"	300	19
51	A = ¼" B = ⅜" C = ½"	¼", ⅜", ½"	½"	5 ¼"	2 ½"	1 ½"	750	0.875

Series 69 Capacities

Set Pressure (PSI)	A ½"	B ¾"	C 1"	D 1 ¼"	E 1 ½"	F 2"	G 2 ½"	H 3"	Set Pressure (PSI)	Series 51
5	4	7.7	12	17	22	33	44	55	10	3.3
10	5.6	10.9	17	24	31	46	62	78	20	4.6
15	6.9	13	21	30	38	56	76	96	30	5.7
20	7.9	15	24	34	44	65	88	111	40	6.5
25	8.9	17	27	38	49	73	98	124	50	7.3
30	9.7	19	30	42	54	80	107	136	75	8.9
35	10.5	20	32	45	58	86	116	146	100	10.3
40	11	22	34	48	62	92	124	157	150	12.7
45	12	23	36	51	66	98	132	166	200	14.6
50	13	13	38	54	69	103	139	175	300	17.9
55	13	13	40	57	73	108	145	184	400	20.7
60	14	14	42	59	76	113	152	192	500	23.1
65	14	14	43	62	79	117	158	200	750	28.3
70	15	15	45	64	82	122	164	207		
75	15	15	47	66	85	126	170	214		
80	16	31	48	68	88	130	175	221		
85	16	32	50	70	90	134	181	228		
90	17	33	51	72	93	138	186	235		
95	17	34	53	74	95	142	191	241		
100	18	35	54	76	98	145	196	247		
110	19	36	57	80	103	153	206	260		
120	19	38	59	84	107	159	215	271		
130	20	39	61	87	112	166	224	282		
140	21	41	64	90	116	172	232	293		
150	22	42	66	93	120	178	240	304		
160	22	44	68	96	124	184	248	313		
170	23	45	70	99	128	190	256	323		
180	24	46	72	102	131	195	263	332		
190	24	48	74	105	135	201	270	341		
200	25	49	76	108	139	206	277	350		
210	26	50	78	111	142	211	284	359		
220	26	51	80	113	145	216	291	367		
230	27	52	82	116	149	221	297	375		
240	27	54	84	118	152	225	304	383		
250	28	55	85	121	155	230	310	391		
300	31	60	94	131	170	252	340	429		
350	33	65	101	143	183	272				
400	35	69	108	153	196	291				
450	38	73	114							
500	40	77	121							
550	42	81	126							
600	43	85	132							

Liquid Capacity in Gallons Per Minute (USGPM) at 25% Overpressure

Recommended: Stainless Steel Trim Package for pressure settings over 300 PSI. (Disc & Seat Insert)

Series 69 is available with a wider optional adjustable range. Valves are set to the mid-level pressure (or as specified). Typical wide-range is 150 PSI increments. Note: Flow rates are not shown on flow charts and vary by set pressure points. Please contact Pressure Systems for specific flow compatibility.



• Series 69 Brass/Bronze Safety Relief Valves

Series 69 Nomenclature

EXAMPLE								
69	C	1	A	1	M	3	U	1
Series	Inlet Size	Outlet Size	Metals	Connection	Seating	Cap	Service	Options
69	A- ½"	1- Same Size as Inlet	A -Brass/Bronze	1- NPT MxF	M- Metal	1- Lift lever	U- Non-Coded Liquid	1 - None
	B- ¾"	2- Next Larger than Inlet	B- 316SS Nozzle-Disc w/Bronze	2- NPT FxF	P- PTFE	2- Closed cap		2 - Chrome
	C- 1"		L- No Lead Nozzle-Disc w/Bronze	3- BSPT MxF		3- Packed lift lever		3 - O2 Cleaned
	D-1.1/4"		M- 316SS/ No Lead Bronze	4- BSPT FxF		4- Lift Lever Anti-Vibration Spring		
	E-1.1/2"			8- BSPP MxF		5- Closed Cap with Test Gag		
	F-2"			9- BSPP FxF		6- Packed Lever with Test Gag		
	G-2.1/2"					8- Closed Cap with O-Ring		
	H-3"					W- Wheel Handle		