

Liquid Relief Valves

SIZES FROM 1/4" TO 3"
PRESSURE TO 750#
TEMPERATURES TO 450°

Series 69 is an industry standard relief valve used for liquid applications. Engineered and designed for heavy-duty industrial usages. Series 51 and 55 are used for smaller sized applications or where space may be a factor. Single piece bonnets with sealed hex-caps to minimize leakage.

SERIES 69



Series 69, 51 & 55

Usages

- Pressure relief, liquid relief, by-pass and over-protection
- Continuous relief
- Pressure regulation
- Pumping stations, tanks, hydraulics, fluid lines, oil fields, piping lines

Features

- Field adjustable
- Metal-to-metal precision lapped seating
- Sealed hex cap with O-ring teflon seal
- One piece enclosed bonnet to minimize leakage
- Back pressure tested against leakage (now standard)
- Easy to clean and maintain by simple removal of the bonnet
- 302 Stainless steel springs (STD)

SERIES 69-H



SERIES 69-F



SERIES 51



SERIES 55

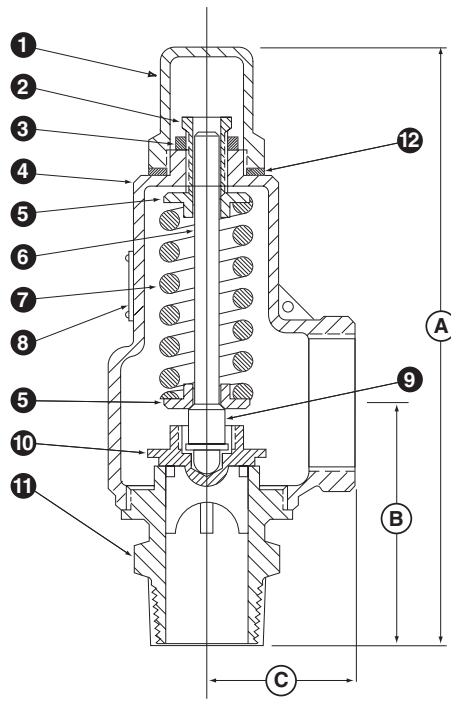


Options

- Wheel handle
- Same size or next size outlet (see chart – standard for liquid relief is same size outlet)
- Female inlet
- 302 Stainless steel whetted trimming
 - Chemical reactivity or abrasiveness of fluids
 - Pressure settings over 400 PSI
- Available with tamper-resistant seal
- BSPT connects
- Chrome plating/polishing
- Stainless steel disk (only)

SEE CAPACITY AND SIZE CHARTS

PARTS IDENTIFICATION & MATERIALS		
ITEM	PART NAME	MATERIAL
1	HOOD	BRASS
2	PRESSURE SCREW	BRASS
3	LOCK NUT	BRASS
4	BONNET	BRONZE
5	SPRING PLATE	BRASS/STEEL *
6	SPRING POST	BRASS/STEEL *
7	SPRING	STAINLESS STEEL
8	NAME PLATE	ALUMINUM
9	SPRING PLATE SUPPORT	BRASS/STEEL *
10	DISC	BRONZE
11	BODY	BRASS/BRONZE
12	SEALING DISK	TEFLON
* STEEL PLATED		



ORDERING/IDENTIFICATION	
SERIES	DESCRIPTION
69	BRASS/BRONZE SEATING (STD)
69-F	FEMALE INLET
69-H	HANDLE WHEEL
69-S	STAINLESS STEEL WHETTED TRIM

SERIES 51, 55 & 69 DIMENSIONS • LIQUID

SERIES	VALVE SIZE	OUTLET SIZE	SEAT SIZE	DIMENSIONS			MAX. SET PRESSURE LIQUID	WEIGHT LBS
				A	B	C		
69	1/2"	1/2"	1/2" - A	5 7/8	2 1/8	1 3/8	600	1.5
69	1/2"	3/4"	1/2" - A	5 7/8	2 1/8	1 3/8	600	1.5
69	3/4"	3/4"	3/4" - B	6	2 3/8	1 3/8	600	2
69	3/4"	1"	3/4" - B	6	2 3/8	1 3/8	600	2
69	1"	1"	1" - C	7 1/2	2 5/8	1 7/8	600	3
69	1"	1 1/4"	1" - C	7 1/2	2 5/8	1 7/8	600	3
69	1 1/4"	1 1/4"	1 1/4" - D	8 1/2	3 1/4	2	600	4.5
69	1 1/4"	1 1/2"	1 1/4" - D	8 1/2	3 1/2	2	600	4.5
69	1 1/2"	1 1/2"	1 1/2" - E	9 3/4	3 1/2	2 1/2	600	6.5
69	1 1/2"	2"	1 1/2"	9 3/4	3 1/2	2 1/2	600	6.5
69	2"	2"	2" - F	11 1/8	4	2 5/8	600	9.25
69	2"	2 1/2"	2" - F	11 1/8	4	2 5/8	600	9.25
69	2 1/2"	2 1/2"	2-1/2" - G	12	4 3/4	3 1/8	600	21
69	2 1/2"	3"	2 1/2" - G	12	4 3/4	3 1/8	600	22
69	3"	3"	3" - H	13 1/2	5 1/8	4 3/8	600	24
51	1/4"-3/8"-1/2"	1/2"	1/2" - A	5 1/4	1 3/8	1 1/8	750	.875
55	1/4"-3/8"-1/2"	1/2"	1/2" - A	3	1 3/4	1 1/8	200	.875

STANDARD VALVE FOR LIQUID RELIEF IS "SAME SIZED OUTLET" (UNLESS OTHERWISE SPECIFIED)

PLEASE SPECIFY SERIES, SIZE, SERVICE & SET PRESSURE

STAINLESS STEEL TRIMMING RECOMMENDED FOR PRESSURE SETTINGS OVER 400 PSI (OR FOR CHEMICAL REACTIVE PURPOSES)

2-1/2 & 3" MAX SET PRESSURE 350 PSI



SERIES 69 CAPACITIES Liquid Capacity in Gallons Per Minute (GPM) at 25% Over Pressure

SIZES: 1/2"-3"

CAPACITIES

SET PRESSURE	CAPACITIES							
	A 1/2"	B 3/4"	C 1"	D 1 1/4"	E 1 1/2"	F 2"	G 2 1/2"	H 3"
5	3.9	7.7	12	17	22	33	44	55
10	5.6	8.1	17	24	31	46	62	78
15	6.8	13	21	29	38	56	76	95
20	7.9	15	24	34	44	65	88	111
25	8.8	17	27	38	49	73	98	124
30	9.7	19	29	41	53	80	107	136
40	11	22	34	48	62	92	124	157
50	12	24	38	53	69	103	139	175
60	13	26	42	58	75	112	151	190
75	15	30	47	65	85	126	170	21
100	18	34	54	76	98	146	196	248
125	20	38	60	85	109	163	219	277
150	22	42	66	93	120	178	240	303
175	23	45	71	100	129	193	259	328
200	25	48	76	107	138	206	277	350
225	26	51	80	113	146	218	293	371
250	28	54	85	120	154	230	310	392
275	29	56	89	125	161	240	325	410
300	31	59	93	131	169	252	340	429
325	32	61	97	136	176	262		
350	33	64	101	141	183	272		
375	34	66	104	146	189	281		
400	35	68	108	151	195	291		
425	36	70	112	156	201	302		
450	37	72	115	162	208	314		
475	38	75	119	167	215	326		
500	39	77	123	171	221	337		
525	40	79	126	176	227	348		
550	41	81	130	180	234	359		
575	42	83	134	185	240	371		
600	43	86	138	189	247	383		

Recommended:
Stainless Steel Trim Package for pressure settings over 400 PSI. (Disk and seat insert).

LITERS PER MINUTE = GPM x 3.785 BAR = PSI x .06895

SERIES 51 & 55 CAPACITIES Water Capacity in Gallons Per Minute (GPM) at 25% Over Pressure

SIZES: 1/4"-3/8"-1/2"

PSI SET PRESSURE	10	20	30	40	50	75	100	150	200	300	400	500	750
	3.3	4.7	5.7	6.6	7.4	9.1	10.5	12.7	14.6	17.8	20.6	23	28.2