

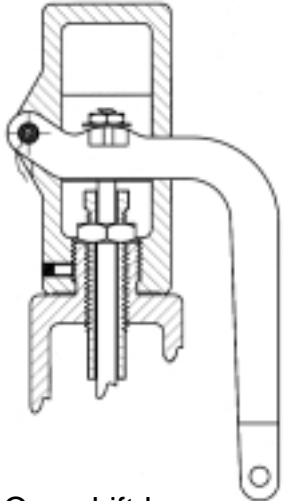
High Capacity Safety Relief Valves

- Manufactured in accordance with ASME Code Section VIII
- NBBI capacity certified for Air/Gas & Liquid
- Pressures to 3,500 psi
- Soft seat seal
- 3/4" to 2" NPT inlet sizes

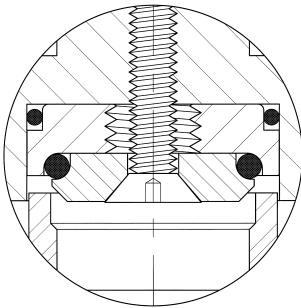
 **Hydroseal**
Valve Company, Inc.



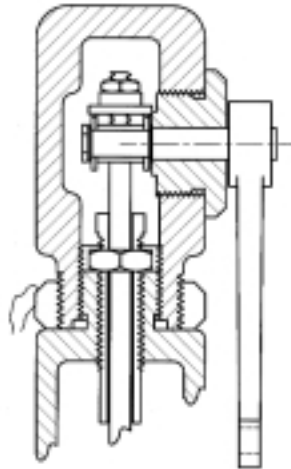
High Capacity Series FT & HC Safety Relief Valves



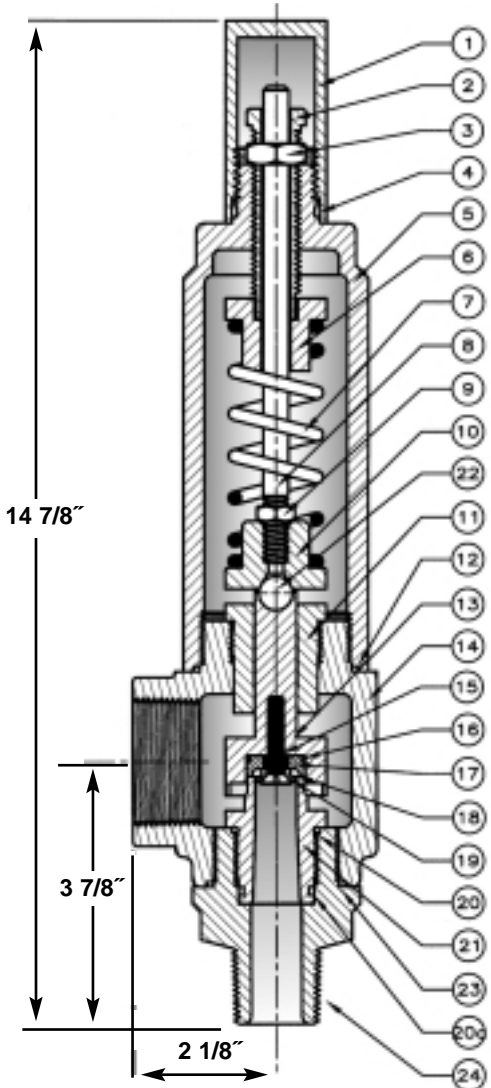
Open Lift Lever



Seat Detail

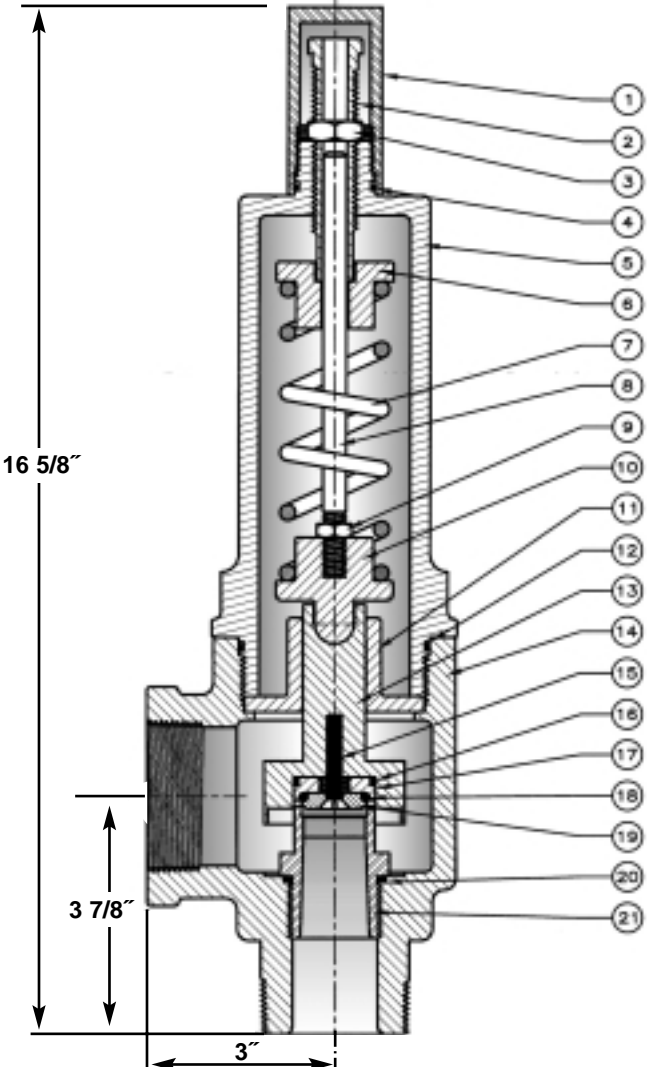


Packed Lift Lever



SERIES FT

5/8" DIAMETER ORIFICE
Weight 15 lbs



SERIES HC

1" DIAMETER ORIFICE
Weight 25 lbs.

Model Selection



3 FT INLET • ORIFICE • OUTLET

ADD L FOR LIQUID SERVICE

MODEL	INLET	ORIFICE [SQ. IN]	OUTLET	MAX SET PRESSURE [PSIG]
3 FT	3/4" FNPT	0.306	1 1/2" FNPT	3500
4 FT	1" MNPT	0.306	1 1/2" FNPT	1000
5 FT	1" FNPT	0.306	1 1/2" FNPT	3500
5 HC	1 1/4" FNPT	0.785	2" FNPT	2000
6 HC	1 1/2" MNPT	0.785	2" FNPT	2000
7 HC	2" MNPT	0.785	2" FNPT	2000

N SOFT SEAT SEAL

N - Nitrile [Buna-N]
F - Fluorocarbon [Viton®]
C - Neoprene
K - Kalrez®
Z - Kalrez® seat w/ Viton® Seals
X - Teflon® Seat w/ Viton® Seals (liquid only)
E - EPDM
<i>O-ring material selection is media and temperature dependent</i>

O MATERIAL CODE

0 - Standard Material
1 - Standard w/ 316 SS Spring
2 - Standard w/ 302 SS Spring
3 - All 316 SS
4 - All 316 SS w/ Inconel® Spring
5 - 316 SS Trim
6 - 316 SS Trim w/ Inconel® Spring
7 - Standard w/ Inconel® Spring

O CAP TYPE

0 - Closed Cap
L - Open Lift Lever
P - Packed Lift Lever
Maximum Temperature 450° F
ASME Code requires lift lever on water over 140° F or air service

MATERIAL CODE	0	1	2	3	4	5	6	7
1. CAP	CSZ	CSZ	CSZ	316 SS	316 SS	CSZ	CSZ	CSZ
2. ADJUSTING SCREW	CSZ	CSZ	CSZ	316 SS	316 SS	316 SS	316 SS	CSZ
3. ADJUSTING LOCKNUT	CSZ	CSZ	CSZ	316 SS	316 SS	316 SS	316 SS	CSZ
4. CAP SEAL	DETERMINED BY SOFT SEAT SELECTION							
5. BONNET	WCB	WCB	WCB	CF8M	CF8M	WCB	WCB	WCB
6. UPPER SPRING PLATE	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
7. SPRING	CSZ	316 SS	302 SS	316 SS	Inconel®	316 SS	Inconel®	Inconel®
8. GUIDE STEM	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
9. STEM LOCKNUT	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
10. LOWER SPRING PLATE	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
11. SPINDLE GUIDE	17-4 PH	17-4 PH	17-4 PH	316 SS	316 SS	316 SS	316 SS	17-4 PH
12. BONNET SEAL	DETERMINED BY SOFT SEAT SELECTION							
13. SPINDLE	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
14. BODY	WCB	WCB	WCB	CF8M	CF8M	WCB	WCB	WCB
15. DISK RET. SCREW	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
16. DISK SEAL	DETERMINED BY SOFT SEAT SELECTION							
17. DISK	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
18. O-RING SEAT	DETERMINED BY SOFT SEAT SELECTION							
19. O-RING RETAINER	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
20. SEAT SEAL	DETERMINED BY SOFT SEAT SELECTION							
21. SEAT	SS	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
22. BALL (FT only)	440C	440C	440C	SS	SS	SS	SS	440C
23. BODY SEAL (FT only)	DETERMINED BY SOFT SEAT SELECTION							
24. BASE (FT only)	CS	CS	CS	316 SS	316 SS	316 SS	316 SS	CS
25. OPEN LL ASS'Y	CS	CS	CS	316 SS	316 SS	316 SS	316 SS	CS
26. PACKED LL ASS'Y	CS	CS	CS	316 SS	316 SS	316 SS	316 SS	CS

CS - CARBON STEEL
SS - STAINLESS STEEL

WCB - ASTM A 216 - WCB CARBON STEEL
CF8M - ASTM A 351 - CF8M STAINLESS STEEL

CSZ - CARBON STEEL - ZINC PLATED

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Teflon® is a registered trademark of I. E. DuPont De Nemours Company.
Stellite® is a registered trademark of the Deloro Stellite Company, Inc.
Inconel® and Monel® are registered trademarks of the International Nickel Company, Inc.

Capacity Tables For Series FT and HC

ASME Section VIII "UV" Code Stamped for Air, Gas & Liquid.
All Capacities Listed at 10% Over Set Pressure

SERIES FT				5/8" ORIFICE DIAMETER				0.306 SQ. IN. AREA			
SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM	SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM	SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM
15	152	196	35	900	4903	6325	267	1000	5440	7017	281
50	340	439	63	950	5171	6671	274	1050	5708	7363	288
75	474	612	77	1000	5440	7017	281	1100	5977	7710	295
100	609	785	89	1050	5708	7363	288	1150	6245	8056	302
125	743	958	99	1100	5977	7710	295	1200	6513	8402	308
150	877	1131	109	1150	6245	8056	302	1250	6782	8748	314
200	1145	1477	126	1300	7050	9095	321	1350	7319	9441	327
250	1414	1824	141	1350	7319	9441	327	1400	7587	9787	333
300	1682	2170	154	1400	7587	9787	333	1450	7855	10133	339
350	1951	2516	166	1450	7855	10133	339	1500	8124	10480	344
400	2219	2862	178	1500	8124	10480	344	1550	8392	10826	350
450	2487	3209	189	1550	8392	10826	350	1600	8661	11172	356
500	2756	3555	199	1600	8661	11172	356	1800	9734	12557	377
550	3024	3901	209	1800	9734	12557	377	2000	10808	13942	398
600	3293	4247	218	2000	10808	13942	398	2500	13492	17404	445
650	3561	4594	227	2500	13492	17404	445	3000	16176	20867	487
700	3829	4940	235	3000	16176	20867	487	3500	18860	24329	526
750	4098	5286	244								
800	4366	5632	252								
850	4635	5979	259								

SCFM [Air] = 4.88 [1.1 Set Pressure + 14.7]
Coefficient of Discharge [Air] 0.871

GPM [Water] = 8.48 $\sqrt{1.1 \text{ Set Pressure}}$
Coefficient of Discharge [Water] 0.725

SERIES HC				1" ORIFICE DIAMETER				0.785 SQ. IN. AREA			
SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM	SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM	SET PRESSURE PSI	AIR SCFM	NATURAL GAS [SG = 0.60] SCFM	WATER GPM
15	394	532	111	1000	14068	18147	868	1000	14068	18147	868
50	880	1135	194	1050	14762	19042	889	1100	15456	19938	910
100	1574	2030	274	1100	15456	19938	910	1150	16150	20833	931
150	2268	2925	336	1150	16150	20833	931	1200	16844	21729	951
200	2962	3821	388	1200	16844	21729	951	1250	17538	22624	970
250	3656	4716	434	1250	17538	22624	970	1300	18232	23519	990
300	4350	5612	475	1300	18232	23519	990	1350	18926	24415	1008
350	5044	6507	513	1350	18926	24415	1008	1400	19620	25310	1027
400	5738	7402	549	1400	19620	25310	1027	1450	20314	26206	1045
450	6432	8298	582	1450	20314	26206	1045	1500	21008	27101	1063
500	7126	9193	614	1500	21008	27101	1063	1550	21703	27996	1081
550	7821	10088	644	1550	21703	27996	1081	1600	22397	28892	1098
600	8515	10984	672	1600	22397	28892	1098	1650	23091	29787	1115
650	9209	11879	700	1650	23091	29787	1115	1700	23785	30682	1132
700	9903	12775	726	1700	23785	30682	1132	1750	24479	31578	1148
750	10597	13670	752	1750	24479	31578	1148	1800	25173	32473	1164
800	11291	14566	776	1800	25173	32473	1164	1850	25867	33369	1180
850	11985	15461	800	1850	25867	33369	1180	1900	26561	34264	1196
900	12679	16356	823	1900	26561	34264	1196	2000	27950	36055	1227
950	13373	17252	846	2000	27950	36055	1227				

SCFM [Air] = 12.62 [1.1 Set Pressure + 14.7]
Coefficient of Discharge [Air] 0.877

GPM [Water] = 26.17 $\sqrt{1.1 \text{ Set Pressure}}$
Coefficient of Discharge [Water] 0.877

CANADIAN REGISTRATION NUMBER 0G0736.2C
(Applies to ASME Code stamped valves only.)



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