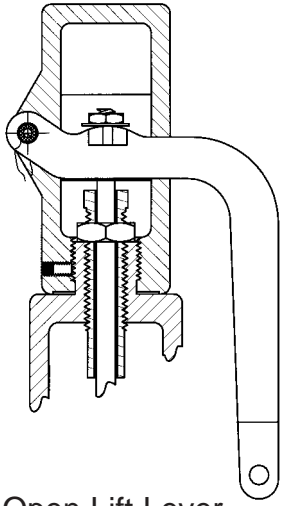


# High Capacity FT • HC • HD Safety Relief Valves

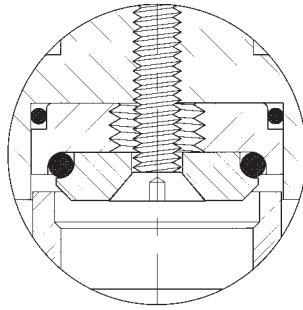
- Manufactured in accordance with ASME Code Section VIII
- NBBI capacity certified for Air/Gas & Liquid
- Pressures to 3,500 psi
- Soft seat seal
- 3/4" to 2" NPT inlet sizes



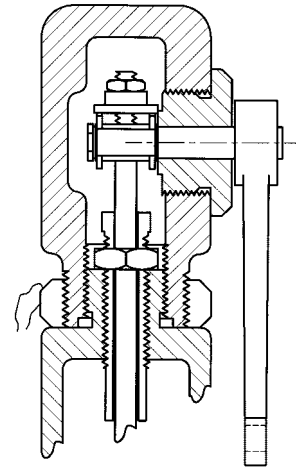
# High Capacity Series FT & HC Safety Relief Valves



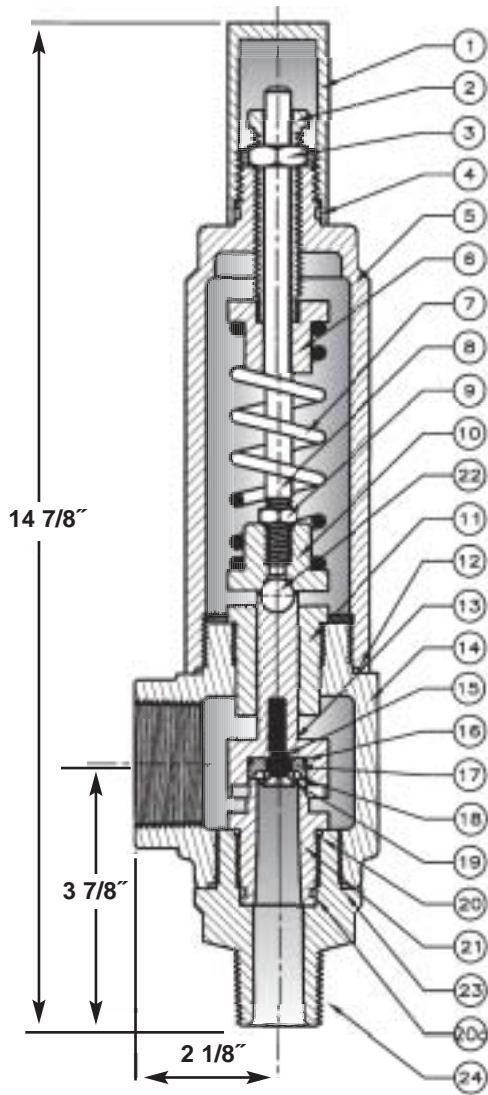
Open Lift Lever



Seat Detail

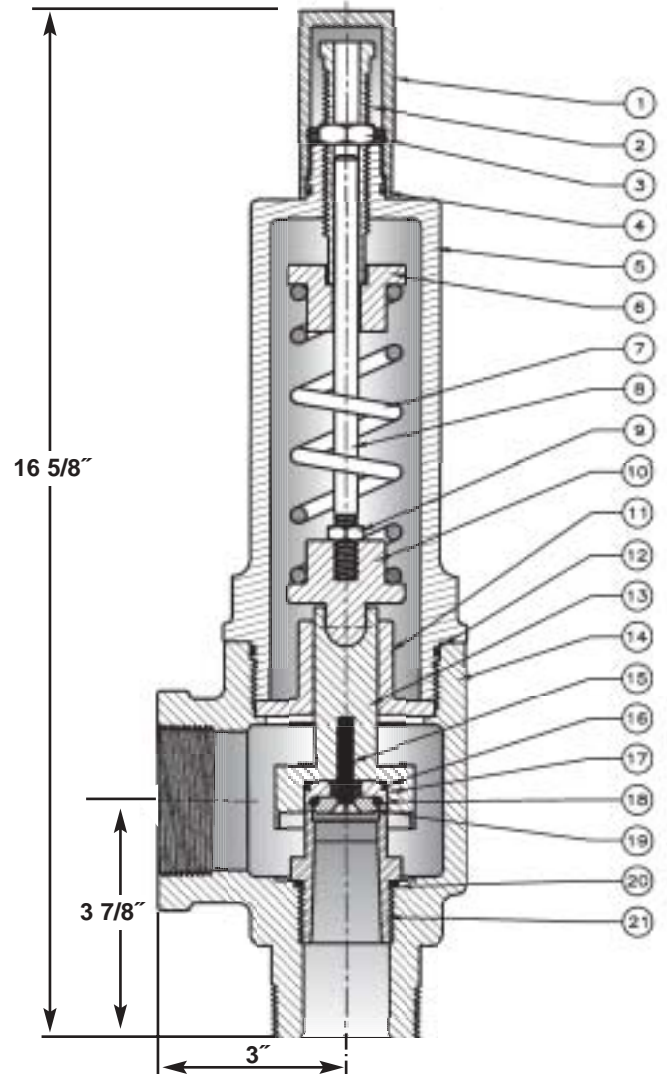


Packed Lift Lever



## SERIES FT

5/8" DIAMETER ORIFICE  
Weight 15 lbs.



## SERIES HC

1" DIAMETER ORIFICE  
Weight 25 lbs.

# Model Selection



**3 FT**  
INLET • ORIFICE • OUTLET

**N**  
SOFT SEAT  
SEAL

**O**  
MATERIAL  
CODE

**O**  
CAP TYPE

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

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

<b>0</b> - Standard Material
<b>1</b> - Standard w/ 316 SS Spring
<b>3</b> - All 316 SS
<b>4</b> - All 316 SS w/ Inconel® Spring
<b>5</b> - 316 SS Trim
<b>6</b> - 316 SS Trim w/ Inconel® Spring
<b>7</b> - Standard w/ Inconel® Spring

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

MATERIAL CODE	0	1	3	4	5	6	7
1. CAP	CSZ	CSZ	316 SS	316 SS	CSZ	CSZ	CSZ
2. ADJUSTING SCREW	CSZ	CSZ	316 SS	316 SS	316 SS	316 SS	CSZ
3. ADJUSTING LOCKNUT	CSZ	CSZ	316 SS	316 SS	316 SS	316 SS	CSZ
4. CAP SEAL	DETERMINED BY SOFT SEAT SELECTION						
5. BONNET	WCB	WCB	CF8M	CF8M	WCB	WCB	WCB
6. UPPER SPRING PLATE	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
7. SPRING	CS	316 SS	316 SS	Inconel®	316 SS	Inconel®	Inconel®
8. GUIDE STEM	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
9. STEM LOCKNUT	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
10. LOWER SPRING PLATE	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
11. SPINDLE GUIDE	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	316 SS	316 SS	316 SS	316 SS	SS
14. BODY	WCB	WCB	CF8M	CF8M	WCB	WCB	WCB
15. DISK RET. SCREW	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
16. DISK SEAL	DETERMINED BY SOFT SEAT SELECTION						
17. DISK	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	316 SS	316 SS	316 SS	316 SS	SS
20. SEAT SEAL	DETERMINED BY SOFT SEAT SELECTION						
21. SEAT	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
22. BALL (FT only)	440C	440C	SS	SS	SS	SS	440C
23. BODY SEAL (FT only)	DETERMINED BY SOFT SEAT SELECTION						
24. BASE (FT only)	CS	CS	316 SS	316 SS	316 SS	316 SS	CS
25. OPEN LL ASS'Y	CS	CS	316 SS	316 SS	316 SS	316 SS	CS
26. PACKED LL ASS'Y	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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Stellite® is a registered trademark of the Deloro Stellite Company, Inc.  
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# 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	159	205	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	1200	6513	8402	308	1300	7050	9095	321
250	1414	1824	141	1250	6782	8748	314	1350	7319	9441	327
300	1682	2170	154	1300	7050	9095	321	1400	7587	9787	333
350	1951	2516	166	1350	7319	9441	327	1450	7855	10133	339
400	2219	2862	178	1400	7587	9787	333	1500	8124	10480	344
450	2487	3209	189	1450	7855	10133	339	1550	8392	10826	350
500	2756	3555	199	1500	8124	10480	344	1600	8661	11172	356
550	3024	3901	209	1550	8392	10826	350	1800	9734	12557	377
600	3293	4247	218	1600	8661	11172	356	2000	10808	13942	398
650	3561	4594	227	1800	9734	12557	377	2500	13492	17404	445
700	3829	4940	235	2000	10808	13942	398	3000	16176	20867	487
750	4098	5286	244	2500	13492	17404	445	3500	18860	24329	526
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	412	532	75	1000	14068	18147	584	1000	14068	18147	584
50	880	1135	131	1050	14762	19042	599	1050	14762	19042	599
100	1574	2030	185	1100	15456	19938	613	1100	15456	19938	613
150	2268	2925	226	1150	16150	20833	627	1150	16150	20833	627
200	2962	3821	261	1200	16844	21729	640	1200	16844	21729	640
250	3656	4716	292	1250	17538	22624	653	1250	17538	22624	653
300	4350	5612	320	1300	18232	23519	666	1300	18232	23519	666
350	5044	6507	346	1350	18926	24415	679	1350	18926	24415	679
400	5738	7402	370	1400	19620	25310	691	1400	19620	25310	691
450	6432	8298	392	1450	20314	26206	704	1450	20314	26206	704
500	7126	9193	413	1500	21008	27101	716	1500	21008	27101	716
550	7821	10088	433	1550	21703	27996	728	1550	21703	27996	728
600	8515	10984	453	1600	22397	28892	739	1600	22397	28892	739
650	9209	11879	471	1650	23091	29787	751	1650	23091	29787	751
700	9903	12775	489	1700	23785	30682	762	1700	23785	30682	762
750	10597	13670	506	1750	24479	31578	773	1750	24479	31578	773
800	11291	14566	523	1800	25173	32473	784	1800	25173	32473	784
850	11985	15461	539	1850	25867	33369	795	1850	25867	33369	795
900	12679	16356	554	1900	26561	34264	806	1900	26561	34264	806
950	13373	17252	570	2000	27950	36055	826	2000	27950	36055	826

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

GPM [Water] = 17.62  $\sqrt{1.1 \text{ Set Pressure}}$   
Coefficient of Discharge [Water] 0.590

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



1610 US Hwy. 259 N. • Kilgore, Texas 75662  
903-984-8574 • Fax 903-984-6307  
www.hydroseal.com

