

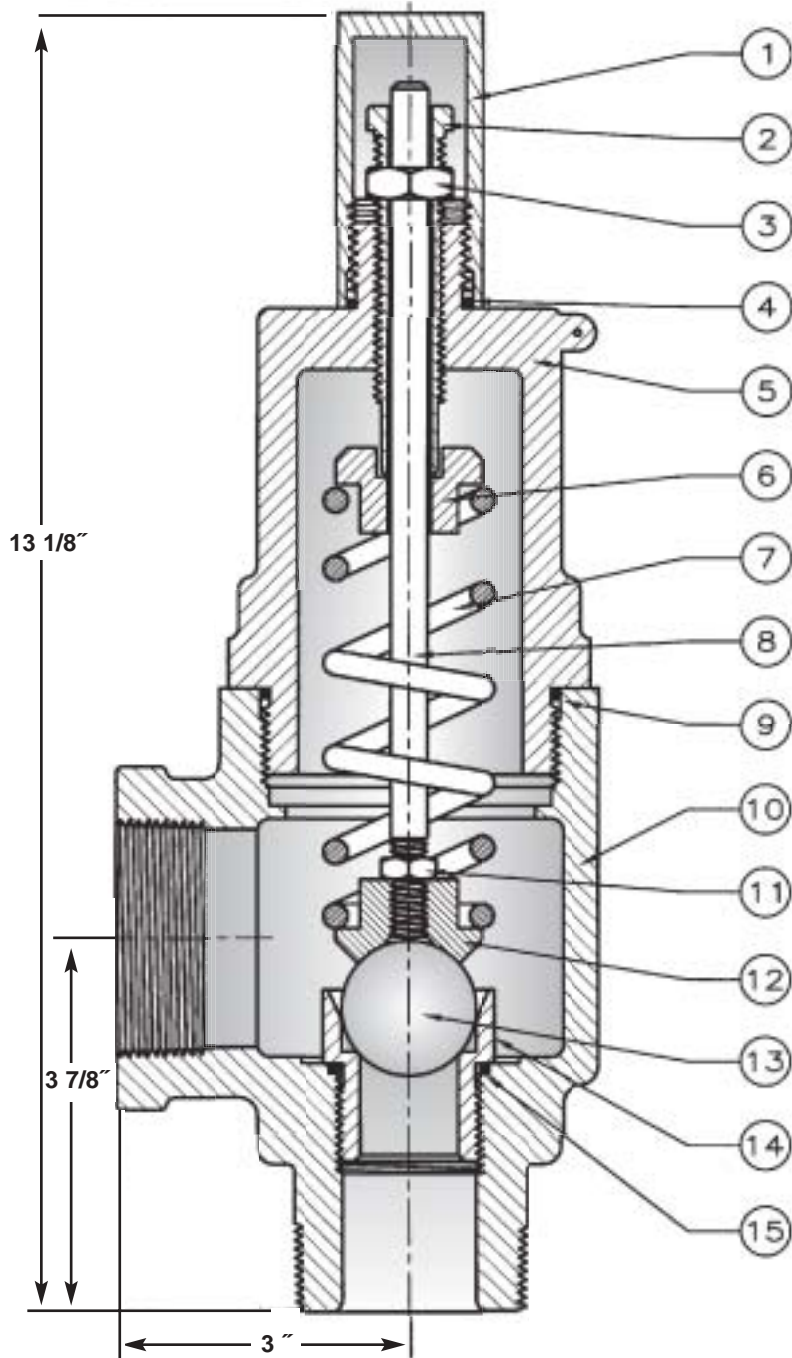
Steel Series 5 - 8 Ball Seat Safety Relief Valves

- Manufactured in accordance with ASME Code Section VIII
- NBB1 capacity certified for Air/Gas
- Dependable "Ball & Seat" design
- Pressures to 6,000 psi
- 1" to 2" NPT inlet sizes

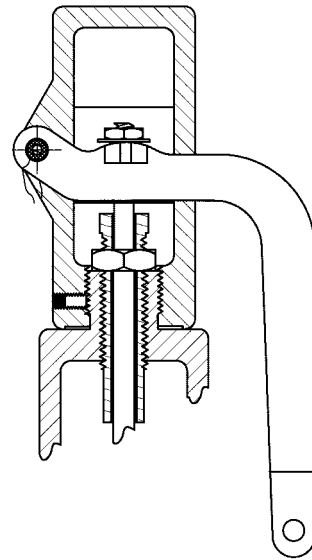
 **Hydroseal**
A Mallard Control Company



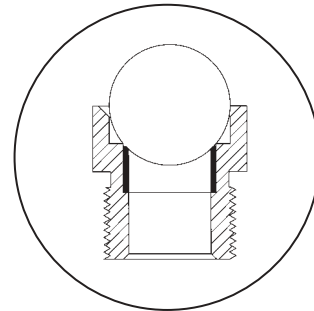
Series 5, 6, 7 & 8 Safety Relief Valves



Weight 20 lbs.

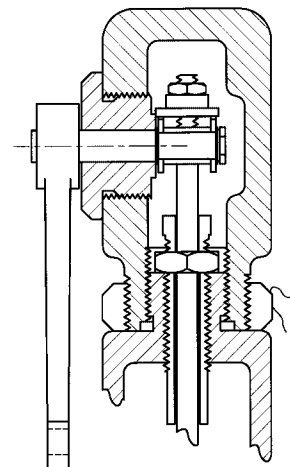


Open Lift Lever



Soft Seat Detail

ARV & CRV Models
Molded Viton® seal standard
Optional materials available



Packed Lift Lever

Model Selection



5ARV INLET • ORIFICE • OUTLET

MODEL	INLET	ORIFICE [DIA]	OUTLET	SOFT SEAT	MAX. SET PRES. [PSI]
5ARV	1 1/4" FNPT	1/2"	2" FNPT	●	2000
5AXV	1 1/4" FNPT	9/16"	2" FNPT	●	6000
5BV	1 1/4" FNPT	3/4"	2" FNPT	●	3000
5CV	1 1/4" FNPT	1"	2" FNPT	●	2000
5CRV	1 1/4" FNPT	1"	2" FNPT	●	2000
6ARV	1 1/2" MNPT	1/2"	2" FNPT	●	2000
6AXV	1 1/2" MNPT	9/16"	2" FNPT	●	6000
6BV	1 1/2" MNPT	3/4"	2" FNPT	●	3000
6CV	1 1/2" MNPT	1"	2" FNPT	●	2000
6CRV	1 1/2" MNPT	1"	2" FNPT	●	2000
7ARV	2" MNPT	1/2"	2" FNPT	●	2000
7AXV	2" MNPT	9/16"	2" FNPT	●	6000
7BV	2" MNPT	3/4"	2" FNPT	●	3000
7CV	2" MNPT	1"	2" FNPT	●	2000
7CRV	2" MNPT	1"	2" FNPT	●	2000
8ARV	1" FNPT	1/2"	2" FNPT	●	2000
8AXV	1" FNPT	9/16"	2" FNPT	●	6000
8BV	1" FNPT	3/4"	2" FNPT	●	3000
8CV	1" FNPT	1"	2" FNPT	●	2000
8CRV	1" FNPT	1"	2" FNPT	●	2000

O MATERIAL

0	- Standard Material
1	- Standard w/ 316 SS Spring, Stellite® Ball
3	- All 316 SS w/ Stellite® Ball
4	- All 316 SS w/ Inconel® Spring, Stellite® Ball
5	- 316 SS Trim Stellite® Ball
6	- 316 SS Trim w/ Inconel® Spring, Stellite® Ball
7	- Standard w/ Inconel® Spring

O CAP TYPE

0	- Closed Cap
L	- Open Lift Lever
P	- Packed Lift Lever
Maximum Temperature 450°	
ASME Code requires lift lever on air service	
NOT ASME Code for liquid service	

N O RING / SOFT SEAT

O	- Nitrile [Buna-N] O-Ring with Viton® Soft Seat and Body/Seat Seal
N	- Nitrile [Buna-N]
F	- Fluorocarbon [Viton®]
C	- Neoprene
K	- Kalrez®
E	- EPDM
M	- Metal Gasket w/ Kalrez Body/Seat Seal
<i>Polymer selection is media temperature dependent</i>	

MATERIAL CODE	0	1	3	4	5	6	7
1. VALVE CAP	CS	CS	316 SS	316 SS	CS	CS	CS
2. ADJUSTING SCREW	CS	CS	316 SS	316 SS	316 SS	316 SS	CS
3. ADJUSTING LOCKNUT	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
4. CAP SEAL	Specify	Specify	Specify	Specify	Specify	Specify	Specify
5. BONNET	WCB	WCB	C8FM	C8FM	WCB	WCB	WCB
6. UPPER SPRING PLATE	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
7. SPRING	SS	316 SS	316 SS	Inconel®	316 SS	Inconel®	Inconel®
8. GUIDE STEM	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
9. BODY BONNET SEAL	Specify	Specify	Specify	Specify	Specify	Specify	Specify
10. BODY	WCB	WCB	CF8M	CF8M	WCB	WCB	WCB
11. STEM LOCKNUT	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
12. LOWER SPRING PLATE	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
13. BALL	440C	Stellite®	Stellite®	Stellite®	Stellite®	Stellite®	440C SS
14. SEAT	SS	SS	316 SS	316 SS	316 SS	316 SS	SS
15. BODY/SEAT SEAL	Specify	Specify	Specify	Specify	Specify	Specify	Specify
OPEN LEVER ASSEMBLY	CS	CS	SS	SS	CS	CS	CS
PACKED LEVER ASSEMBLY	CS	CS	SS	SS	CS	CS	CS

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

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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 5, 6, 7, & 8



Set Pressure PSIG	ARV		AXV		BV		CRV		CV	
	Orifice: 1/2" soft seat Area = 0.196 sq. in.		Orifice: 9/16" Area = 0.248 sq. in.		Orifice: 3/4" Area = 0.441 sq. in.		Orifice: 1" soft seat Area = 0.785 sq. in.		Orifice: 1" Area = 0.785 sq. in.	
	Air SCFM	Water GPM	Air SCFM	Water GPM	Air SCFM	Water GPM	Air SCFM	Water GPM	Air SCFM	Water GPM
25	47	5	49	7	137	12	130	24	132	24
50	77	7	80	11	224	17	215	34	218	34
75	108	9	112	13	313	21	300	42	304	42
100	138	10	143	15	402	24	385	49	390	49
125	169	12	175	17	490	27	470	55	476	55
150	199	13	207	19	579	30	555	60	562	60
200	261	15	270	22	756	34	725	69	735	69
250	322	16	333	24	933	38	895	77	907	77
300	383	18	396	27	1110	42	1065	85	1079	85
350	444	19	460	29	1287	46	1235	92	1251	92
400	505	21	523	31	1464	49	1405	98	1423	98
500	627	23	649	35	1818	55	1745	110	1768	110
600	749	26	776	38	2173	60	2085	120	2112	120
750	932	29	946	42	2704	67	2595	134	2628	134
1000	1237	33	1282	49	3589	77	3444	155	3489	155
1250	1543	37	1598	55	4475	87	4294	173	4350	173
1500	1848	41	1914	60	5360	95	5144	190	5211	190
1750	2153	44	2231	65	6246	102	5994	205	6071	205
2000	2458	47	2547	70	7131	110	6843	220	6932	220
2500			3179	78	8902	123				
3000			3812	85	10673	134				
5000			6342	110						

ASME Section VIII "UV" Code for Air/Gas
AIR CAPACITIES listed at 10% over set pressure.
 To calculate air capacities in SCFM, $Q = m[(1.1 \times \text{Set Pressure PSI}) + 14.7]$

m [slope] VALUES

ORIFICE	DIA.	SLOPE
ARV	1/2"	1.11
AXV	9/16"	1.15
BV	3/4"	3.22
CRV	1"	3.09
CV	1"	3.13

WATER CAPACITIES determined at 25% over set pressure
CANADIAN REGISTRATION NUMBER OG0736.2C
 (Applies to ASME Code stamped valves only.)



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