

**POWER VALVES**

PowerSeal Model & letter designation	APCO		CRISPIN		VAL-MATIC		INLET X OUTLET	
5401 AIR RELEASE	A	--	--	M3 & M5		15	150 psi	3/4 x 3/8
	B	55	150 psi	M8 & M10		22	150 psi	1/2 x 1/2
	C	65	150 psi	--		25	150 psi	3/4 x 1/2
	D	200A	150 psi	P10	150 psi	38	150 psi	1 x 1/2
	E	200A	150 psi	P10 A	150 psi	38	150 psi	2 x 1/2
	F	200A	300 psi	P10	300 psi	38	300 psi	1 x 1/2
	G	200A	200 psi	P10 A	200 psi	38	200 psi	2 x 1/2
	H	200	150 psi	P20	150 psi	45	150 psi	2 x 1
	I	200	300 psi	P20	300 psi	45	300 psi	2 x 1
	J	200	500 psi	HP20 A&B	500 psi	50	500 psi	2 x 1
	K	205	800 psi	HP20C	800 psi	50HP	800 psi	2 x 1
5402 AIR & VACUUM	A	142 150	or 300 psi	A-10		101 150	or 300 psi	1 x 1
	B	144 150	or 300 psi	A-20		102 150	or 300 psi	2 x 2
	C	146 150	or 300 psi	A-30		103 150	or 300 psi	3 x 3
	D	152 150	or 300 psi	A-41 & A-42		104 150	or 300 psi	4 x 4
	E	153 150	or 300 psi	A-61 & A-62		106 150	or 300 psi	6 x 6
	F	154 150	or 300 psi	A-81 & A-82		108 150	or 300 psi	8 x 8
	G	155 150	or 300 psi	A-101 & A-82		110 150	or 300 psi	10 x 10
	H	156 150	or 300 psi	--		112 150	or 300 psi	12 x 12
5403 COMBINATION	A	143C	300 psi	U10		201C	300 psi	1 x 1
	B	145C	300 psi	U20		202C	300 psi	2 x 2
	C	147C	300 psi	U30		203C	300 psi	3 x 3
	D	149C	300 psi	U41		204C	300 psi	4 x 4
	E	152/200A	125 FLG	C41		104/38	125 FLG	4 x 4
	F	152/200A	250 FLG	C42		104/38	250 FLG	4 x 4
	G	153/200A	125 FLG	C61		106/38	125 FLG	6 x 6
	H	153/200A	250 FLG	C62		106/38	250 FLG	6 x 6
	I	154/200A	125 FLG	C81		108/38	125 FLG	8 x 8
	J	155/200A	250 FLG	C82		108/38	250 FLG	8 x 8
	K	155/200A	125 FLG	--		110/38	125 FLG	10 x 10
	L	155/200A	250 FLG	--		110/38	250 FLG	10 x 10
	M	156/200A	125 FLG	--		112/38	125 FLG	12 x 12
	N	156/200A	250 FLG	--		112/38	250 FLG	12 x 12
5404 SEWAGE	A	400		S20		48		2 x 1/2
	AF	400WA		S20B		48 BWA		2 x 1/2
	B	400		S30		48		3 x 1/2
	BF	400WA		S30B		48 BWA		3 x 1/2
	C	400		S40		48		4 x 1/2
	CF	400WA		S40B		48 BWA		4 x 1/2
5406 SEWAGE AIR & VACUUM	A	401		--		301		2 x 1
	AF	401WA		--		301 BWA		2 x 1
	B	402		S20A		302		2 x 2
	BF	402WA		S20AB		302 BWA		2 x 2
	C	403		S30A		303		3 x 3
	CF	403WA		S30AB		303 BWA		3 x 3
5407 COMBINATION SEWAGE	A	400/401		--		48/301		2 x 1
	AF	400/401W		--		48/301 BWA		2 x 1
	B	400/402		S20/20A		48/302		2 x 2
	BF	400/402WA		S20/S20AB		48/302 BWA		2 x 2
	C	400/403		S30/S30A		48/303		3 x 3
	CF	400/403WA		S30/S30AB		48/303 BWA		3 x 3
5408 WELL SERVICE	A	141WD		D5		100 DWS		1/2 x 1/2
	B	142WD		D10		101DWS		1 x 1
	C	144WD		D20		102 DWS		2 x 2
	D	146WD		D30		103 DWS		3 x 3
	E	1604-152		D41 & D42		104 DWS		4 x 4
	F	1606-153		D61 & D62		106 DWS		6 x 6

**AIR RELEASE VALVE**

Air Release Valves are intended to release pockets of air as they accumulate at high points during system operation.

Air Release Valves open and release accumulated air under pressure through the use of a leverage mechanism. When the float is not longer buoyant, this mechanism produces a greater force to open the valve than the system pressure produces against the valve orifice.

For air release valve sizing, the higher the system pressure, the smaller the orifice diameter must be to allow the valve to open and release accumulated air conversely, for a lower system pressure, a larger orifice diameter must be used.

**AIR/VACUUM VALVE**

As a line is being filled with water, Air/Vacuum Valves mounted at high points in the system air present in the pipeline. After all the air has been exhausted, water from the pipeline will enter the valve, lift the float and close the valve orifice.

At some time during the system operation, should the internal pressure of the pipe approach a negative value due to column separation, draining of the pipeline, power outage, pipeline break, etc., the float will immediately drop away from the orifice, and allow a flow of air to re-enter the pipeline, which will minimize the potential vacuum and protect the pipeline against collapse or other related damage.

Even though the entire valve may eventually fill with air, the Air/Vacuum Valve will not open, as it is intended to only exhaust air during pipeline fill and to admit air during pipeline drain.

**COMBINATION AIR VALVE**

As the name implies, this valve combines the operating features of both an Air Release and Air-Vacuum Valve. It is utilized at those high points within a system where it has been determined that the functions of both Air Released and Air/Vacuum Valves are needed to properly vent and protect a pipeline.

## MODEL 5402 AIR/VACUUM VALVE

**BODY:** Cast Iron per ASTM A48, Class 35.

**COVER:** Cast Iron per ASTM A48, Class 35.

**FLOAT:** Type 304 (18-8) Stainless Steel per ASTM A240.

**ORIFICE BUTTON:** Nitrile (Buna-N) per ASTM D2000.

**LEVER ASSEMBLY:** Type 304 (18-8) Stainless Steel per ASTM A240 and A276.



### NPT INLET AND OUTLET

Inlet Size NPT	Letter Code	Part Number	150 PSI WP List Price	Part Number	300 PSI WP List Price	Weight	
						lbs.	kgs.
1/2	AA	5402AA005000	\$336.10	5402AA005300	\$395.90	15	7
1	A	5402A0010000	\$411.50	5402A0010300	\$485.40	24	11
2	B	5402B0020000	\$708.00	5402B0020300	\$828.60	50	23
3	C	5402C0030000	\$1,085.60	5402C0030300	\$1,177.30	55	25

### FLANGED INLET AND PLAIN HOODED OUTLET

Flanged Inlet Size	Letter Code	Part Number	ANSI Class 125 List Price	Weight	
				lbs.	kgs.
4	D	5402D0040000	\$1,905.60	105	48
6	E	5402E0060000	\$2,817.10	160	73
8	F	5402F0080000	\$4,538.00	208	94
10	G	5402G0100000	\$6,201.70	370	168
12	H	5402H0120000	\$10,903.50	555	252
14	I	5402I0140000	\$14,427.90	670	304
16	J	5402J0160000	\$28,373.10	860	390

Flanged Inlet Size	Letter Code	Part Number	ANSI Class 250 List Price	Weight	
				lbs.	kgs.
4	D	5402D0040250	\$2,200.00	115	52
6	E	5402E0060250	\$3,330.10	176	80
8	F	5402F0080250	\$4,897.50	237	108
10	G	5402G0100250	\$7,308.10	405	184
12	H	5402H0120250	\$12,739.20	601	273
14	I	5402I0140250	\$17,235.20	710	322
16	J	5402J0160250	\$32,033.70	945	429

## MODEL 5402 AIR/VACUUM VALVE

FLANGED INLET AND THREADED OR FLANGED HOODED OUTLET\*

Flanged Inlet Size	Letter Code	Part Number	NPT Outlet List Price	Weight	
				lbs.	kgs.
4	D	5402D00400NP	\$2,145.30		48
6	E	5402E00600NP	\$3,129.50		73
8	F	N/A	-	-	-
10	G	N/A	-	-	-
12	H	N/A	-	-	-
14	I	N/A	-	-	-
16	J	N/A	-	-	-

Flanged Inlet Size	Letter Code	Part Number	Flanged Outlet List Price	Weight	
				lbs.	kgs.
4	D	5402D004000F	\$2,249.50	105	48
6	E	5402E006000F	\$3,181.60	160	73
8	F	5402F008000F	\$5,272.40	208	94
10	G	5402G010000F	\$6,961.90	370	168
12	H	5402H012000F	\$11,752.10	555	252
14	I	5402I014000F	POA	670	304
16	J	5402J016000F	POA	860	390

\*The valves listed have ANSI Class 125 Inlet and Outlet Flanges. Other options are available.