

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 5401 AIR RELEASE 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: Viton per ASTM D2000.

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



| Inlet Size NPT | Letter Code | Maximum Operating Pressure | Part Number | Standard Value | Part Number | Value With Vacuum Check | Weight | |
|-------------------|-------------|----------------------------------|--------------|-------------------|--------------|-------------------------|--------|------|
| | | PSI | | | | | lbs. | kgs. |
| 1/2 | A | 175 | 5401A0005000 | \$150.60 | - | N/A | 6 | 3 |
| 3/4 | A | 175 | 5401A0007500 | \$150.60 | - | N/A | 6 | 3 |
| 1 | A | 175 | 5401A0010000 | \$164.70 | - | N/A | 6 | 3 |
| 1/2 | B | 175 | 5401B0005000 | \$248.60 | 5401B00050VC | \$293.00 | 8 | 4 |
| 3/4 | B | 175 | 5401B0007500 | \$248.60 | 5401B00075VC | \$293.00 | 8 | 4 |
| 1 | B | 175 | 5401B0010000 | \$259.70 | 5401B00100VC | \$304.40 | 8 | 4 |
| 1/2 | B | 300 | 5401B0005300 | \$273.40 | 5401B00053VC | \$318.10 | 8 | 4 |
| 3/4 | B | 300 | 5401B0007300 | \$273.40 | 5401B00073VC | \$318.10 | 8 | 4 |
| 1 | B | 300 | 5401B0010300 | \$273.40 | 5401B00103VC | \$318.10 | 8 | 4 |
| 3/4 | C | 150 | 5401C0007500 | \$373.90 | 5401C00075VC | \$418.70 | 12 | 5 |
| 1 | C | 150 | 5401C0010000 | \$373.90 | 5401C00100VC | \$418.70 | 12 | 5 |
| 3/4 | C | 300 | 5401C0075300 | \$404.60 | 5401C00753VC | \$449.10 | 12 | 5 |

| Inlet Size NPT | Letter Code | Maximum Operating Pressure | Part Number | Standard Value | Part Number | Value With Vacuum Check | Weight | |
|-------------------|-------------|----------------------------------|--------------|-------------------|--------------|-------------------------|--------|------|
| | | PSI | | | | | lbs. | kgs. |
| 1 | C | 300 | 5401C0010300 | \$404.60 | 5401C00103VC | \$449.86 | 12 | 5 |
| 1 | D | 150 | 5401D0010000 | \$443.80 | 5401D00100VC | \$488.14 | 24 | 11 |
| 2 | E | 150 | 5401E0020000 | \$468.70 | 5401E00200VC | \$513.86 | 24 | 11 |
| 1 | F | 300 | 5401F0010000 | \$477.29 | 5401F00100VC | \$521.86 | 24 | 11 |
| 2 | G | 300 | 5401G0020000 | \$505.00 | 5401G00200VC | \$549.71 | 24 | 11 |
| 2 | H | 150 | 5401H0020000 | \$856.40 | 5401H00200VC | \$928.86 | 48 | 22 |
| 3 | H | 150 | 5401H0030000 | \$1,096.40 | 5401H00300VC | \$1,168.86 | 53 | 24 |
| 2 | I | 300 | 5401I0020000 | \$915.10 | 5401I00200VC | \$987.57 | 48 | 22 |
| 3 | I | 300 | 5401I0030000 | \$1,138.10 | 5401I00300VC | \$1,210.71 | 53 | 24 |
| 2 | J | 500 | 5401J0020000 | \$1,785.10 | 5401J00200VC | \$1,908.00 | 72 | 33 |
| 2 | K | 800 | 5401K0020000 | \$2,399.14 | 5401K00200VC | \$2,521.86 | 77 | 35 |
| 3/4 | C | 300 | 5401C0075300 | \$404.60 | 5401C00753VC | \$449.10 | 12 | 5 |