

Universal Sewer Valves



US
SERIES

Valve Function

- Exhausts air as a pipeline fills, and allows air in as pipeline drains
- Allows accumulating air to escape while line is in operation

Features Include

- Standard and short body series available
- Available in sizes 2" thru 6"



The Universal Sewer Air Release Valve is designed to permit the automatic escape of large quantities of air from a pipeline when the line is being filled, and to permit air to enter the pipeline when the line is being emptied.

It will also allow accumulating air to escape while the line is in operation and under pressure. This is accomplished with a compound lever system that functions in conjunction with a large and small orifice in one integral body casting.

As the liquid rises into the valve, air escapes through the large orifice to the atmosphere. Liquid entering the valve raises the float and lever system, carrying with it the pressure plunger and the pressure seat. When the liquid has raised the float to its limit, the stainless steel pressure seat rests against the air and vacuum seat, and the pressure plunger rests against the pressure seat. In this position, the valve is closed and no liquid can escape.

The valve body is elongated, as are other Sewage Air Valves. This helps to keep solids and debris away from the valve seating mechanism.

If accumulating air rises into the valve while the line is in operation and under pressure, it will displace the liquid at the top of the valve body, and the float will drop as the liquid level recedes.

As this occurs, the pressure air release valve will open, permitting the escape of the accumulated air, after which the liquid level will rise and the valve will close.

Should the pipeline be drained through natural processes, or if a large break develops, the float will drop all the way down as the liquid level drains from the valve body. The valve will then stay in the full open position, permitting the entrance of air, and eliminating the danger of pipeline collapse due to vacuum.

These cycles will repeat automatically as each condition presents itself, and the valve will function satisfactorily with hot or cold water, and in the presence of many chemicals and oil base liquids.



US SERIES

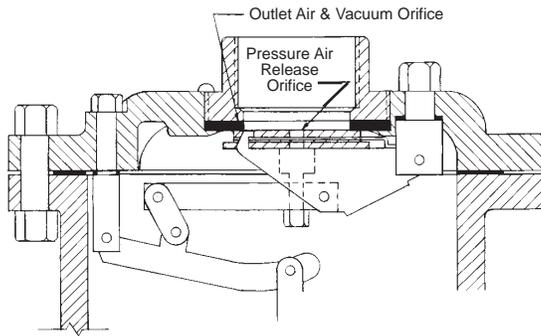
Universal Sewer Valves

Universal Sewer Valves

Universal Short Body Series

| MODEL | INLET | OUTLET | HEIGHT |
|-------|------------|------------|---------|
| US10S | 2" screwed | 1" screwed | 12 3/4" |
| US20S | 2" screwed | 2" screwed | 12 3/4" |

Universal Valve Seating Detail



All CRISPIN Air and Vacuum Valves have standard Buna-N seating material with a Shore durometer of 70-80.

This standard seat allows drip tight closure beyond 4-5 PSIG. Occasionally, a gravity system operates at pressures less than 10 PSIG. These applications require a soft seating material which will prevent leakage down to 2 PSIG.

This soft seating material should not be applied to systems with operating pressures greater than 50 PSIG, or high pressure leaks may occur around the seat.

Because of the unpredictable nature of sewage, backflushing attachments are recommended. These attachments will permit the valve to be cleaned periodically to help maintain the system design's efficiency.

Parts List

| PART NO. | ITEM | MATERIAL |
|-----------------|-------------------|-----------------|
| 1P [†] | PROTECTOP | Cast Iron |
| 1S [†] | TOP | Cast Iron |
| 2 | FLANGE | Cast Iron |
| 3 [†] | BODY, SCREWED | Cast Iron |
| 3F* (2" only) | BODY, 125lb Flg. | Cast Iron |
| 3FH* (2" only) | BODY, 250lb Flg. | Cast Iron |
| 4 | A&V FULCRUM | Stainless Steel |
| 4A | A&V FULCRUM BOLT | Stainless Steel |
| 6 | VALVE LEVER | Stainless Steel |
| 7 | LINK | Stainless Steel |
| 8 | BALL LEVER | Stainless Steel |
| 9 | BALL FLOAT | Stainless Steel |
| 9A | FLOAT ROD | Stainless Steel |
| 10 | BALL FULCRUM | Stainless Steel |
| 11 | VALVE PLUNGER | BUNA-N/SS |
| 12 | PLUNGER NUT | Stainless Steel |
| 15 | PRESSURE SEAT | Stainless Steel |
| 16 | PRESSURE FULCRUM | Stainless Steel |
| 17 | SEAT CAGE | Stainless Steel |
| 18 | A&V SEAT | BUNA-N |
| 21 (2" only) | PRESS. LIMIT STOP | Stainless Steel |
| 23 | BEARING PIN | Stainless Steel |
| 23A/B | BEARING PIN | Stainless Steel |
| 24 | BEARING PIN | Stainless Steel |
| 25 | BEARING PIN | Stainless Steel |
| 26 | PIN CLIP | Stainless Steel |
| 29 (2" only) | DRAIN PLUG | Steel |
| 30 | FULCRUM WASHER | Fibre |
| 31 | FULCRUM WASHER | Fibre |
| 32 | FLANGE GASKET | Armstrong |
| 33 | FLANGE BOLT | Steel |
| 34 | FLANGE NUT | Steel |
| 36 | BALL FULCRUM NUT | Steel |

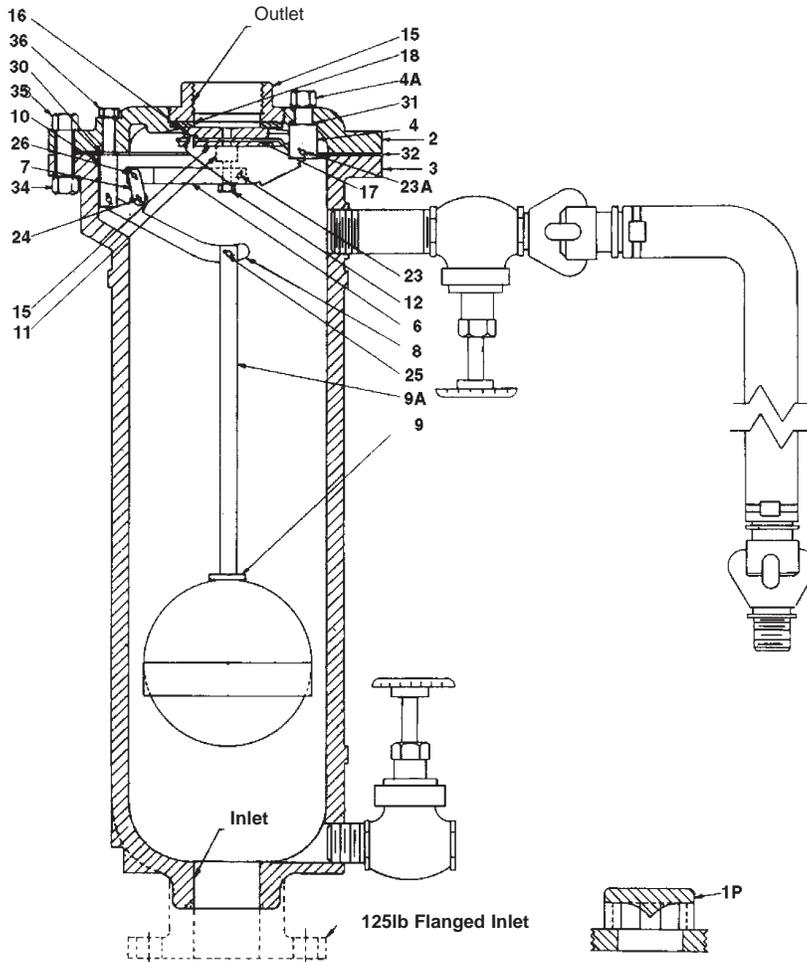
All Crispin valves are hydrostatically tested at 150% of their maximum working pressure.

[†] The above parts are provided as kits or assemblies for ease of maintenance.

* The above parts are optional and interchangeable at the customer's request



US SERIES



Note: Inlet Gate Valve is included when backflushing attachments are provided.

Dimensions and Weights

| Model | Inlet x Outlet | Height | Height w/Backflush | Width | Width w/Backflush | Weight | Weight. w/Backflush | Trim |
|-------|----------------|---------|--------------------|----------|-------------------|--------|---------------------|------|
| USL20 | 2" x 1" | 21 1/2" | 25 3/4" | 9 11/16" | 11 1/4" | 49lbs | 60lbs | SS |
| US20 | 2" x 2" | 25 3/4" | 29 1/2" | 10 1/16" | 13 1/2" | 93lbs | 105lbs | SS |
| US21 | 2" x 2" | 29 1/4" | 36 1/4" | 10 1/16" | 13 1/2" | 106lbs | 136lbs | SS |
| US30 | 3" x 3" | 29" | 34 3/8" | 11" | 15" | 127lbs | 144lbs | SS |
| US31 | 3" x 3" | 29" | 37 3/8" | 11" | 15" | 137lbs | 190lbs | SS |
| US40 | 4" x 4" | 31" | 37" | 12 1/2" | 16 1/2" | 135lbs | 159lbs | SS |
| US41 | 4" x 4" | 31" | 40 1/4" | 12 1/2" | 16 1/2" | 149lbs | 226lbs | SS |
| US61 | 6" x 6" | 26 1/2" | 37" | 14 1/2" | 26 1/2" | 210lbs | 360lbs | IBBT |



US SERIES

Universal Sewer Valves

Universal Sewer Valves

Model Information

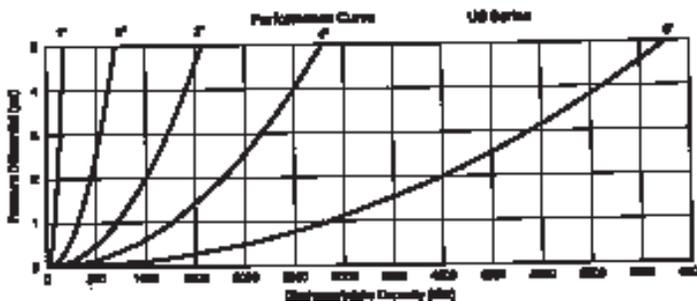
| Inlet Size | 2" | 2" | 3" | 4" | 6" |
|---------------------------|------------------|-----------------|-------|-------|-------|
| Outlet Size | 1" | 2" | 3" | 4" | 6" |
| Screwed Inlet | USL20 US10S | US20 US20S | US30 | US40 | |
| Screwed Inlet w/Backflush | US10SB USL20B | US20SB US20B | US30B | US40B | |
| 125lb Flange | | US21 | US31 | US41 | US61 |
| 125lb Flange w/Backflush | | US21B | US31B | US41B | US61B |

Available Orifice Sizes

| Max. Op. Pressure | USL20 US10S | US20 US20S | US30 | US40 | US61 |
|-------------------|----------------|---------------|------|------|------|
| 150 psi | 3/16" | 1/4" | 1/4" | 1/4" | 1/4" |
| 300 psi | 3/32" | 1/8" | 1/8" | 1/8" | 1/8" |

Discharge in SCFM

| Op. Pres. PSIG | Orifice Size in Inches | | |
|----------------|------------------------|-------|------|
| | 1/8" | 3/16" | 1/4" |
| 150 | 24.4 | 54.6 | 98 |
| 300 | 46.7 | 105 | 187 |



The Air and Vacuum orifice and Pressure Air Release orifice close simultaneously after the pump starts and liquid enters the valve body. The small orifice opens to continuously release accumulating air as it collects in the valve body. The large Air and Vacuum orifice will only open again when a vacuum occurs upon pump shut down.



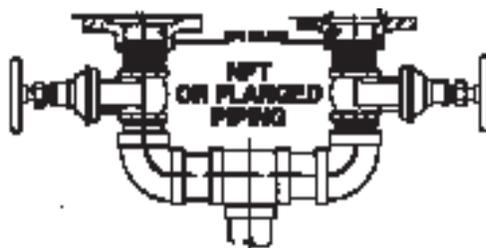
S/SL SERIES

Combination (Dual) Sewer Valves

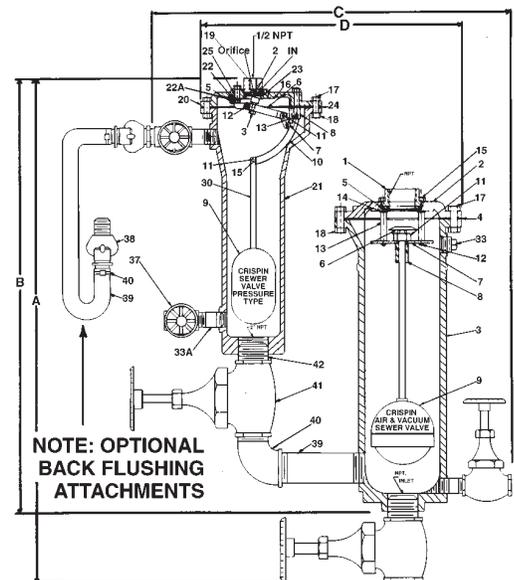
Combination Dimensions

| MODEL | SIZE | INLET | A | B | C | D |
|------------|------|---------------|---------|---------|---------|---------|
| SL20A/SL20 | 2" | Yoke Arrang. | 28 3/4" | 25" | 26 1/4" | 23" |
| S20A/SL20 | 2" | Screw | 35 1/4" | 27 3/4" | 24 3/4" | 19 3/4" |
| S21A/SL20 | 2" | 125 lb. Flng. | 42 3/4" | 31 3/4" | 24 3/4" | 19 3/4" |
| S30A/SL20 | 3" | Screwed | 37" | 27 3/4" | 25 3/4" | 20 3/4" |
| S31A/SL20 | 3" | 125 lb. Flng. | 39 1/2" | 27 3/4" | 25 3/4" | 20 3/4" |
| S40A/SL20 | 4" | Screwed | 39" | 29 3/4" | 27 3/4" | 22 3/4" |
| S41A/SL20 | 4" | 125 lb. Flng. | 42 1/4" | 29 3/4" | 27 3/4" | 22 3/4" |
| S61A/SL20 | 6" | 125 lb. Flng. | 45 1/4" | 31 1/4" | 30 1/4" | 25 1/2" |
| S81A/SL20 | 8" | 125 lb. Flng. | 45" | 29 3/4" | 31 3/4" | 27 1/2" |

Optional Yoke Arrangement



Standard Combination Sewer Valve Arrangement



• Please note that dimensions include backflush attachments

Submittal Sheet for Crispin US Series

2" (2" I X 1" O) Universal Sewer (stan.)

Manufactured in compliance with ANSI/AWWA C512

Date: October, 2001

Specifications

The valve(s) shall be installed at the high points in the system, or at points selected by the engineer. This will permit discharging the surge of air from an empty line when filling, and relieve the vacuum when draining the system. The valve(s) shall also release an accumulation accomplished in a single valve body.

The valve shall operate through a compound lever system that will seal both the pressure orifice and the Air and Vacuum orifice simultaneously.

This lever system shall permit a _____" orifice to release an accumulation of air from the valve body at a capacity of _____ SCFM of air at a pressure of _____ PSIG.

The valve body shall be cast iron. The internal linkage and float shall be stainless steel. The valve(s) shall be Crispin Model _____ Universal Sewer Air Valve, as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA. The valve(s) shall be _____" NPT screwed as ANSI Class (125, 250) flanged inlet connection.

Valves which operate with the Air and Vacuum Valve disc held in a cradle with slots through which the air must flow will not be acceptable.

Option: A protectop shall be supplied to prevent dirt and debris from entering the outlet of the valve.

Option: The valves shall be supplied with backflushing attachments so that the interior body can be flushed periodically for proper operation.

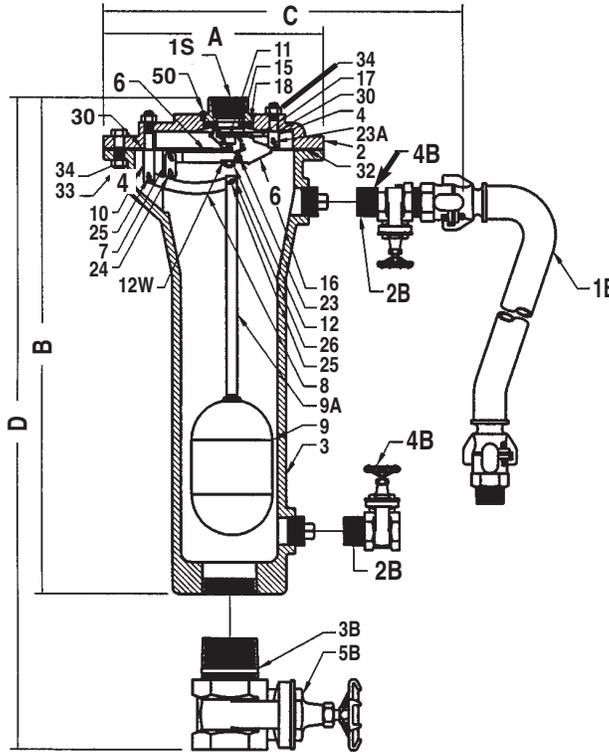
Standard operating pressure for Crispin Air Valves is 20 to 150 PSIG. Please check one of the following if your operating needs differ: _____ 2 to 40 PSIG _____ 151 to 300 PSIG

Orifice Options

| DIAMETER | MAX. PRESSURE | FLOW RATE |
|----------|---------------|-----------|
| 3/16 | 150 PSIG | 54.6 SCFM |
| 3/32 | 300 PSIG | 26.4 SCFM |

Size Specifications

| MODEL | INLET SIZE | OUTLET SIZE | A | B | C | D | WHT. |
|--------|------------|-------------|------|-------|-------|-------|------|
| USL20 | 2" NPT | 1" NPT | 9.75 | 21.50 | | | 50 |
| USL20B | 2" NPT | 1" NPT | | | 11.25 | 25.75 | 62 |



Parts List

| ITEM | QTY. | DESCRIPTION | MATERIAL | ASTM |
|------|------|--------------------|---------------------|-----------|
| 1S | 1 | TOP | CAST IRON | A126 CL.B |
| 2 | 1 | FLANGE | CAST IRON | A126 CL.B |
| 3 | 1 | BODY | CAST IRON | A126 CL.B |
| 4 | 1 | AIR/VACUUM FULCRUM | STAINLESS STEEL | A582 |
| 6 | 1 | VALVE LEVER | STAINLESS STEEL | A582 |
| 7 | 2 | LINK | STAINLESS STEEL | A240 |
| 8 | 1 | BALL LEVER | STAINLESS STEEL | A240 |
| 9 | 1 | FLOAT | STAINLESS STEEL | A240 |
| 9A | 1 | FLOAT ROD | STAINLESS STEEL | A582 |
| 10 | 1 | BALL FULCRUM | STAINLESS STEEL | A582 |
| 11 | 1 | PLUNGER | S/S & BUNA-N RUBBER | D2000 |
| 12 | 1 | PLUNGER NUT | STAINLESS STEEL | A194 |
| 12W | 1 | LOCK WASHER | STAINLESS STEEL | A240 |
| 15 | 1 | PRESSURE SEAT | STAINLESS STEEL | A582 |
| 16 | 1 | PRESSURE FULCRUM | STAINLESS STEEL | A240 |
| 17 | 1 | SEAT CAGE | STAINLESS STEEL | A240 |
| 18 | 1 | SEAT | BUNA-N RUBBER | D2000 |
| 23 | 1 | BEARING PIN | STAINLESS STEEL | A582 |
| 23A | 1 | BEARING PIN | STAINLESS STEEL | A582 |
| 24 | 2 | BEARING PIN | STAINLESS STEEL | A582 |
| 25 | 2 | BEARING PIN | STAINLESS STEEL | A582 |
| 26 | 6 | COTTER PIN | STAINLESS STEEL | A313 |
| 30 | 2 | FULCRUM WASHER | FIBER | N/A |
| 32 | 1 | FLANGE GASKET | ARMSTRONG N-8092 | N/A |
| 33 | 7 | BOLT | STEEL | A307 |
| 34 | 9 | NUT | STEEL | A563 |
| *40 | 2 | FLUSH PLUG | CAST IRON | A126 CL.B |
| 50 | 1 | INTERFERENCE PIN | STAINLESS STEEL | A193 |

OPTIONAL BACK FLUSH COMPONENTS

| | | | | |
|-----|---|---------------|----------------------|------|
| *1B | 1 | HOSE ASSEMBLY | S/S, CAD PLT, RUBBER | N/A |
| *2B | 2 | 1 X CL NIPPLE | STEEL | A53 |
| *3B | 1 | 2 X CL NIPPLE | STEEL | A53 |
| *4B | 2 | 1" GATE VALVE | BRASS | B505 |
| *5B | 1 | 2" GATE VALVE | BRASS | B505 |



SUBMITTAL SHEET FOR US SERIES



Submittal Sheet for Crispin US Series

1"-2" (2" I X 1" O) Universal Sewer (SB)

Manufactured in compliance with ANSI/AWWA C512

Date: October, 2001

Specifications

The valve(s) shall be installed at the high points in the system, or at points selected by the engineer. This will permit discharging the surge of air from an empty line when filling, and relieve the vacuum when draining the system. The valve(s) shall also release an accumulation accomplished in a single valve body.

The valve shall operate through a compound lever system that will seal both the pressure orifice and the Air & Vacuum orifice simultaneously.

This lever system shall permit a _____" orifice to release an accumulation of air from the valve body at a capacity of _____ SCFM of air at a pressure of _____ PSIG.

The valve body shall be cast iron. The internal linkage and float shall be stainless steel. The valve(s) shall be Crispin Model _____ Universal Sewer Air Valve, as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA. The valve(s) shall be _____" NPT screwed as ANSI Class (125, 250) flanged inlet connection. Valves which operate with the Air & Vacuum Valve disc held in a cradle with slots through which the air must flow will not be acceptable.

Option: A protectop shall be supplied to prevent dirt and debris from entering the outlet of the valve.

Option: The valves shall be supplied with backflushing attachments so that the interior body can be flushed periodically for proper operation.

Standard operating pressure for Crispin Air Valves is 20 to 150 PSIG. Please check one of the following if your operating needs differ: _____ 2 to 40 PSIG _____ 151 to 300 PSIG

Size Specifications

| MODEL | INLET SIZE | OUTLET SIZE | A | B | C | D | WHT. |
|--------|------------|-------------|-------|-------|-------|-------|------|
| US10S | 2" NPT | 1" NPT | 10.25 | 12.75 | | | 49 |
| US10SB | 2" NPT | 1" NPT | | | 13.75 | 16.50 | 60 |
| US20S | 2" NPT | 2" NPT | 10.25 | 12.75 | | | 54 |
| US20SB | 2" NPT | 2" NPT | | | 13.75 | 16.50 | 66 |

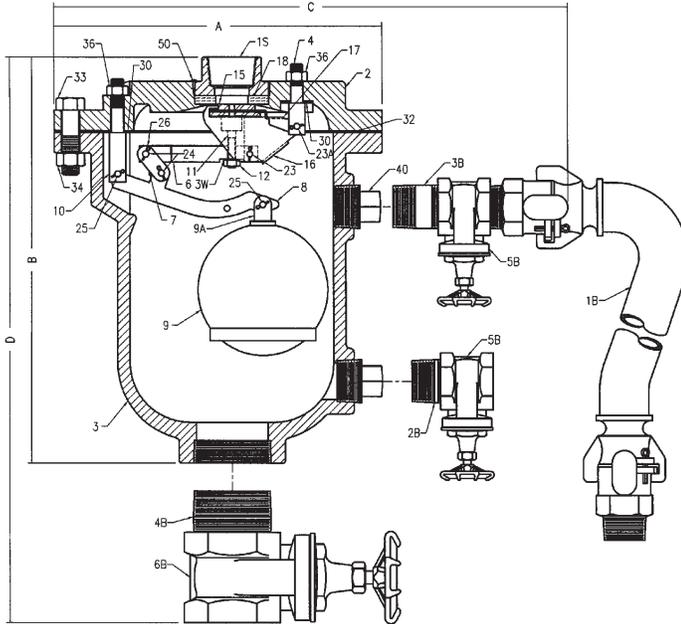
1" Valve Orifice Options

| DIAMETER | MAX. PRESSURE | DISCHARGE RATE |
|----------|---------------|----------------|
| 3/16 | 150 PSIG | 54.6 SCFM |
| 3/32 | 300 PSIG | 26.4 SCFM |

2" Valve Orifice Options

| DIAMETER | MAX. PRESSURE | DISCHARGE RATE |
|----------|---------------|----------------|
| 1/4 | 150 PSIG | 98 SCFM |
| 1/8 | 300 PSIG | 46.7 SCFM |

* Parts are interchangeable & optional at customer's request



Parts List

| ITEM | DESCRIPTION | MATERIAL | ASTM |
|---------------------------------------|--------------------|------------------------|------------|
| 1S | TOP | CAST IRON | A126 CL.B |
| 2 | FLANGE | CAST IRON | A126 CL.B |
| 3 | BODY | CAST IRON | A126 CL.B |
| 3W | LOCK WASHER | STAINLESS STEEL | A240 |
| 4 | AIR/VACUUM FULCRUM | STAINLESS STEEL | A582 |
| 6 | VALVE LEVER | STAINLESS STEEL | A582 |
| 7 | LINK | STAINLESS STEEL | A240 |
| 8 | BALL LEVER | STAINLESS STEEL | A240 |
| 9 | FLOAT | STAINLESS STEEL | A240 |
| 9A | FLOAT ROD | STAINLESS STEEL | A582 |
| 10 | BALL FULCRUM | STAINLESS STEEL | A582 |
| 11 | PLUNGER | S/S & BUNA-N RUBBER | D2000/A193 |
| 12 | PLUNGER NUT | STAINLESS STEEL | A194 |
| 15 | PRESSURE SEAT | STAINLESS STEEL | A582 |
| 16 | PRESSURE FULCRUM | STAINLESS STEEL | A582 |
| 17 | SEAT CAGE | STAINLESS STEEL | A240 |
| 18 | AIR/VACUUM SEAT | BUNA-N RUBBER | D2000 |
| 23 | BEARING PIN | STAINLESS STEEL | A582 |
| 23A | BEARING PIN | STAINLESS STEEL | A582 |
| 24 | BEARING PIN | STAINLESS STEEL | A582 |
| 25 | BEARING PIN | STAINLESS STEEL | A582 |
| 26 | COTTER PIN | STAINLESS STEEL | A493 |
| 30 | FULCRUM WASHER | FIBER | D710 |
| 32 | FLANGE GASKET | ARMSTRONG N-8092 | N/A |
| 33 | FLANGE BOLT | STEEL | A307 |
| 34 | NUT | STEEL | A563 |
| 36 | FULCRUM NUT | STEEL | A563 |
| *40 | FLUSH PLUG | CAST IRON | A126 CL.B |
| 50 | INTERFERENCE PIN | STAINLESS STEEL | A582 |
| OPTIONAL BACK FLUSH COMPONENTS | | | |
| *1B | HOSE ASSEMBLY | STEEL, CAD PLT, RUBBER | N/A |
| *2B | NIPPLE | STEEL | A53 |
| *3B | NIPPLE | STEEL | A53 |
| *4B | NIPPLE | STEEL | A53 |
| *5B | GATE VALVE | BRASS | N/A |
| *6B | GATE VALVE | BRASS | N/A |

SUBMITTAL SHEET FOR US SERIES

Submittal Sheet for Crispin US Series

2"–6" Universal Sewer Valve (high)

Manufactured in compliance with ANSI/AWWA C512

Date: October, 2001



SUBMITTAL SHEET FOR US SERIES

Specifications

The valve(s) shall be installed at the high points in the system, or at points selected by the engineer. This will permit discharging the surge of air from an empty line when filling, and relieve the vacuum when draining the system. The valve(s) shall also release an accumulation accomplished in a single valve body.

The valve shall operate through a compound lever system that will seal both the pressure orifice and the Air and Vacuum orifice simultaneously. This lever system shall permit a _____" orifice to release an accumulation of air from the valve body at a capacity of _____ SCFM of air at a pressure of _____ PSIG.

The valve body shall be cast iron. The internal linkage and float shall be stainless steel. The valve(s) shall be Crispin Model _____ Universal Sewer Air Valve, as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA. The valve(s) shall be _____" NPT screwed as ANSI Class (125, 250) flanged inlet connection. Valves which operate with the Air and Vacuum Valve disc held in a cradle with slots through which the air must flow will not be acceptable.

Option: A protectop shall be supplied to prevent dirt and debris from entering the outlet of the valve.

Option: The valves shall be supplied with backflushing attachments so that the interior body can be flushed periodically for proper operation.

Standard operating pressure for Crispin Air Valves is 20 to 150 PSIG. Please check one of the following if your operating needs differ: _____ 2 to 40 PSIG _____ 151 to 300 PSIG

Size Specifications

| MODEL | INLET SIZE | OUTLET SIZE | A | B | C | D | WHT. |
|---------|-------------|-------------|-------|-------|-------|-------|------|
| US20 | 2" NPT | 2" NPT | 10.25 | 25.75 | | | 93 |
| US20B | 2" NPT | 2" NPT | | | 13.50 | 29.50 | 105 |
| **US21 | 2" 125# FLG | 2" NPT | 10.25 | 29.25 | | | 99 |
| **US21B | 2" 125# FLG | 2" NPT | | | 13.50 | 36.25 | 139 |
| US30 | 3" NPT | 3" NPT | 11.00 | 29.00 | | | 127 |
| US30B | 3" NPT | 3" NPT | | | 15.00 | 34.75 | 144 |
| US31 | 3" 125# FLG | 3" NPT | 11.00 | 29.00 | | | 137 |
| US31B | 3" 125# FLG | 3" NPT | | | 15.00 | 37.50 | 190 |
| US40 | 4" NPT | 4" NPT | 12.50 | 31.00 | | | 135 |
| US40B | 4" NPT | 4" NPT | | | 16.50 | 37.00 | 164 |
| US41 | 4" 125# FLG | 4" NPT | 12.50 | 31.00 | | | 149 |
| US41B | 4" 125# FLG | 4" NPT | | | 16.50 | 40.25 | 226 |
| US61 | 6" 125# FLG | 6" NPT | 14.50 | 26.50 | | | 210 |
| US61B | 6" 125# FLG | 6" NPT | | | 26.50 | 37.00 | 360 |

US61 is only available with flanged inlet.

Orifice Options

| DIAMETER | MAX. PRESSURE | FLOW RATE |
|----------|---------------|-----------|
| 1/4 | 150 PSIG | 98 SCFM |
| 1/8 | 300 PSIG | 46.7 SCFM |

OPTIONAL BACK FLUSH COMPONENTS

| ITEM | DESCRIPTION | MATERIAL | ASTM |
|------|---------------|------------------------|------|
| *1B | HOSE ASSEMBLY | STEEL, CAD PLT, RUBBER | N/A |
| *2B | NIPPLE | STEEL | A53 |
| *3B | NIPPLE | STEEL | A53 |
| *4B | 1" GATE VALVE | BRASS | N/A |
| *5B | BOLT | STEEL | A307 |
| *6B | NUT | STEEL | A563 |
| *7B | GASKET | ARMSTRONG N-8092 | N/A |
| *8B | 1" GATE VALVE | BRASS | N/A |

Parts List

| ITEM | DESCRIPTION | MATERIAL | ASTM |
|------|--------------------|---------------------|------------|
| 1S | TOP | CAST IRON | A126 CL.B |
| 2 | FLANGE | CAST IRON | A126 CL.B |
| 3F | BODY | CAST IRON | A126 CL.B |
| 3W | LOCK WASHER | STAINLESS STEEL | A240 |
| 4 | AIR/VACUUM FULCRUM | STAINLESS STEEL | A582 |
| 5 | PRESSURE FULCRUM | STAINLESS STEEL | A240 |
| 6 | VALVE LEVER | STAINLESS STEEL | A582 |
| 7 | LINK | STAINLESS STEEL | A240 |
| 8 | BALL LEVER | STAINLESS STEEL | A240 |
| 9 | FLOAT | STAINLESS STEEL | A240 |
| 9A | FLOAT ROD | STAINLESS STEEL | A582 |
| 10 | BALL FULCRUM | STAINLESS STEEL | A582 |
| 11 | PLUNGER | S/S & BUNA-N RUBBER | A193/D2000 |
| 12 | PLUNGER NUT | STAINLESS STEEL | A194 |
| 13 | PRESSURE SEAT | STAINLESS STEEL | A582 |
| 17 | SEAT CAGE | STAINLESS STEEL | A240 |
| 18 | AIR/VACUUM SEAT | BUNA-N RUBBER | D2000 |
| 23 | BEARING PIN | STAINLESS STEEL | A582 |
| 23A | BEARING PIN | STAINLESS STEEL | A582 |
| 24 | BEARING PIN | STAINLESS STEEL | A582 |
| 24A | BEARING PIN | STAINLESS STEEL | A582 |
| 25 | BEARING PIN | STAINLESS STEEL | A582 |
| 26 | COTTER PIN | STAINLESS STEEL | A493 |
| 31 | FULCRUM WASHER | FIBER | D710 |
| 32 | FLANGE GASKET | ARMSTRONG N-8092 | N/A |
| 33 | BOLT | STEEL | A307 |
| 34 | NUT | STEEL | A563 |
| *40 | FLUSH PLUG | CAST IRON | A126 CL.B |
| 50 | INTERFERENCE PIN | STAINLESS STEEL | A582 |

