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.

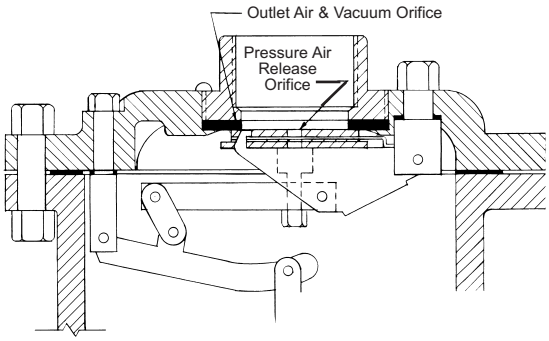
US SERIES

Universal Sewer Valves

Universal 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	BEARING PIN	Stainless Steel
23B	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.

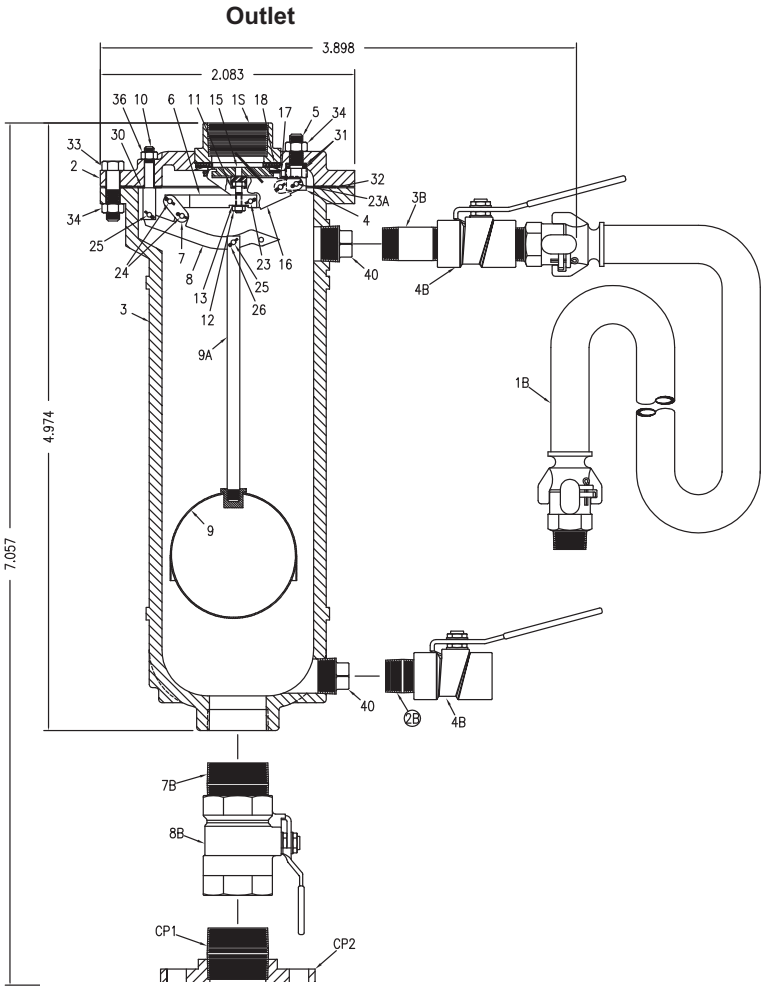
† *The above parts are provided as kits or assemblies for ease of maintenance.*

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

US Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

Universal Sewer Valves

US SERIES



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

Dimensions and Weights

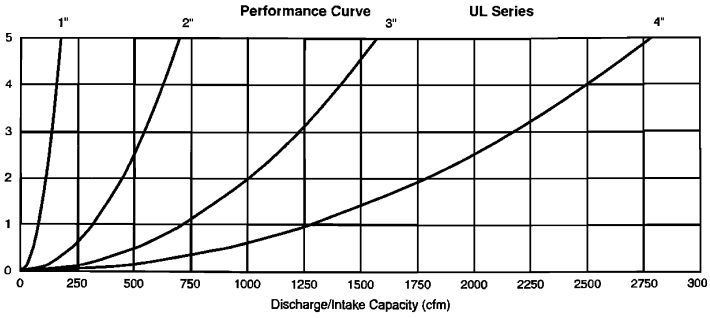
Model	Inlet x Outlet	Height	Height w/Backflush	Width	Width w/Backflush	Weight	Weight. w/Backflush	Trim
USL20	2” x 1”	21 1/2”	25 3/4”	9 11/16”	11 1/4”	49lbs	60lbs	SS
US20	2” x 2”	25 3/4”	29 1/2”	10 1/16”	13 1/2”	93lbs	105lbs	SS
US21	2” x 2”	29 1/4”	36 1/4”	10 1/16”	13 1/2”	106lbs	136lbs	SS
US30	3” x 3”	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

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.

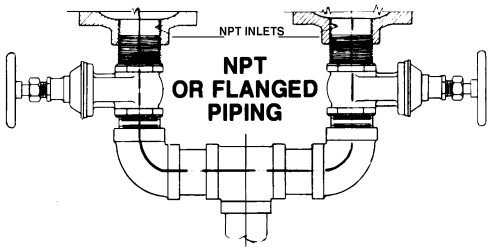
S/SL SERIES

Combination (Dual) Sewer Valves

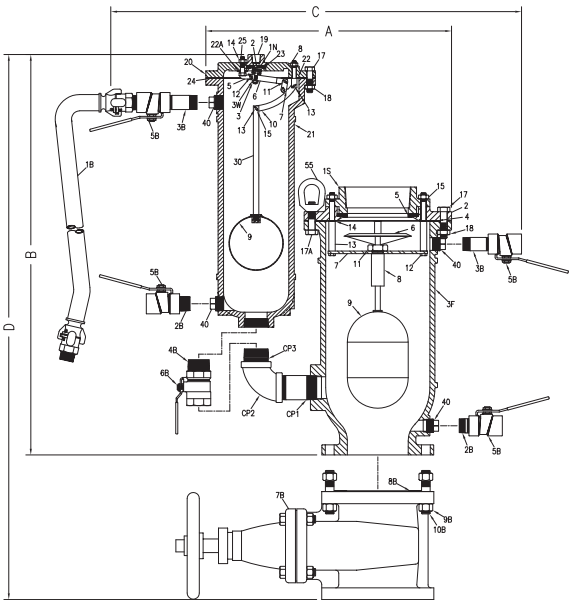
Combination Dimensions

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

US Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

Submittal Sheet for Crispin US Series

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

Manufactured in compliance with ANSI/AWWA C512 Date: 2016

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.

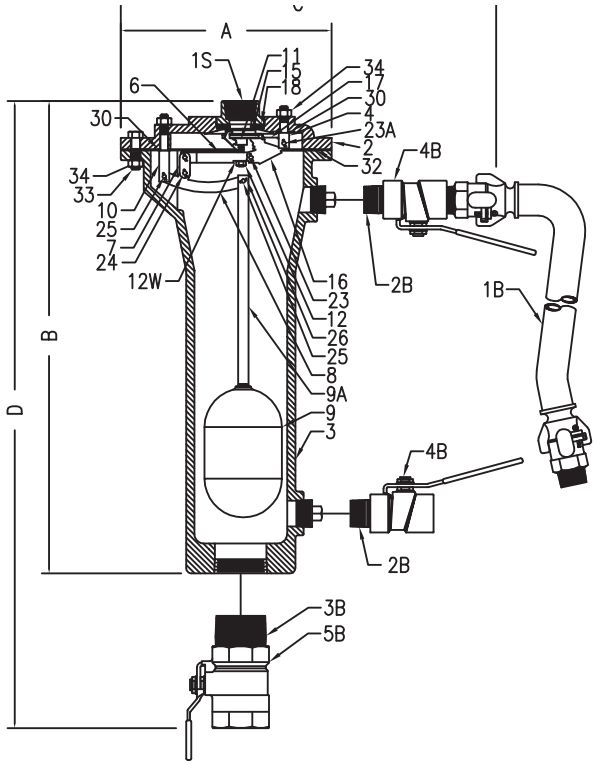
Standard operating pressure for Crispin Air Valves is 20 to 150 PSIG. Please check one of the following if your operating needs differ:____ 2 to 40 PSIG____ 151 to 300 PSIG

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			12.25	27.00	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
OPTIONAL BACK FLUSH COMPONENTS				
*1B	1	HOSE ASSEMBLY	S/S, CAD PLT, RUBBER	N/A
*2B	2	NIPPLE	STEEL	A53
*3B	1	NIPPLE	STEEL	A53
*4B	2	BALL VALVE	BRASS	B505
*5B	1	BALL VALVE	BRASS	B505

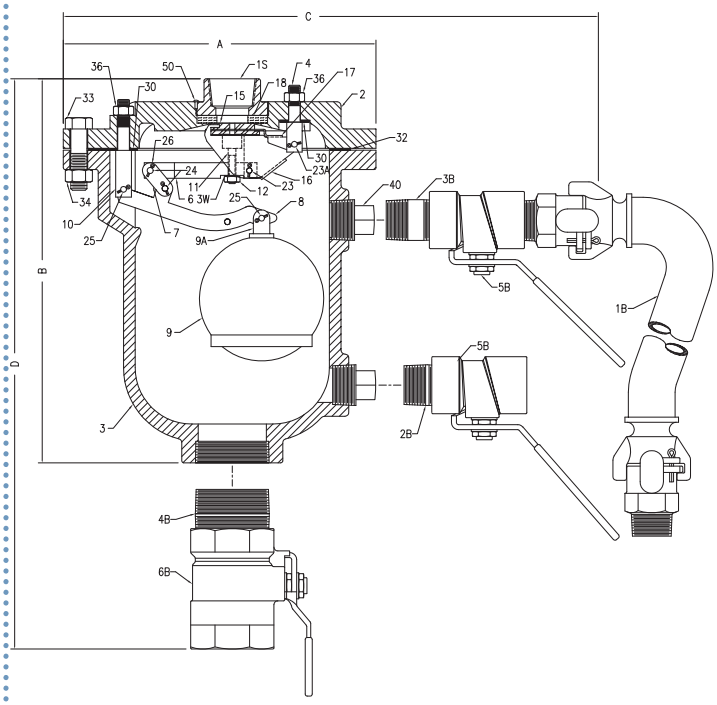
Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

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: 2016



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

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	BUNA-N RUBBER & S/S	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	CAD PLT. STEEL & RUBBER	N/A
*2B	NIPPLE	STEEL	A53
*3B	NIPPLE	STEEL	A53
*4B	NIPPLE	STEEL	A53
*5B	BALL VALVE	BRASS	N/A
*6B	BALL VALVE	BRASS	N/A

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			14.75	17.75	60
US20S	2” NPT	1” NPT	10.25	12.75			54
US20SB	2” NPT	1” NPT			14.75	17.75	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

US Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

Submittal Sheet for Crispin US Series

2”–6” Universal Sewer Valve (high)

Manufactured in compliance with ANSI/AWWA C512 Date: 2016

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.

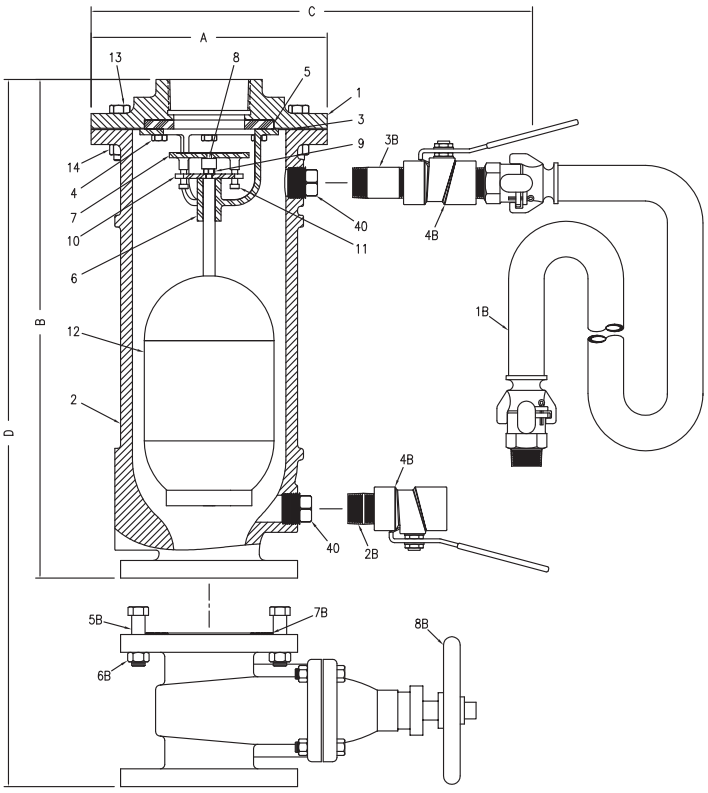
Option: A protectop shall be supplied to prevent dirt and debris from entering the outlet of the valve.

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

Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
1	COVER	CAST IRON	A126 CL.B
2	BODY	CAST IRON	A126 CL.B
3	COVER GASKET	BUNA-N RUBBER	D2000
4	SEAT RETAINER BOLT	STAINLESS STEEL	A193
5	SEAT	BUNA-N RUBBER	D2000
6	FLOAT GUIDE PLATE	STAINLESS STEEL	A351-CF8M
7	VALVE ASSEMBLY	STAINLESS STEEL	A351-CF8M
8	PLUNGER ASSEMBLY	BUNA-N RUBBER & S/S	D2000/A193
9	PLUNGER NUT	STAINLESS STEEL	A194
10	VALVE GUIDE PLATE	STAINLESS STEEL	A240
11	SHOULDER BOLT	STAINLESS STEEL	A193
12	FLOAT ASSEMBLY	STAINLESS STEEL	A276/240
13	COVER BOLT	STAINLESS STEEL	A193
14	COVER NUT	STAINLESS STEEL	A194
*40	FLUSH PLUG	BRASS	N/A=



Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	A	B	C	D	WHT.
US30	3” NPT	3” NPT	10.00	21.25			89
US30B	3” NPT	3” NPT			15.25	28.75	116
US31	3” 125# FLG	3” NPT	10.00	21.25			94
US31B	3” 125# FLG	3” NPT			15.25	29.25	115
US40	4” NPT	4” NPT	11.50	22.00			113
US40B	4” NPT	4” NPT			17.25	32.35	158
US41	4” 125# FLG	4” NPT	11.50	22.00			120
US41B	4” 125# FLG	4” NPT			17.25	32.50	147
US61	6” 125# FLG	6” NPT	14.50	25.50			195
US61B	6” 125# FLG	6” NPT			19.25	36.00	339

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	RUBBER & CAD PLT STEEL	N/A
*2B	NIPPLE	STEEL	A53
*3B	NIPPLE	STEEL	A53
*4B	BALL VALVE	BRASS	N/A
*5B	BOLT	STEEL	A307
*6B	NUT	STEEL	A563
*7B	GASKET	ARMSTRONG N-8092	N/A
*8B	GATE VALVE	BRASS	N/A

Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

SUBMITTAL SHEET FOR S/SL SERIES

Submittal Sheet for Crispin S/SL Series

2” Dual Sewer Valve (stan.)

Manufactured in compliance with ANSI/AWWA C512 Date: 2016

Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
1	TOP	CAST IRON	A126 CL.B
2	FLANGE	CAST IRON	Al 26 CL.B
3	BODY	CAST IRON	A126 CL.B
4	GASKET	ARMSTRONG N—8092	N/A
5	SEAT	BUNA—N RUBBER	D2000
6	VALVE & FLOAT ROD	STAINLESS STEEL	A582
7	GUIDE ROD STAND	STAINLESS STEEL	A240
8	FLOAT ROD GUIDE	NYLATRON	N/A
9	FLOAT	STAINLESS STEEL	A240
11	GUIDE ROD NUT	STAINLESS STEEL	A194
12	STAND ROD SCREW	STAINLESS STEEL	A193
13	STAND ROD	STAINLESS STEEL	A582
14	STAND ROD GASKET	FIBER	NvA
17	BOLT	STEEL	A307
18	NUT	STEEL	A563
*40	FLUSH PLUG	CAST IRON	A126 CL.B
50	INTERFERENCE PIN	STAINLESS STEEL	A193

Pressure Air Release Sewer Valve

*1N	SEAT	PVC	1784
*1P	SEAT	STAINLESS STEEL	A582
2	VALVE PLUNGER	BUNA—N RUBBER	D2000
3	NUT	STAINLESS STEEL	A194
3W	LOCKWASH ER	STAINLESS STEEL	A240
5	VALVE FULCRUM	STAINLESS STEEL	A582
6	VALVE LEVER	STAINLESS STEEL	A240
7	LINK	STAINLESS STEEL	A240
8	BALL FULCRUM	STAINLESS STEEL	A582
9	BALL FLOAT	STAINLESS STEEL	A240
10	BALL LEVER	STAINLESS STEEL	A240
11	BEARING PIN	STAINLESS STEEL	A582
12	BEARING PIN	STAINLESS STEEL	A582
13	BEARING PIN	STAINLESS STEEL	A582
15	COTTER PIN	STAINLESS STEEL	A313
17	BOLT	STEEL	A307
18	NUT	STEEL	A563
9	TOP	CAST IRON	A126 CL.B
20	FLANGE	CAST IRON	A126 CL.B
21	BODY	CAST IRON	A126 CL.B
22	FULCRUM WASHER	FIBER	N/A
22A	FULCRUM WASHER	FIBER	N/A
23	SEAT GASKET	BUNA—N RUBBER	D2000
24	FLANGE GASKET	ARMSTRONG N—8092	N/A
25	BOLT	STAINLESS STEEL	A193
30	FLOAT ROD	STAINLESS STEEL	A582
*40	FLUSH PLUG	CAST IRON	A196 CL.B

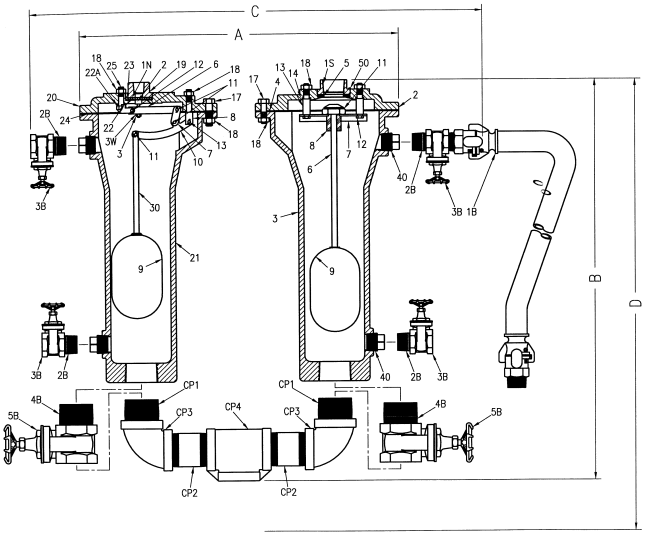
Optional Back Flush Components

*1B	HOSE ASSEMBLY	RUBBER, CAD. PLT. STEEL	N/A
*2B	1 “ x CL. NIPPLE	STEEL	A53
*3B	1 “ GATE VALVE	BRASS	N/A
*4B	2” x CL. NIPPLE	STEEL	A53
*5B	9” GATE VALVE	BRASS	N/A

Connecting Parts

CP1	2” x CL. NIPPLE	STEEL	A53
CP2	2” x 3.500” NIPPLE	STEEL	A53
CP3	2” — 90° ELBOW	MALLEABLE IRON	A338
CP4	2” x 2” x 2” TEE	MALLEABLE IRON	A338

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



Specifications

The Combination (dual) Sewer Valves shall be installed at 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 or under a negative pressure, and also to release an accumulation of air and gases when the system is under pressure.

The valve shall be Crispin Model_____Combination Sewer Valves as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, Pa.

(To specify each valve of the combination, refer to the specifications for the Sewer Air and Vacuum and Pressure Sewer Valves).

The valves in combination shall be joined by piping the pressure sewer valve out of the side of the Air and Vacuum Sewer Valve.

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

Option: (Where pressures are greater than 300 psig).

The valve(s) shall be ANSI Class (125,250) flanged inlet connection and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

Option: The valves in the combination shall be joined together by a “Y” or “yoke” section.

Note: When combination valves are specified with backflushing attachments, only one backflushing hose per combination will be supplied.

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	WT
SL20A/SL20	2” NPT	1” NPT	23.00	25.00			110
SL20AB/S20B	2” NPT	1” NPT			26.25	28.75	130

* Parts are interchangeable & optional at customer’s request

S/SL Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

Submittal Sheet for Crispin S/SL Series

3-10” Dual Sewer Valve (high) (1 of 2)

Manufactured in compliance with ANSI/AWWA C512 Date: 2016

SUBMITTAL SHEET FOR S/SL SERIES

Specifications

The Combination (dual) Sewer Valves shall be installed at 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 or under a negative pressure, and also to release an accumulation of air and gases when the system is under pressure.

The valve shall be Crispin Model_____Combination Sewer Valves as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, Pa.

(To specify each valve of the combination, refer to the specifications for the Sewer Air and Vacuum and Pressure Sewer Valves).

The valves in combination shall be joined by piping the pressure sewer valve out of the side of the Air and Vacuum Sewer Valve.

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

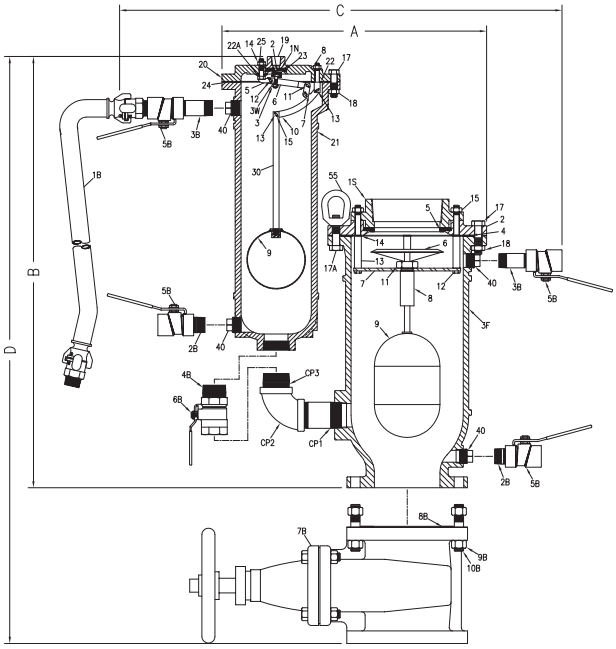
Option: (Where pressures are greater than 300 psig).

The valve(s) shall be ANSI Class (125,250) flanged inlet connection and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

Option : The valves in the combination shall be joined together by a “Y” or “yoke” section.

Note: When combination valves are specified with backflushing attachments, only one backflushing hose per combination will be supplied.

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	WT.
†S30A/S20	3” NPT	3” NPT	20.25	31.50			197
†S30AB/S20B	3” NPT	3” NPT			24.25	41.00	225
†S31A/S20	3” 125# FLG	3” NPT	20.25	31.50			207
†S31AB/S20B	3” 125# FLG	3’ NPT			24.25	43.50	270
†S40A/S20	4” NPT	4” NPT	22.25	33.50			218
†S40AB/S20B	4” NPT	4” NPT			26.25	43.50	237
†S41A/S20	4” 125# FLG	4” NPT	22.25	33.50			235
†S41AB/S20B	4” 125# FLG	4” NPT			26.25	46.25	325
S61A/S20	6” 125# FLG	6” NPT	25.25	35.00			308
S61AB/S20B	6” 125# FLG	6” NPT			28.75	49.25	460
S81A/S20	8” 125# FLG	8” NPT	27.25	33.50			433
S81AB/S20B	8” 125# FLG	8” NPT			30.25	49.00	660
S101A/S20	10” 125# FLG	10” NPT	23.00	28.75			600
S101AB/S20B	10” 125# FLG	10” NPT			41.00	51.00	900

Optional Back Flush Components

ITEM	DESCRIPTION	MATERIAL	ASTM
*1B	HOSE ASSEMBLY	RUBBER, CAD. PLT. STEEL	N/A
*2B	NIPPLE	STEEL	A’53
*3B	NIPPLE	STEEL	A53
*4B	NIPPLE	STEEL	A53
*5B	GATE VALVE	BRASS	N/A
*6B	GATE VALVE	BRASS	N/A
*7B	GATE VALVE	BRASS	N/A
*8B	GASKET	ARMSTRONG N—8092	N/A
*9B	NUT	STEEL	A563
*108	THR’D ALL STUD	STEEL	A307
CP1	NIPPLE	STEEL	A53
CP2	ELBOW	MALLEABLE IRON	A338
CP3	NIPPLE	STEEL	A53

Please refer to the next page for a full listing of the standard and connecting parts associated with Combination Dual Air Release Sewer Valves.

† *3” and 4” also available with threaded inlet.*
** Parts are interchangeable & optional at customer’s request*

Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com

SUBMITTAL SHEET FOR S/SL SERIES

Submittal Sheet for Crispin S/SL Series

3-10” Dual Sewer Valve (high) (2 of 2)

Manufactured in compliance with ANSI/AWWA C512 Date: 2016

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
4	GASKET	ARMSTRONG N—8092	N/A
5	SEAT	BUNA—N RUBBER	D2000
6	VALVE & FLOAT ROD	STAINLESS STEEL	A582
7	GUIDE ROD STAND	STAINLESS STEEL	A240
8	FLOAT ROD GUIDE	NYLATRON	D5989
9	FLOAT	STAINLESS STEEL	A240
11	GUIDE ROD NUT	STAINLESS STEEL	A194
12	STAND ROD SCREW	STAINLESS STEEL	A193
13	STAND ROD	STAINLESS STEEL	A582
14	STAND ROD GASKET	FIBER	D710
15	STANDROD NUT	STEEL	A563
17	BOLT	STEEL	A307
17A	BOLT	STEEL	A307
18	NUT	STEEL	A563
19	BOLT (NOT SHOWN)	STEEL	A307
*40	DRAIN PLUG	CAST IRON	A126 CL.B
55	EYENUT	STEEL	A563
	Pressure Air Release Sewer Valve		
*1N	SEAT	PVC	1754
*1P	SEAT	STAINLESS STEEL	A582
2	VALVE	PLUNGER BUNA—N RU8BER	D2000
3	NUT	STAINLESS STEEL	A194
W	LOCK	WASHER STAINLESS STEEL	A240
5	VALVE FULCRUM	STAINLESS STEEL	A582
6	VALVE LEVER	STAINLESS STEEL	A582
7	LINK	STAINLESS STEEL	A240
8	BALL FULCRUM	STAINLESS STEEL	A582
9	BALL FLOAT	STAINLESS STEEL	A240
10	BALL LEVER	STAINLESS STEEL	A240
11	BEARING PIN	STAINLESS STEEL	A582
12	BEARING PIN	STAINLESS STEEL	A582
13	BEARING PIN	STAINLESS STEEL	A582
14	NUT	STEEL	A563
15	COTTER PIN	STAINLESS STEEL	A493
17	BOLT	STEEL	A307
18	NUT	STEEL	A563
19	TOP	CAST IRON	A126 CL.B
20	FLANGE	CAST IRON	A126 CL.B
21	BODY	CAST IRON	A126 CL.B
22	FULCRUM WASHER	FIBER	D710
22A	FULCRUM WASHER	FIBER	D710
23	SEAT GASKET	BUNA—N RUBBER	D20p0
24	FLANGE GASKET	ARMSTRONG N—8092	N/A
25	BOLT	STAINLESS STEEL	A193
30	FLOAT ROD	STAINLESS STEEL	A582
*40	DRAIN PLUG	CAST IRON	A126 CL.B
	Connecting Parts		
CP1	NIPPLE	STEEL	A53
CP2	ELBOW	MALLEABLE IRON	A338
CP3	NIPPLE	STEEL	A53

Please refer to the previous page for a listing of the optional backflush components available with Combination Dual Air Release Sewer Valves.

** Parts are interchangeable & optional at customer’s request*

S/SL Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-AIR-VALV • T: (570) 752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com