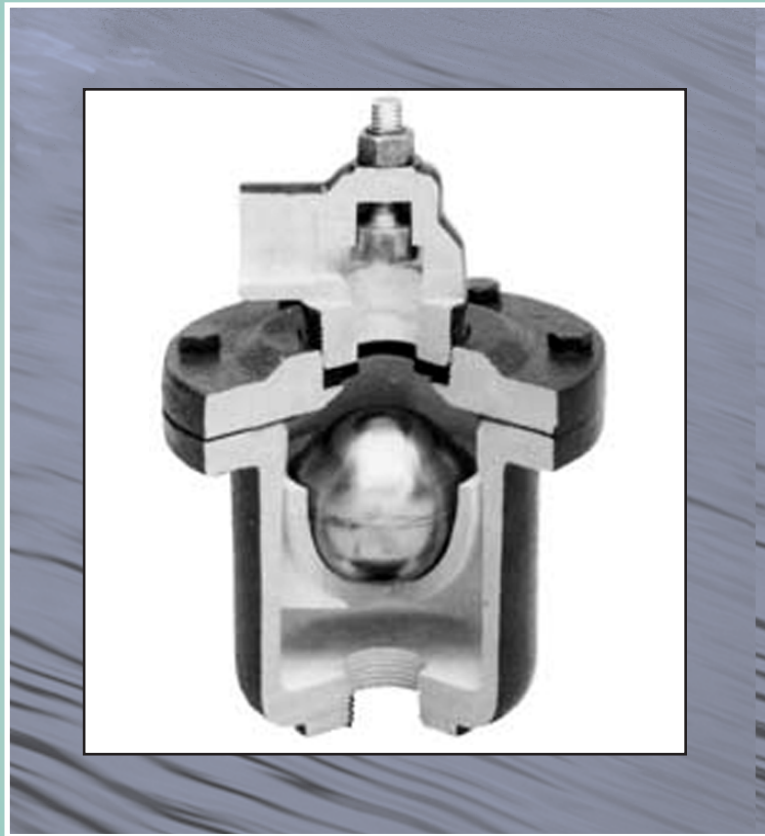


# The DL Series Deep Well Valves

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**Sizes 1/2" thru 6" available • Additional Sizes with Surge  
Check Option • Drip Tight Closure beyond 4-5 PSIG**



**Crispin**  
Since 1905

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**Crispin Multiplex Manufacturing Co. • 600 Fowler Avenue • Berwick, PA 18603 • 1-800-247-VALV  
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# DL SERIES

## Deep Well Valves

# Crispin Deep Well Valves

### Valve Function

- Air/Vacuum style
- Vents air from the pump column at the discharge point ahead of a check or control valve

### Features

- Peripheral guide system for unobstructed closure
- Hydrostatically tested to 150% of maximum working pressure.
- Standard Buna-N seating material
- Available in sizes 1/2" thru 6"

PUMP CAP. G.P.M.	VALVE SIZE	MODEL NO.
200	1/2"	D5
201-800	1"	DL10
801-3700	2"	DL20
3701-7000	3"	DL30
7001-14000	4"	DL40
14001-29000	6"	DL61

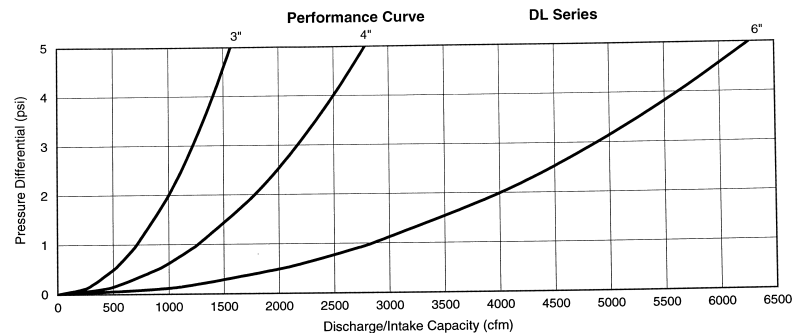
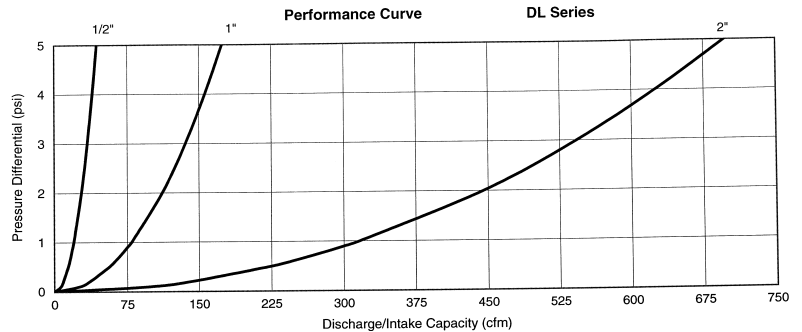
\* The sizes above are recommended for normal installation

### With Stainless Steel Trim or Bronze Trim and Stainless Steel Float

The Crispin Deep Well Air Valve is designed to vent air from the pump column at the discharge point ahead of the check or control valve. The air flow is controlled by screwing down the stem on the Deep Well top to a point where the float ceases to flutter. In the event of excessive water spillage or slamming of the float into its seat, further adjustment may be necessary. After the correct setting has been found, the jam nut is tightened.

Crispin Valve provides the same unique design in the Deep Well Valve as with its Air and Vacuum Valve. That is, the float is peripherally guided to the seat, which permits the float to self center and tightly seal the orifice. There are no shafts to bend or deform, which would prevent a drip tight seal.

### Performance Curves



3", 4" can be furnished with flanged connection.  
6" furnished with flanged connection only.

\* See Surge Check Series for Surge Check options in sizes 3" and above

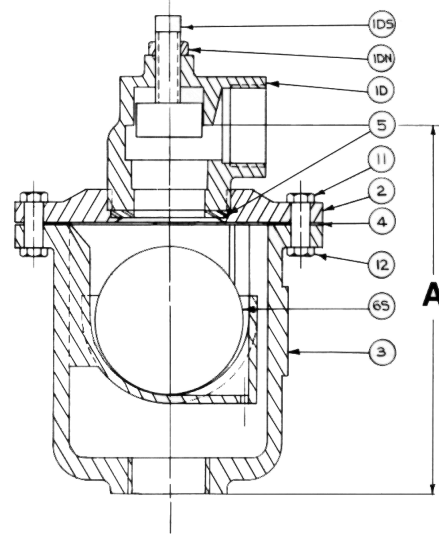


# DL SERIES

## Crispin Deep Well Valves

### Parts List for Deep Well 1/2" thru 6"

PART NO.	ITEM	MATERIAL 1/2" VALVE	MATERIAL 1" thru 6"
1D	Top, Deep Well	Cast Iron	Cast Iron
1DS	Stem, Deep Well	Cast Iron-Steel	Cast Iron-Steel
1DN	Jam Nut	Steel	Steel
2	Flange	Cast Iron	Cast Iron
3*	Body NPT Inlet	Cast Iron	Cast Iron
3F*	Body, 125 ANSI Flanged	Cast Iron	Cast Iron
3FH*	Body 250 ANSI Flanged	Cast Iron	Cast Iron
4	Gasket	Armstrong	Armstrong
5	Seat	Buna-N	Buna-N
6S	Float	Stainless Steel	Stainless Steel
7	Hanger	Stainless Steel	
8	Cup	Stainless Steel	
9	Rivet	Stainless Steel	
11	Bolt	Steel	Steel
12	Nut	Steel	Steel



\* Part No's 3, 3F and 3H are at customer's option \*\*For ease of maintenance, some of the above parts are provided as kits or assemblies. Note: Prices and Materials are Subject to Change Without Notice

### Deep Well Valve Detail

Model	Inlet	Outlet	Trim	Height	Width	Wt. (lbs)	Dim A
D5	1/2"	1/2"	IBBT	6 13/16"	4 3/4"	7 1/2	5"
DL10	1"	1"	S/S	9 1/16"	6 1/4"	18	6 5/8"
DL20	2"	2"	S/S	13 15/16"	8 3/4"	50	10 1/2"
DL21	2" 125# Flg.	2"	S/S	16 3/16"	8 3/4"	56	14"
DL22	2" 250# Flg	2"	S/S	16 7/16"	8 3/4"	58	14 1/4"
DL30	3"	3"	S/S	18 5/8"	11 1/2"	109	12 3/4"
DL31	3" 125# Flg.	3"	S/S	22 5/8"	11 1/2"	132	16 3/4"
DL32	3" 250# Flg.	3"	S/S	23"	11 1/2"	141	17 1/8"
DL40	4"	4"	S/S	22 7/8"	14"	187	15 13/16"
DL41	4" 125# Flg.	4"	S/S	25 13/16"	14"	206	18 1/8"
DL42	4" 250# Flg.	4"	S/S	26 1/8"	14"	224	19 1/16"
DL61	6" 125# Flg.	6"	S/S	27 5/16"	15"	295	20"
DL62	6" 250# Flg.	6"	S/S	28"	15"	304	20 3/8"

\*All cast iron Crispin valves are designed for a cold water working pressure of 300 PSIG

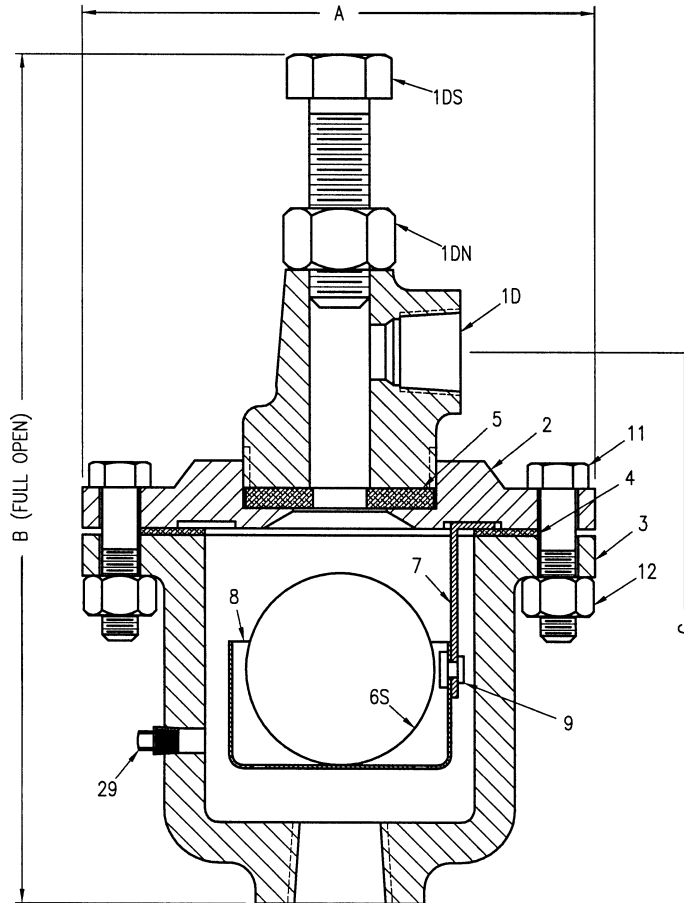


## Submittal Sheet for Crispin DL Series

# 1/2" Deep Well Valve

Manufactured in compliance with ANSI/AWWA C512

Date: 2016



### Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	A	B	C	WEIGHT
D5	1/2" NPT	1/2" NPT	4.75	7.00	5.00	8

### Deep Well Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
1 D	DEEP WELL TOP	CAST IRON	A126 CL. B
1 DS	DEEP WELL STEM	STEEL	A307/A36
1 DN	NUT	STEEL	A563
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
6S	FLOAT	STAINLESS STEEL	A240
7	HANGER	STAINLESS STEEL	A240
8	CUP	STAINLESS STEEL	A312
9	RIVET	STAINLESS STEEL	A193
11	BOLT	STEEL	A307
12	NUT	STEEL	A563
29	PLUG	BRASS	B505

### Specifications

The Deep Well Air Release Valve(s) shall be installed on the discharge side of the pump, so that the volume of air exiting the system can be easily vented and controlled without hampering the operation of the Air Release Valve. This shall be accomplished by means of a throttling device on the discharge side of the valve.

The valve(s) shall operate by sealing the Buna-N rubber orifice with a peripheral guided ball float as the air exits the valve at an adjustable and controlled rate, and the liquid enters the chamber to raise the float. All Crispin Valves are hydrostatically tested to 150% of their maximum working pressure.

The valve(s) shall be Crispin Model \_\_\_\_\_ Deep Well Air Valves as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA.

The valve(s) shall be \_\_\_\_\_" NPT screwed inlet and outlet connection with cast iron body and top, stainless steel trim.

**Option:** Where pressures are greater than 300 PSIG, the valve(s) shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

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

# Submittal Sheet for Crispin DL Series

## 1"–6" Deep Well Valve

Manufactured in compliance with ANSI/AWWA C512

Date: 2016



### Specifications

The Deep Well Air Release Valve(s) shall be installed on the discharge side of the pump, so that the volume of air exiting the system can be easily vented and controlled without hampering the operation of the Air Release Valve. This shall be accomplished by means of a throttling device on the discharge side of the valve.

The valve(s) shall operate by sealing the Buna-N rubber orifice with a peripheral guided ball float as the air exits the valve at an adjustable and controlled rate, and the liquid enters the chamber to raise the float. All Crispin Valves are hydrostatically tested to 150% of their maximum working pressure.

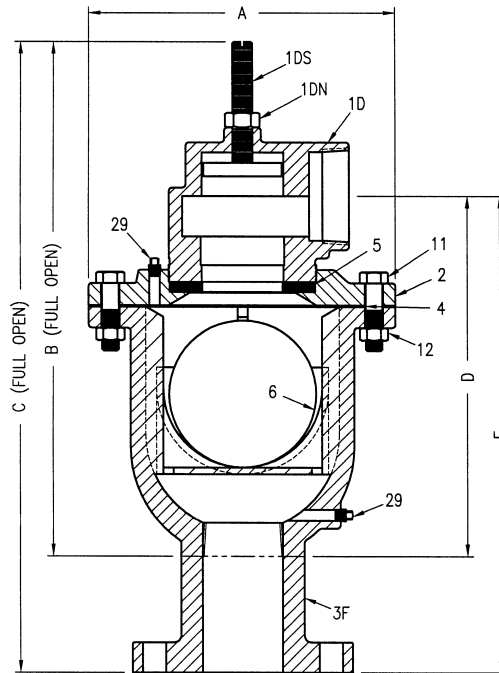
The valve(s) shall be Crispin Model \_\_\_\_\_ Deep Well Air Valves as manufactured by Crispin- Multiplex Manufacturing Co., Berwick, PA.

1"–6"—The valve(s) shall be \_\_\_\_\_" NPT screwed inlet and outlet or ANSI Class (125, 250) flanged inlet connection with cast iron body and top, stainless steel trim.

**Option:** Where pressures are greater than 300 PSIG, the valve(s) shall be ANSI Class \_\_\_\_\_ flanged inlet connection and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

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	E	WEIGHT
DL10	1" NPT	1" NPT	6.25	9.25		6.50		18
DL20	2" NPT	2" NPT	8.75	14.25		10.50		50
DL21	2" 125# FLG	2" NPT	8.75		17.75		13.00	57
DL22	2" 250# FLG	2" NPT	8.75		18.00		13.25	60
DL30	3" NPT	3" NPT	11.50	20.00		13.00		109
DL31	3" 125# FLG	3" NPT	11.50		23.50		17.00	132
DL32	3" 250# FLG	3" NPT	11.50		24.00		17.50	141
DL40	4" NPT	4" NPT	14.00	23.25		15.50		187
DL41	4" 125# FLG	4" NPT	14.00		26.00		18.50	206
DL42	4" 250# FLG	4" NPT	14.00		26.50		18.75	224
DL61	6" 125# FLG	6" NPT	15.50		26.00		20.00	295
DL62	6" 250# FLG	6" NPT	15.50		26.00		20.50	318

### Deep Well Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
1 D	DEEP WELL TOP	CAST IRON	A126 CL. B
1 DS	DEEP WELL STEM	STEEL	A307/A36
1DN	NUT	STEEL	A563
2	FLANGE	CAST IRON	A126 CL. B
3F	BODY	CAST IRON	A126 CL. B
4	GASKET	ARMSTRONG N—8092	N/A
5	SEAT	BUNA—N RUBBER	D2000
6	FLOAT	STAINLESS STEEL	A240
11	BOLT	STEEL	A307
12	NUT	STEEL	A563
29	PLUG	BRASS	B505

SUBMITTAL SHEET FOR DL SERIES





# AL/D SERIES

## Air and Vacuum Valves with Diffuser

# Air & Vacuum Valves with Diffuser

### Valve Function

- Vents air from the pump column without hampering the Air Release Valve

### Features

- Peripheral guide system
- Available with NPT screwed inlets and outlets
- Available in sizes 1/2" thru 4"

The Air and Vacuum Valve with diffuser is installed on the discharge side of the pump, so that the volume of air exiting the pump along with the liquid can be easily vented and controlled, all without hampering the operation of the air valve. The diffuser functions to break up the solid stream of water entering the valve.

The valve operates by sealing the BUNA-N rubber outlet seat with a peripheral float as the liquid enters the valve chamber to raise the float.

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

In sizes 1/2" thru 4", the valve is constructed with a cast iron body, and a top flange with all stainless steel trim. It is available with an NPT screwed inlet and outlet, or an ANSI Class (125,250) flanged inlet with NPT screwed outlet. It also features a peripheral guided float ball made of stainless steel.

Several options are available for this valve. The optional protectop prevents debris from entering the outlet of the valve. The valve is also available with a steel, stainless steel or ductile iron body, top and inlet flange.

### Parts List

PART #	ITEM	MATERIAL (Standard)
*1P	PROTECTOP	Cast Iron ASTM A126 Class B
*1S	TOP	Cast Iron ASTM A126 Class B
*2	FLANGE	Cast Iron ASTM A126 Class B
*3	BODY	Cast Iron ASTM A126 Class B
4	GASKET	Armstrong N-8090
5	SEAT	BUNA-N Rubber
6S	FLOAT	Stainless Steel ASTM A240
11	BOLT	Steel SAE J429 Grade 2
12	NUT	Steel A563 Grade A
14	DIFFUSER	Stainless Steel ASTM A240
50	INTERFERENCE PIN	Stainless Steel 18/3

\* Optional Material: Ductile Iron  
Cast Iron Drain Plug also optional

### Valve Detail

Model	Inlet Size	Outlet Size	A	B	Weight (lbs)
*A5-D	1/2" NPT	1/2" NPT	4-3/4"	5"	9
*AL10-D	1" NPT	1" NPT	6-1/4"	6-1/4"	18
AL20-D	2" NPT	2" NPT	8-3/4"	9-3/4"	46
**AL21-D	2" 125#	2" NPT	8-3/4"	13-1/4"	52
	FLG.				
**AL22-D	2" 250#	2" NPT	8-3/4"	13-1/2"	54
	FLG.				
AL30-D	3" NPT	3" NPT	11-1/2"	11-3/4"	94
AL31-D	3" 125#	3" NPT	11-1/2"	15-3/4"	114
	FLG.				
AL32-D	3" 250#	3" NPT	11-1/2"	16"	122
	FLG.				
AL40-D	4" NPT	4" NPT	14"	14-1/2"	156
AL41-D	4" 125#	4" NPT	14"	17-1/2"	172
	FLG.				
AL42-D	4" 250#	4" NPT	14"	18"	183
	FLG.				

\*Protectop is Not Available

\*\*Includes ANSI CL. 125 or 250 Companion Flange and Nipple

# Submittal Sheet for Crispin AL/D Series

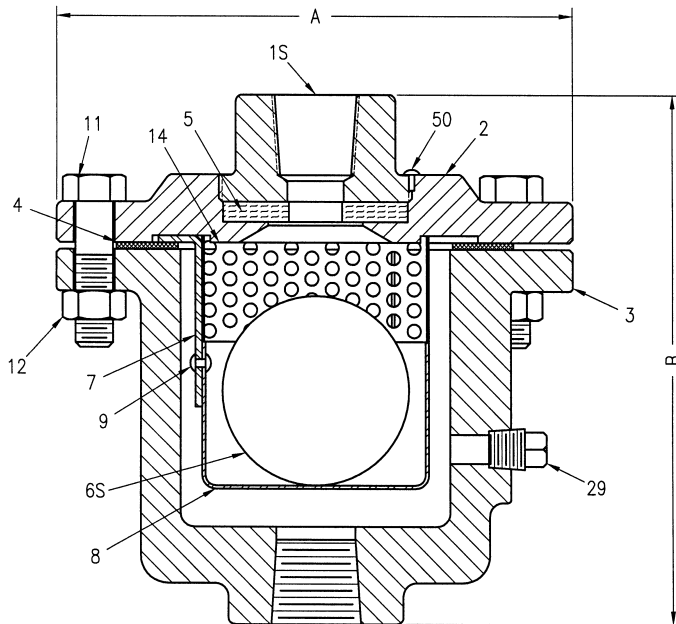


## 1/2" Air & Vacuum with Diffuser

Manufactured in compliance with ANSI/AWWA C512

Date: 2016

### Specifications



The Air and Vacuum Valve(s) with diffuser shall be installed on the discharge side of the pump, so that the volume of air exiting the pump along with the liquid can be easily vented and controlled, all without hampering the operation of the Air Release Valve.

The valve(s) shall operate by sealing the Buna-N rubber outlet seat with a peripheral float as the liquid enters the valve chamber to raise the float. All Crispin Valves are hydrostatically tested at 150% of their maximum working pressure.

1/2"–4"—The valve(s) shall be constructed with a cast iron body, and top flange with all stainless steel trim, and shall be \_\_\_\_\_ NPT screwed inlet and outlet, or ANSI Class (125, 250) flanged inlet with NPT screwed inlet. The peripheral guided float ball shall be stainless steel.

The valve(s) shall be Crispin Model \_\_\_\_\_, as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA.

**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 valves shall be ANSI Class \_\_\_\_\_ flanged inlet connection and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

### Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	A	B	WEIGHT
*A5-D	1/2" NPT	1/2" NPT	4.75	5.00	9

\*Protectop is Not Available

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

### Air & Vacuum 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
6S	FLOAT	STAINLESS STEEL	A240
7	HANGER	STAINLESS STEEL	A240
8	CUP	STAINLESS STEEL	A240
9	RIVET	STAINLESS STEEL	A582
11	BOLT	STEEL	A307
12	NUT	STEEL	A563
14	DIFFUSER	STAINLESS STEEL	A240
29	PLUG	BRASS	B505
50	INTERFERENCE PIN	STAINLESS STEEL	A582

SUBMITTAL SHEET FOR AL SERIES



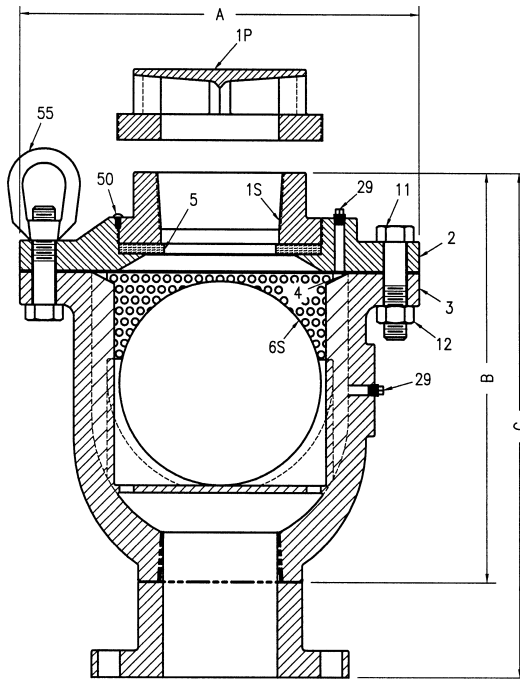
SUBMITTAL SHEET FOR AL/D SERIES

# Submittal Sheet for Crispin AL/D Series

## 1"–4" Air & Vacuum with Diffuser

Manufactured in compliance with ANSI/AWWA C512

Date: 2016



\* Protectop not available

\*\* Includes ANSI CL. 125 or 250 companion FLG & NPL

\*\*\* Parts are interchangeable and optional at customer's request

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

### Specifications

The Air and Vacuum Valve(s) with diffuser shall be installed on the discharge side of the pump, so that the volume of air exiting the pump along with the liquid can be easily vented and controlled, all without hampering the operation of the Air Release Valve.

The valve(s) shall operate by sealing the Buna-N rubber outlet seat with a peripheral float as the liquid enters the valve chamber to raise the float. All Crispin Valves are hydrostatically tested at 150% of their maximum working pressure.

1"–4"—The valve(s) shall be constructed with a cast iron body, and top flange with all stainless steel trim, and shall be \_\_\_\_\_ NPT screwed inlet and outlet, or ANSI Class (125, 250) flanged inlet with NPT screwed inlet. The peripheral guided float ball shall be stainless steel.

The valve(s) shall be Crispin Model \_\_\_\_\_, as manufactured by Crispin-Multiplex Manufacturing Co., Berwick, PA.

**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 valves shall be ANSI Class \_\_\_\_\_ flanged inlet connection and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange.

### Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	A	B	C	WEIGHT
*AL10-D	1" NPT	1" NPT	6.25	6.25		18
AL20-D	2" NPT	2" NPT	8.75	9.75		46
**AL21-D	2" 125# FLG	2" NPT	8.75		13.25	52
**AL22-D	2" 250# FLG	2" NPT	8.75		13.50	54
AL30-D	3" NPT	3" NPT	11.50	11.75		94
AL31-D	3" 125# FLG	3" NPT	11.50		15.75	114
AL32-D	3" 250# FLG	3" NPT	11.50		16.00	122
AL40-D	4" NPT	4" NPT	14.00	14.50		156
AL41-D	4" 125# FLG	4" NPT	14.00		17.50	172
AL42-D	4" 250# FLG	4" NPT	14.00		18.00	183

### Air & Vacuum Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
***1S	TOP	CAST IRON	A126 CL. B
***1P	PROTECTOP	CAST IRON	A126 CL. B
2	FLANGE	CAST IRON	A126 CL. B
3F	BODY	CAST IRON	A126 CL. B
4	GASKET	ARMSTRONG N—8092	N/A
5	SEAT	BUNA—N RUBBER	D2000
6S	FLOAT	STAINLESS STEEL	A240
11	BOLT	STEEL	A307
12	NUT	STEEL	A563
14	DIFFUSER	STAINLESS STEEL	A240
29	PLUG	BRASS	B505
50	INTERFERENCE PIN	STAINLESS STEEL	A582
55	EYE BOLT	STEEL	A563