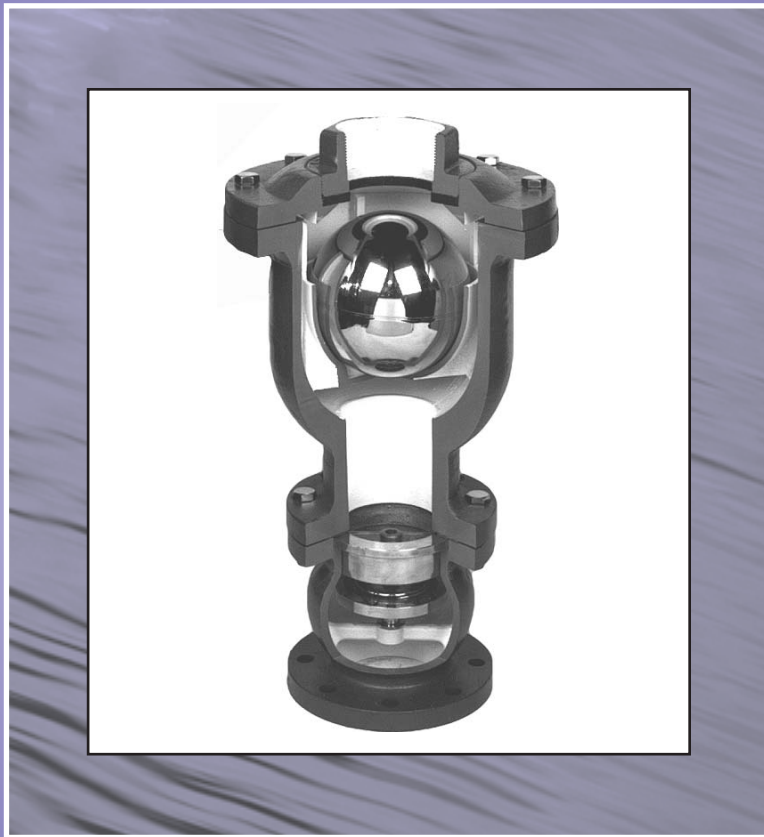


The SC Series Surge Check Valves

**Sizes 3" thru 24" Available • Cast Iron Construction
Limits the Effects of System Surge on Air Release Valves**



**Crispin Multiplex Manufacturing Co. • 600 Fowler Avenue • Berwick, PA 18603 • 1-800-AIR-VALV
T: (570) 752-4524 • F: (570) 752-4962 • www.crispinvalve.com • sales@crispinvalve.com**



SC SERIES

Surge Check Valves

Surge Check Valves

Valve Function

- Limits effects of system surges on Air Release Valve

Features Include

- Cast iron construction with bronze valve disc, bronze seat ring and stainless steel spring
- Available in sizes 3" thru 24"*

125lb. and 250lb. ANSI Flanged

The Surge Check Valve is a normally open valve used to limit the effects of system surge on the Air Valve. This is the only function of the Surge Check Valve. It will not eliminate water hammer or its effects on the system.

The CRISPIN Surge Check Valve will close due to the difference in density between air and water. The air will pass freely through both the Surge Check Valve and the Air Valve, since the density of the air contacting the perforated surge check disc is not great enough to push the disc closed.

However, as the air is pushed out of the system by rising water at a specific velocity, the greater density of the water contacting the disc is enough to push the disc closed. Therefore, with the kinetic energy of the water expended in the Surge Check Valve, the Air Valve is free to function without the threat of being slammed closed by entering water.

* For sizes 18" to 24" please consult the factory.

Model No's.

Valve Size	125lb Flange	250lb Flange
3"	SC 31	SC 32
4"	SC 41	SC 42
6"	SC 61	SC 62
8"	SC 81	SC 82
10"	SC 101	SC 102
12"	SC 121	SC 122
14"	SC 141	SC 142
16"	SC 161	SC 162

Parts List

Part No.	Name	Material
1	BODY	Cast Iron
2	SEAT RING	Bronze
3	VALVE DISC	Bronze
4	SPRING	Stainless Steel
5	BUSHING	Bronze



Surge Check Valves

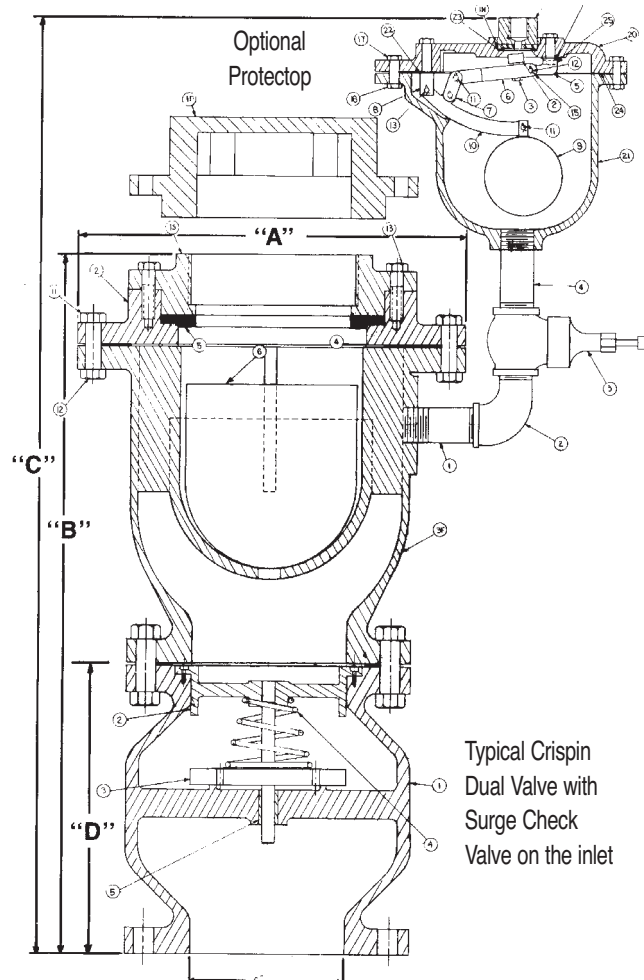
Dimension and Weight Information*

Dim.	Inlet Flange	3"	4"	6"	8"	10"	12"	14"	16"
A		11 1/2"	14"	15"	17 3/4"	21 1/4"	27 1/2"	30"	32 3/4"
B	125	18 3/4"	25"	25 3/4"	30 3/4"	37 3/4"	43 1/4"	48 3/4"	51 1/2"
B	250	19"	25 1/4"	26 1/4"	31 1/4"	38 1/2"	44 1/8"	50 3/4"	52 1/2"
C	125	26"	31 1/2"	32 1/4"	38 1/4"	44 1/4"	48"	52"	54 1/4"
C	250	26 1/2"	31 3/4"	32 1/2"	38 3/4"	45 1/2"	50 1/4"	53 1/4"	55 1/4"
D	125	6"	7 1/4"	9 3/4"	12 1/2"	15 1/2"	14 1/4"	15 3/4"	17 5/8"
D	250	6"	7 1/4"	9 3/4"	12 1/2"	15 1/2"	14 1/4"	15 3/4"	17 5/8"
WT.	125	149	266	282	435	765	1120	1350	1659
WT.	250	165	268	332	515	874	1235	1675	2041

* For sizes 18" to 24"
please consult the factory.

NOTE: This valve should not be used on sewage collection lines or industrial systems with high solids content in the liquid.

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



SC SERIES



Submittal Sheet for Crispin SC Series

3" AL/SC—16" AL/SC Valve

Date: October, 2001

Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	A	B	WHT.
AL31/SC	3" 125# flg	3" NPT	11 1/2"	18 3/4"	141
AL32/SC	3" 250# flg	3" NPT	11 1/2"	19"	157
AL41/SC	4" 125# flg	4" NPT	14"	25"	218
AL42/SC	4" 250# flg	4" NPT	14"	25 3/4"	244
AL61/SC	6" 125# flg	6" NPT	15"	25 3/4"	259
AL62/SC	6" 250# flg	6" NPT	15"	26 1/4"	312
AL81/SC	8" 125# flg	8" NPT	17 3/4"	30 3/4"	410
AL82/SC	8" 250# flg	8" NPT	17 3/4"	31 1/4"	481
AL101/SC	10" 125# flg	10" NPT	21 1/4"	37 3/4"	741
AL102/SC	10" 250# flg	10" NPT	21 1/4"	38 1/2"	850
AL121/SC	12" 125# flg	12"	27 1/2"	43 14"	1070
AL122/SC	12" 250# flg	12"	27 1/2"	44"	1205
AL141/SC	14" 125# flg	14"	30"	47 1/4"	1375
AL142/SC	14" 250# flg	14"	30"	48"	1635
AL161/SC	16" 125# flg	16"	32 3/4"	54 1/4"	1609
AL162/SC	16" 250# flg	16"	32 3/4"	55 1/4"	1991

Specifications

The Surge Check Valve(s) shall be installed on the inlet of the (Air and Vacuum, Dual, Combination, Deep Well or Universal) valve to eliminate a surge of water from prematurely closing or damaging the Air Release Valve.

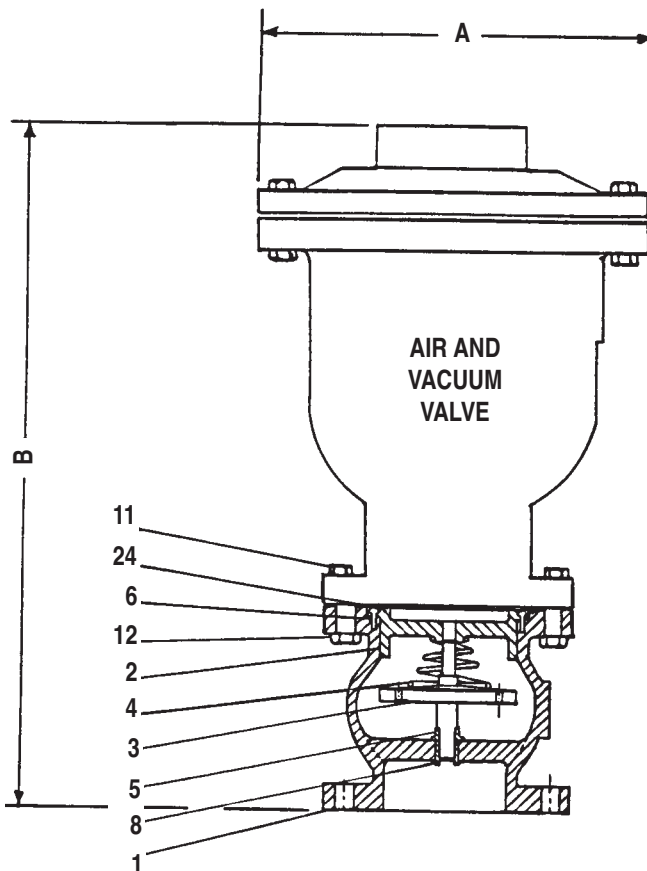
The valve(s) shall be _____" ANSI Class (125, 250) flanged, cast iron construction with bronze valve disc and seat ring and stainless steel spring.

The valve disc shall have drilled holes. These holes allow water to pass after the disc has been seated. The water slowly fills the Air & Vacuum to buoy its float and seal the valve. As the pressure equalizes, a stainless steel spring pushes the disc away from the seat to its original position.

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

Refer to Air & Vacuum and Pressure Air Release Valve specifications for valve detail.

Option: Where pressures are greater than 300 PSIG, the valve shall be ANSI Class _____ flanged inlet connection, and shall have a (steel, stainless steel, or ductile iron) body, top and inlet flange with stainless steel spring and bronze and brass trim.



Parts List

ITEM	DESCRIPTION	MATERIAL	ASTM
*1	Body	Cast Iron	A126 Cl.B
**2	Seat Ring	Bronze	B62
**3	Valve Disc	Bronze	B62
4	Spring	Stainless Steel	A313
**5	Bushing	Bronze	B505
6	Screws	Stainless Steel	18/8
8	Retaining Ring or Pin	Stainless Steel	
11	Bolt	Steel	
12	Nut	Steel	
24	Gasket	Armstrong	N/A

* Optional Material: Ductile Iron

** Optional Material: Stainless Steel

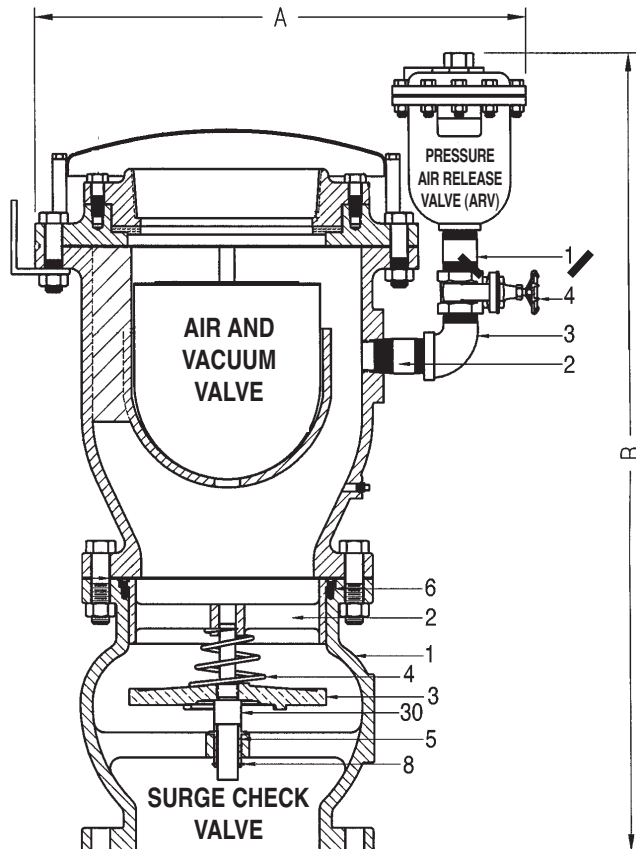
Submittal Sheet for Crispin SC Series

3" AL/SC/M—16" AL/SC/PL Valve

Date: October, 2001

Size Specifications

MODEL	INLET SIZE	OUTLET SIZE	INTERCON. PIPE	A	B	WHT.
AL31/SC/M5	3" 125# flg	3" NPT	1/2"	16"	26"	149
AL32/SC/M5	3" 250# flg	3" NPT	1/2"	16"	26 1/2"	165
AL41/SC/PL10	4" 125# flg	4" NPT	1"	19 3/8"	31 1/2"	266
AL42/SC/PL10	4" 250# flg	4" NPT	1"	20"	31 3/4"	268
AL61/SC/PL10	6" 125# flg	6" NPT	1"	21"	32 1/4"	283
AL62/SC/PL10	6" 250# flg	6" NPT	1"	21"	32 1/2"	336
AL81/SC/PL10	8" 125# flg	8" NPT	1"	24 1/2"	38 1/4"	434
AL82/SC/PL10	8" 250# flg	8" NPT	1"	24 1/2"	38 3/4"	505
AL101/SC/PL10	10" 125# flg	10" NPT	1"	33 3/4"	44 1/4"	765
AL102/SC/PL10	10" 250# flg	10" NPT	1"	33 3/4"	45 1/2"	874
AL121/SC/PL20	12" 125# flg	12"	2"	34 1/2"	48 1/2"	1120
AL122/SC/PL20	12" 250# flg	12"	2"	34 1/2"	49"	1255
AL141/SC/PL20	14" 125# flg	14"	2"	36 1/2"	50"	1403
AL142/SC/PL20	14" 250# flg	14"	2"	36 1/2"	50 3/4"	1591
AL161/SC/PL20	16" 125# flg	16"	2"	39 1/4"	54 1/4"	1659
AL162/SC/PL20	16" 250# flg	16"	2"	39 1/4"	55 1/4"	2041



Specifications

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5	Bushing	Bronze	B505
6	Screws	Stainless Steel	18/8
8	Retaining Ring	Stainless Steel	A313
30	Shaft	Bronze	B505

Connecting Parts (ARV)

ITEM	DESCRIPTION	MATERIAL
1	Nipple	Steel
2	Nipple	Steel
3	Elbow	Malleable Steel
4	Gate Valve	Brass



SUBMITTAL SHEET FOR SC SERIES