



Sizes

2" to 24"



Pressure

up to 1480 PSIG



Temperature

up to 600°F



Applications

Process Industry | Power Industry | Chemical Industry
Oil & Gas | Metals & Mining | Water & Waste | Pulp & Paper

Features

- Compact design
- Low pressure loss
- Minimal installation costs

End Connections

- Wafer Flat Face
- Wafer Raised Face

Body Materials

- Cast Iron
- Carbon Steel
- Stainless Steel

Seat Materials

- Buna-N
- EPDM
- Viton
- Metal To Metal

ASME Ratings

- Class 125
- Class 150
- Class 300
- Class 600

Design Advantage

The short face to face design inherently makes this check valve significantly lighter (10% of the weight of a conventional swing check). The valve is designed to fit between two flanges and requires no flanges of its own. The double door check valve can be installed in any position as the spring aids in keeping the valve closed (Consult factory for vertical downward flow). These features allow you to design your piping layout in the most efficient and least expensive fashion.

Shock Bumpers

An integral cast bumper is present on all Series WT double door check valves (Except class 125 Lb.). The bumpers can be found on both discs, which meet when the valve reaches a fully open position. This design feature prevents the discs from pressing against the stop pin and eliminates leverage that would cause unnecessary stresses and wear. The purpose of the stop pin is to prevent over travel of either disc, which would result in valve failure.

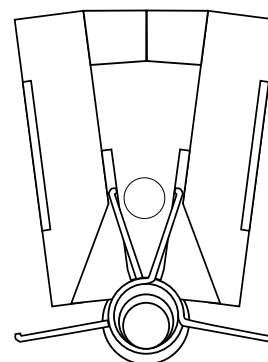


FIGURE 1

Resilient Seat

The basic design of the Series WT double door check valve is illustrated in Fig. 2. This seal is chemically bonded using specially designed adhesives that provide rubber tearing bonds throughout the operating range of the seat material. In case of resilient seat failure, the design permits the doors to float and make contact with the metal surface the seats were adhered to. This feature allows the valve to function even if the resilient seat is not present. The seat design illustrated in Fig. 3 is also available. This design results in a controlled seat squeeze and provides a metal to metal backup seal (Fig.4).

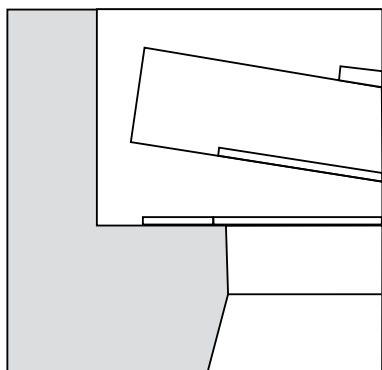


FIGURE 2

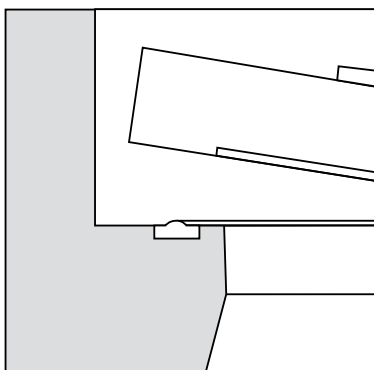


FIGURE 3

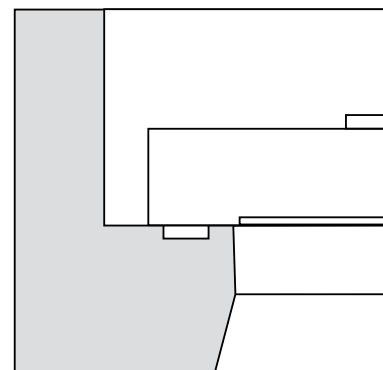


FIGURE 4

Minimal Seat Wear

The Series WT double door check valve was designed to eliminate the possibility of seat wear caused by friction at the heel of the double doors while maintaining low back pressure sealing capabilities. The clearance between the body, disc and hinge pin results in the discs cracking open at the heel location first. When the valve opens the heel does not drag across the seating surface and cause wear. As the valve closes, the spring will take the toe of the disc into the seating surface first, while the line back pressure will force the heels and hinge pin back to the seat to complete the seal.

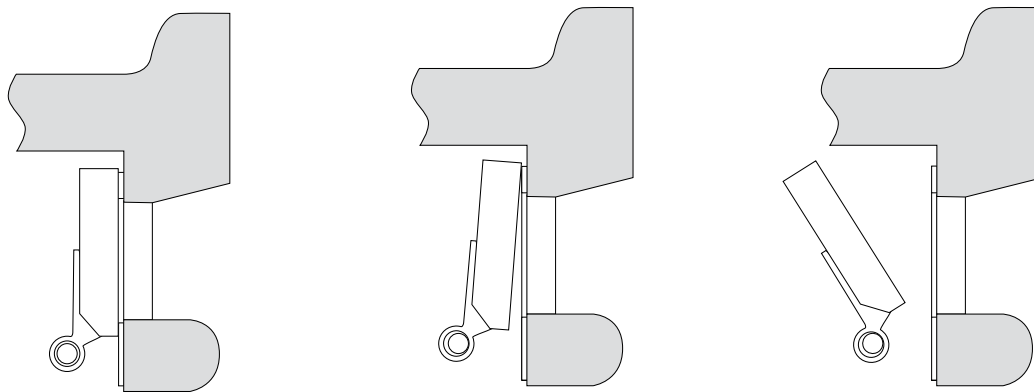


FIGURE 5

Spring Closing

The specially designed torsion spring in the Series WT double door check valve holds the valve discs closed under no flow conditions (Consult factory for vertical downward flow). Pipeline flow (head) causes the discs to open and conversely when flow decays to a point near zero velocity, the force from the legs of the torsion spring instantly closes the valve discs for non-slam shutoff. The Series WT double door check valve comes complete with corrosion resistant stainless steel springs as standard.

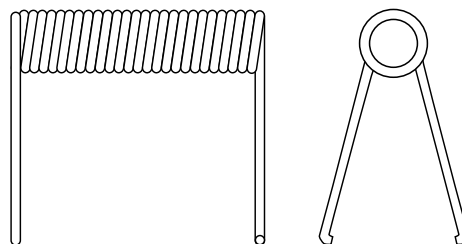


FIGURE 6

Double Door Check Valves

Cast Iron Body | Wafer Style

125WT Series



Sizes

2" to 24"



Pressure

up to 200 PSIG
(13.8 BARG)



Temperature

up to 250°F
(121°C)



Applications

Process Industry | Power Industry | Chemical Industry
Oil & Gas | Metals & Mining | Water & Waste | Pulp & Paper

Features

- ASME Class 125 rated Check Valves
- Wafer body style fits between FF or RF flanges
- Teflon thrust washers
- Resilient Buna-N seats
- Seat design lifts then swings discs to minimize seat wear
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Lifting lug tap on all valves 6" and larger

Models

- 125WTIB - Cast Iron Body, Bronze Disc, Buna Seat
- 125WTIT - Cast Iron Body, Stainless Steel Disc, Buna Seat

Options

- EPDM Seats
- Other Spring Material

Canadian Registration - OE10274.5C

Applicable Codes (designed in accordance with)

- ASME Sec VIII and B16.1 Bodies
- API 598
- FM approved 30246911 (2"-10" only)

125WT Series Ordering Code

1

Inlet Size

1 0 0 0

-

2

Model

1 2 5 W T I B

3

Seat

B

4

Spring

T

1	Inlet Size					
0200	2"	0600	6"	1600	16"	
0250	2½"	0800	8"	1800	18"	
0300	3"	1000	10"	2000	20"	
0400	4"	1200	12"	2400	24"	
0500	5"	1400	14"			

3	Seat
B	Buna-N

4	Spring
T	Stainless Steel

2	Model
125WTIB	Cast Iron Body & Bronze Disc
125WTIT	Cast Iron Body & Stainless Steel Disc

Flow Coefficient Values (Cv)*

* US-GPM @ 1 PSID

Valve Size													
2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
60	100	170	340	520	850	1600	2400	3800	4400	5800	7500	9800	15000

All rights reserved. All valves information and its contents hereof are proprietary to SSI. Any unauthorized reproduction or disclosure, in whole or in part is strictly prohibited. All valves materials, images and data sheets in this catalogue / brochure is for general information and shall not be used for specific performance data and material selection without first consulting with SSI. SSI reserves the right to change the enclosed valves information without notice. SSI does not accept any liability or damages arising from the use of any valve information within this document. All trademarks and registered trademarks are owned by their respective companies.

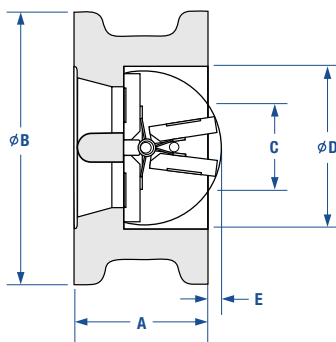
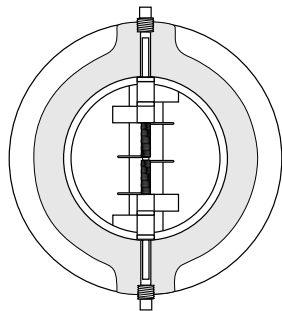
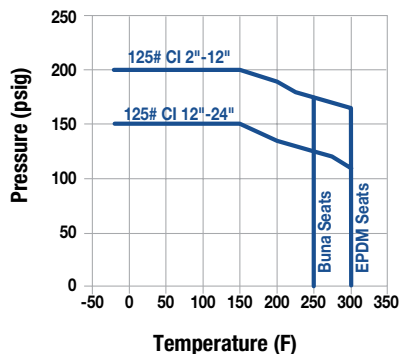
125WT Series

Double Door Check Valves

Cast Iron Body | Wafer Style



Pressure / Temperature Chart
ASME B16.1



Description

SSI manufactures stainless steel double door check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI stainless steel double door check valves are suitable for a full range of steam, liquid, gas & oil, power, pulp & paper, process equipment, chemical, metal & mining and water & waste applications.

Sizes

2" to 24"

Pressure

200 PSIG (13.8 BARG)

Temperature

250° F (121° C)

End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID

Vertical - 0.75 PSID

Features

- Wafer body style fits between FF or RF flanges
- Teflon thrust washers
- Resilient Buna-N seat design lifts then swing discs to minimize seat wear
- Independent springs optimize valve plate closing rates while minimizing spring stress
- Lifting lug tap on all valves 6" and larger

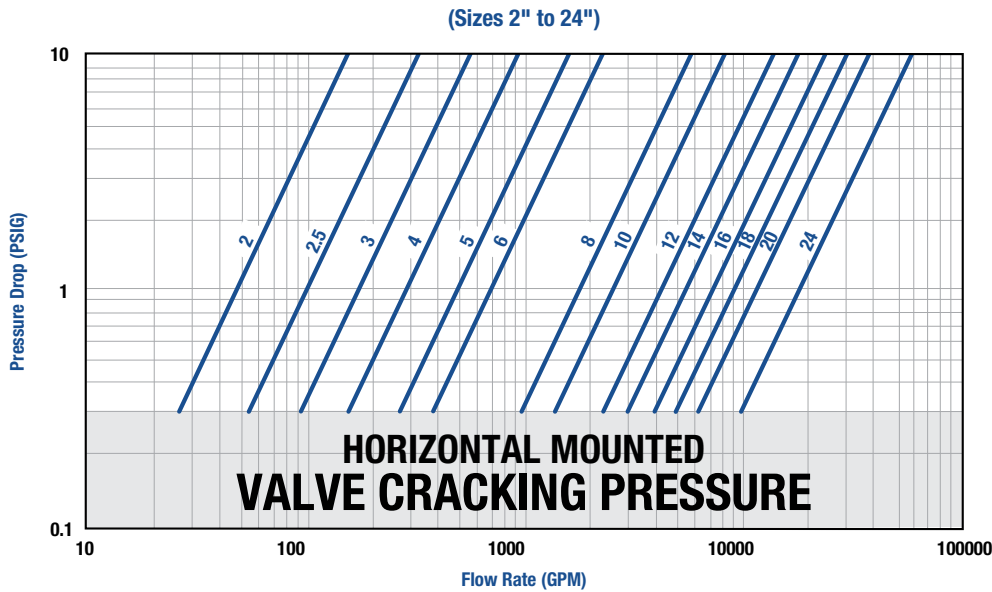
CRN

Dimensions																			
Size		A		B*		C'		D		E		Stud Selection						Weight	
												Qty	Diameter		Length				
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		inch	mm	lbs	kg			
2"	50	2.13	54	4.13	105	2	51	2.38	60	0.13	3	4	0.63	16	5.50	140	3	1.4	
2½"	65	2.13	54	4.88	124	2.5	64	2.88	73	0.50	13	4	0.63	16	6.00	152	5	2.3	
3"	80	2.25	57	5.38	137	3	76	3.50	89	0.63	16	4	0.63	16	6.25	159	8	3.6	
4"	100	2.50	64	6.88	175	4	102	4.50	114	1.00	25	8	0.63	16	6.25	159	13	5.9	
5"	125	2.75	70	7.75	197	5	127	4.50	140	1.25	32	8	0.75	19	7.00	184	16	7.3	
6"	150	3.00	76	8.75	222	6	152	6.63	168	1.63	41	8	0.75	19	8.00	203	20	9.8	
8"	200	3.75	95	11.00	279	8	203	8.63	219	2.38	60	8	0.75	19	9.50	241	37	16.8	
10"	250	4.25	108	13.38	340	10	254	10.75	273	3.00	76	12	0.88	22	10.50	267	57	25.9	
12"	300	5.63	143	16.13	410	12	305	12.75	324	3.88	99	12	0.88	22	12.25	311	93	42.2	
14"	350	7.25	184	17.75	451	12.5	318	14.00	356	4.00	102	12	1.00	25	13.00	330	205	93.1	
16"	400	7.50	191	20.25	514	15	381	16.00	406	5.25	133	16	1.00	25	13.50	343	271	123.0	
18"	450	8.00	203	21.63	549	17	432	18.00	457	6.00	152	16	1.13	29	14.50	368	310	140.7	
20"	500	8.38	213	23.88	606	19	483	20.00	508	6.88	175	20	1.13	29	15.25	387	377	171.2	
24"	600	8.75	222	28.25	718	22.75	578	24.00	610	8.25	210	20	1.25	32	16.25	413	551	250.2	

* Add the "B" dimensions and the diameter of the stud to achieve the ANSI B16.1 bolt hole circle diameter | ¹ Minimum bore diameter of companion flanges
Dimensions shown are subject to change. Consult factory for certified drawings when required.

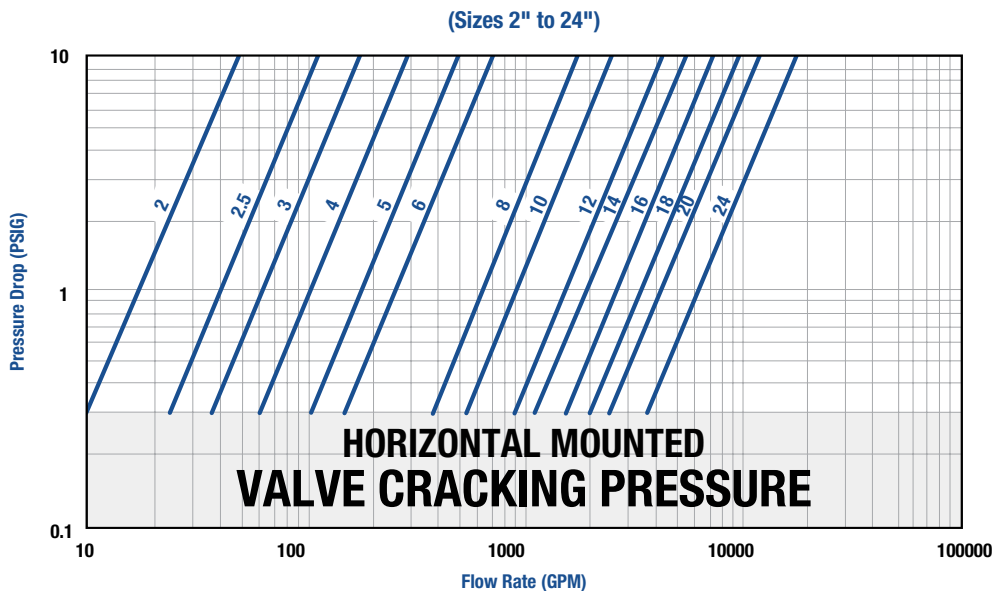
Materials	
Part	Material
Body	A126-B
Discs	Al/Bz B148 C954 or 316SS A351-CF8M
Seat	Buna-N
Spring	316SS

Pressure Drop - Liquids



- Pressure drop curves are based on water flow
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

Pressure Drop - Air



- Pressure drop curves are based on air flow at 60°F and 1 ATM pressure
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

¹ For correct installation and maintenance please see our I&M manual | ² Horizontal installation – Disc pin must be installed in vertical position | ³ Vertical installation (downward flow) – Consult factory

150WT Series

Double Door Check Valves

Carbon & Stainless Steel Body | Wafer Style



Sizes

6" to 12"



Pressure

up to 285 PSIG
(19.7 BARG)



Temperature

up to 600°F
(316°C)



Applications

Process Industry | Power Industry | Chemical Industry
Oil & Gas | Metals & Mining | Water & Waste | Pulp & Paper

Features

- ASME Class 150 rated check valves
- Wafer body style fits between FF or RF flanges
- Size 6" and larger are supplied with a valve lifting lug
- Upper and lower SS thrust washers
- Resilient Buna-N, Viton and metal seats
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual rating 2" - 3" 150#, 300# and 600# Classes
- Dual ratings 4" 150# and 300# Classes

Applicable Codes (designed in accordance with)

- ASME B16.34 ratings
- API 594
- API 598

Models

- 150WTCT – Cast Steel Body, Stainless Steel Disc, Buna Seat
- 150WTTT – Stainless Steel Body, Stainless Steel Disc, Metal or Viton Seat

Options

- EPDM Seats
- Other Spring Material

Canadian Registration - OC10274.5C

150WT Series Ordering Code

1	Inlet Size	2	Model	3	Seat	4	Spring
0	8	0	0	–	1	5	0
					W	T	C
					T		
					B	–	T

1	Inlet Size			
0600	6"	1000	10"	
0800	8"	1200	12"	

3	Seat*			
B	Buna-N (CS Body only)	V	Viton (SS Body only)	
M	Metal (SS Body only)			

2	Model			
150WTCT	Carbon Steel Body			
150WTTT	Stainless Steel Body			

4	Spring			
T	Stainless Steel			

Flow Coefficient Values (Cv)*

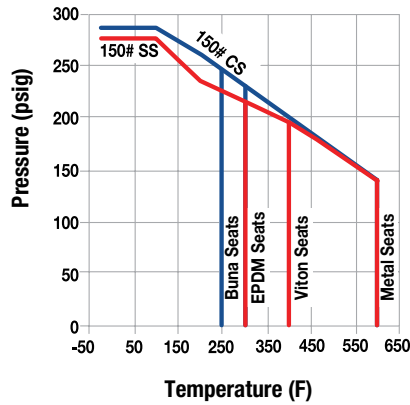
* US-GPM @ 1 PSID

Valve Size			
6"	8"	10"	12"
705	1795	2563	4295

* 150WTCT - Buna-N seat only 150WTTT - Viton or Metal seat



**Pressure / Temperature Chart
ASME B16.34**



Description

SSI manufactures carbon steel double door check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI carbon steel double door check valves are suitable for a full range of steam, liquid, gas & oil, power, pulp & paper, process equipment, chemical, metal & mining and water & waste applications.

Sizes

6" to 12"

Pressure

285 PSIG (19.7 BARG)

Temperature

600° F (316° C)

End Connections

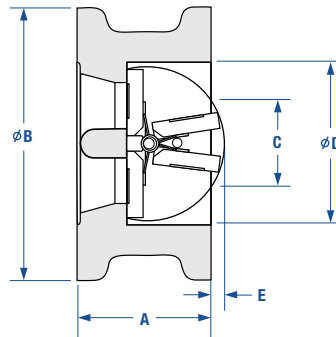
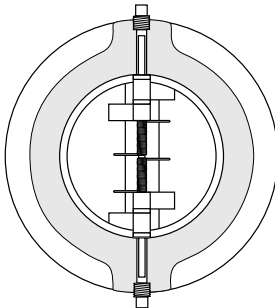
Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID
Vertical - 0.75 PSID

Features

- Wafer body style fits between FF or RF flanges
- Supplied with a valve lifting lug
- Upper and lower SS thrust washers
- Resilient Buna-N, Viton and metal seats
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual rating 2"–3" 150#, 300# and 600# Classes
- Dual ratings 4" 150# and 300# Classes



CRN

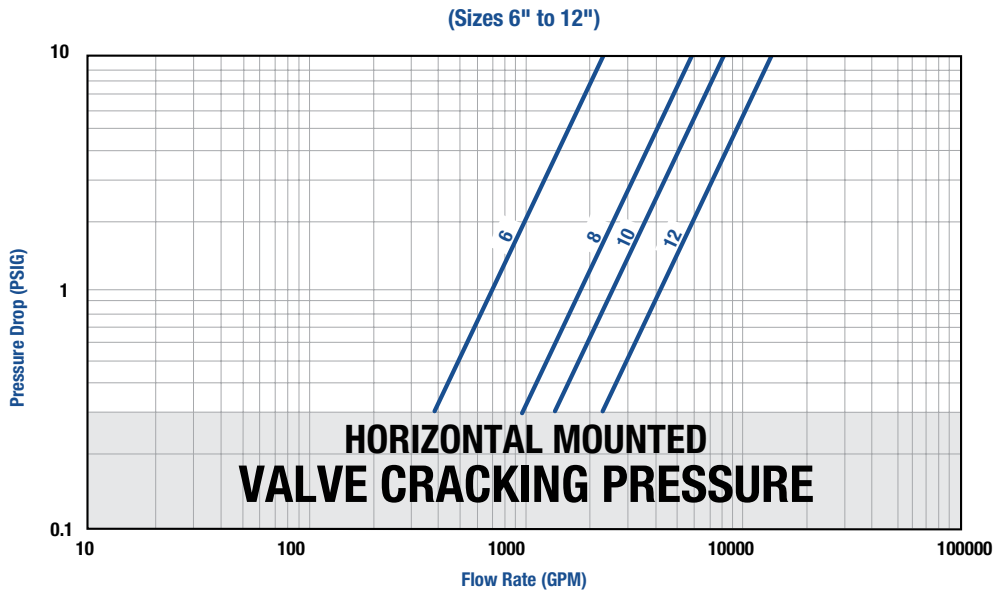
Dimensions																		
Size		A'		B*		C²		D		E		Qty	Stud Selection				Weight	
													Diameter		Length			
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	lbs	kg
2" ³	50					Use 2" 600WT-150# on page 117-118												
2½" ³	66					Use 2½" 600WT-150# on page 117-118												
3" ³	80					Use 2" 600WT-150# on page 117-118												
4" ⁴	100					Use 4" 300WT-150# on page 113-114												
6"	150	3.88	99	8.75	222	5.38	137	6.63	168	1.38	35	8	0.75	19	8.25	210	35	15.9
8"	200	5.00	127	11.00	279	7.38	187	8.63	219	2.00	51	8	0.75	19	9.75	248	70	31.8
10"	250	5.75	146	13.38	340	9.50	241	10.75	273	2.88	73	12	0.88	22	11	279	114	51.8
12"	300	7.13	181	16.13	410	11.25	286	12.75	324	3.38	86	12	0.88	22	12.25	311	180	81.8

¹ Dimensions in accordance with API 594 | ² Minimum bore diameter of companion flanges | ³ Sizes 2", 2½", 3" 150WT, 300WT & 600WT are interchangeable, use 600WT for all applications in these sizes

⁴ Size 4", 150WT & 300WT are interchangeable, use 300WT for 4" size | Dimensions shown are subject to change. Consult factory for certified drawings when required.

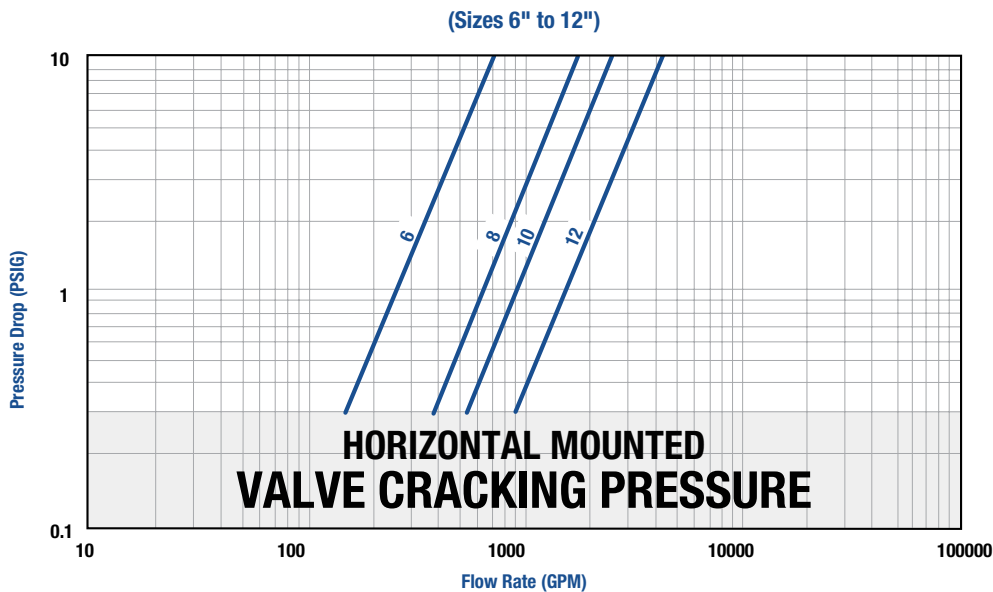
* Add the "B" dimension and the diameter of the stud to achieve the ANSI B16.5 bolt hole circle diameter

Pressure Drop - Liquids



- Pressure drop curves are based on water flow
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

Pressure Drop - Air



- Pressure drop curves are based on air flow at 60°F and 1 ATM pressure
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

¹ For correct installation and maintenance please see our I&M manual | ² Horizontal installation – Disc pin must be installed in vertical position | ³ Vertical installation (downward flow) – Consult factory



Sizes
4" to 12"



Pressure
up to 740 PSIG
(51 BARG)



Temperature
up to 600°F
(316°C)



Applications
Process Industry | Power Industry | Chemical Industry
Oil & Gas | Metals & Mining | Water & Waste | Pulp & Paper

Features

- ASME Class 300 rated check valves
- Wafer body style fits between FF or RF flanges
- Size 6" and larger are supplied with a valve lifting lug
- Upper and lower SS thrust washers
- Resilient Buna-N and Viton
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual rating 2" - 3" 150#, 300# and 600#
- Dual ratings 4" 150# and 300#

Applicable Codes (designed in accordance with)

- ASME B16.34 ratings
- API 594
- API 598

Models

- 300WTCT – Cast Steel Body, Stainless Steel Disc, Buna Seat
- 300WTTT – Stainless Steel Body, Stainless Steel Disc, Viton Seat

Options

- EPDM Seats
- Other Spring Material

Canadian Registration - OC10274.5C

300WT Series Ordering Code

1 Inlet Size		2 Model		3 Seat		4 Spring
0 6 0 0	-	3 0 0 W T C T		B	-	T

1	Inlet Size			
0400	4"	1000	10"	
0600	6"	1200	12"	
0800	8"			

2	Model
300WTCT	Carbon Steel Body
300WTTT	Stainless Steel Body

3	Seat*			
B	Buna-N (CS Body only)		V	Viton (SS Body only)

4	Spring
T	Stainless Steel

Flow Coefficient Values (Cv)*

* US-GPM @ 1 PSID

Valve Size					
4"	5"	6"	8"	10"	12"
291	494	705	1795	2563	4295

* 300WTCT - Buna-N seat only 300WTTT - Viton seat only

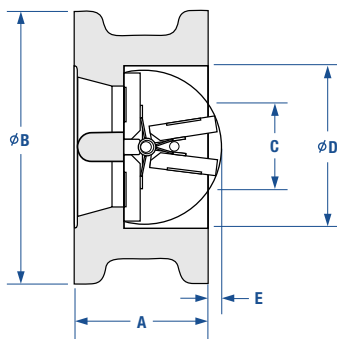
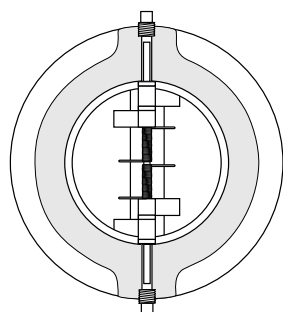
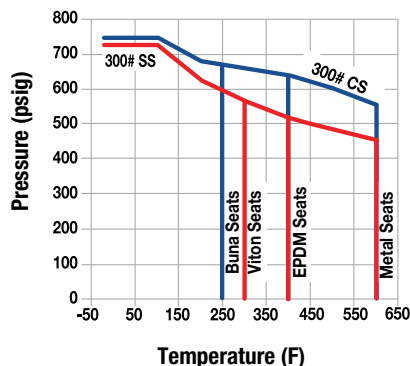
300WT Series

Double Door Check Valves

Carbon & Stainless Steel Body | Wafer Style



Pressure / Temperature Chart
ASME B16.34



Description

SSI manufactures carbon steel double door check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI carbon steel double door check valves are suitable for a full range of steam, liquid, gas & oil, power, pulp & paper, process equipment, chemical, metal & mining and water & waste applications.

Sizes

4" to 12"

Pressure

740 PSIG (51 BARG)

Temperature

600° F (316° C)

End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID
Vertical - 0.75 PSID

Features

- Wafer body style fits between FF or RF flanges
- Supplied with a valve lifting lug
- Upper and lower SS thrust washers
- Resilient Buna-N and Viton seats
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual rating 2"-3" 150#, 300# and 600# Classes
- Dual ratings 4" 150# and 300# Classes

CRN

Dimensions																			
Size			A ¹		B [*]		C ²			D		E		Stud Selection				Weight	
inch	mm		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Qty	Diameter inch	Length mm	lbs	kg
2" ³	50	-					Use 2" 600WT-300# on page 117-118												
2½" ³	66	-					Use 2½" 600WT-300# on page 117-118												
3" ³	80	-					Use 2" 600WT-300# on page 117-118												
4" ⁴	100	150WT	2.88	73	6.88	175	3.38	86	4.50	114	0.75	19	8	0.63	16	7	178	18	8.2
		300WT	2.88	73	7.13	181	3.38	86	4.50	114	0.75	19	8	0.75	19	8.13	207	18	8.2
6"	150	-	3.88	99	9.88	251	5.38	137	6.63	168	1.38	35	12	0.75	19	9.63	245	44	20.0
8"	200	-	5.00	127	12.13	308	7.38	187	8.63	219	2.00	51	12	0.88	22	11.25	286	75	34.0
10"	250	-	5.75	146	14.25	362	9.50	241	10.50	273	2.88	73	16	1.00	25	12.75	324	123	55.8
12"	300	-	7.13	181	16.63	422	11.25	286	12.75	324	3.38	86	16	1.13	29	14.63	372	196	89.0

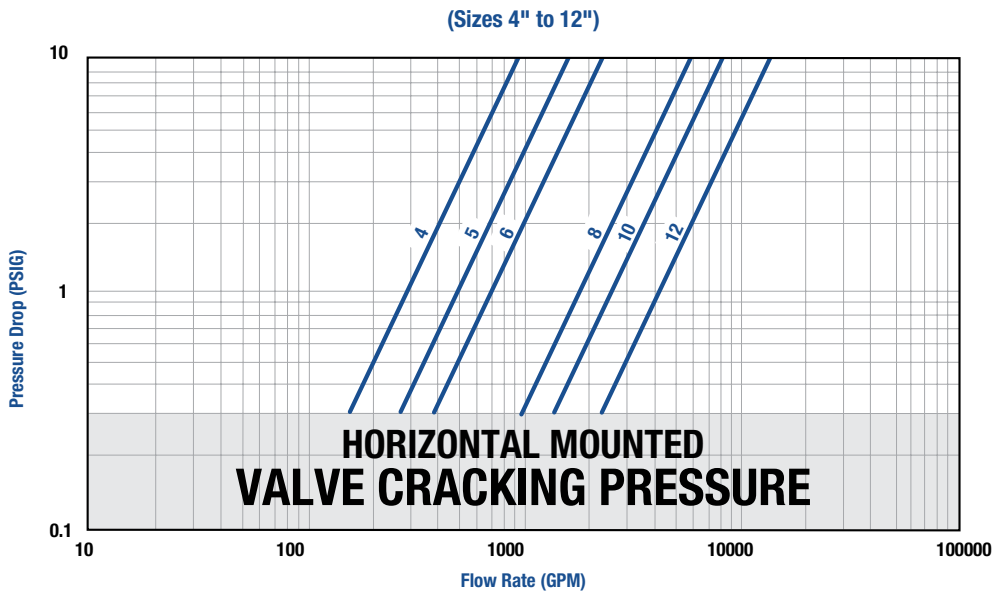
¹ Dimensions in accordance with API 594 | ² Minimum bore diameter of companion flanges | ³ Sizes 2", 2½", 3" 150WT, 300WT & 600WT are interchangeable, use 600WT for all applications in these sizes

⁴ Size 4", 150WT & 300WT are interchangeable, use 300WT for 4" size - 4" sizes fit between both 150# & 300# flanges | Dimensions shown are subject to change. Consult factory for certified drawings when required.

* Add the "B" dimension and the diameter of the stud to achieve the ANSI B16.5 bolt hole circle diameter

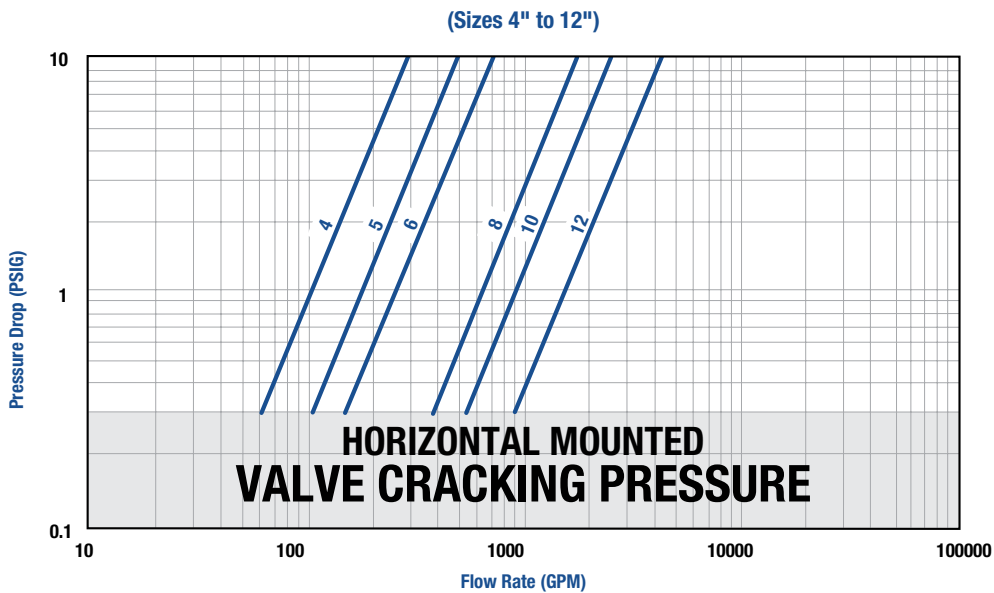
Materials		
Part	Carbon Steel	Stainless Steel
Body	A216-WCB	A351-CF8M
Discs	A351-CF8M	A351-CF8M
Seat	Buna-N	Viton
Spring	316 SS	316 SS

Pressure Drop - Liquids



- Pressure drop curves are based on water flow
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

Pressure Drop - Air



- Pressure drop curves are based on air flow at 60°F and 1 ATM pressure
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

¹ For correct installation and maintenance please see our I&M manual | ² Horizontal installation – Disc pin must be installed in vertical position | ³ Vertical installation (downward flow) – Consult factory

600WT Series

Double Door Check Valves

Carbon & Stainless Steel Body | Wafer Style



Sizes

2" to 3"



Pressure

up to 1480 PSIG
(101.9 BARG)



Temperature

up to 600°F
(316°C)



Applications

Process Industry | Power Industry | Chemical Industry
Oil & Gas | Metals & Mining | Water & Waste | Pulp & Paper

Features

- ASME Class 600 rated check valves
- Wafer body style fits between FF or RF flanges
- Upper and lower SS thrust washers
- Resilient Buna-N and Viton
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual rating 2" - 3" 150#, 300# and 600#

Applicable Codes (designed in accordance with)

- ASME B16.34 ratings
- API 594
- API 598

Models

- 600WTCT – Cast Steel Body, Stainless Steel Disc, Buna Seat
- 600WTTT – Stainless Steel Body, Stainless Steel Disc, Metal or Viton Seat

Options

- EPDM Seats
- Other Spring Material

Canadian Registration - OC10274.5C

600WT Series Ordering Code

1	Inlet Size	2	Model	3	Seat	4	Spring							
0	2	0	0	-	6	0	0	W	T	T	T	V	-	T

1	Inlet Size			
0200	2"	3000	3"	
0250	2½"			

3	Seat*			
B	Buna-N (CS Body only)	V	Viton (SS Body only)	
M	Metal (SS Body only)			

2	Model
600WTCT	Carbon Steel Body
600WTTT	Stainless Steel Body

4	Spring
T	Stainless Steel

Flow Coefficient Values (Cv)*

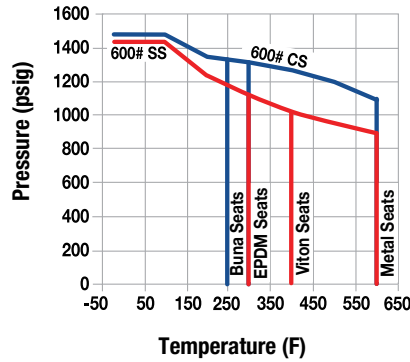
* US-GPM @ 1 PSID

Valve Size		
2"	2½"	3"
48	90	171

* 300WTCT - Buna-N seat only 300WTTT - Viton seat only



Pressure / Temperature Chart
ASME B16.34



Description

SSI manufactures carbon steel double door check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI carbon steel double door check valves are suitable for a full range of steam, liquid, gas & oil, power, pulp & paper, process equipment, chemical, metal & mining and water & waste applications.

Sizes

2" to 3"

Pressure

1480 PSIG (101.9 BARG)

Temperature

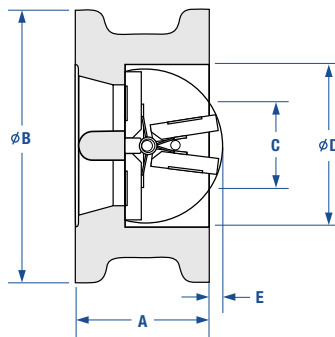
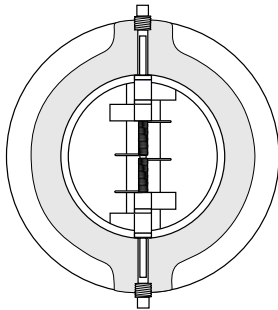
600° F (316° C)

End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID
Vertical - 0.75 to 1.25 PSID



Features

- Wafer body style fits between FF or RF flanges
- Upper and lower SS thrust washers
- Resilient Buna-N, Viton and metal seats
- Seat design lifts then swings discs to minimize seat wear
- Shock bumpers minimize stresses in hinge pins
- Independent springs optimizes valve plate closing rates while minimizing spring stress
- Dual ratings 2"–3" 150#, 300# and 600#

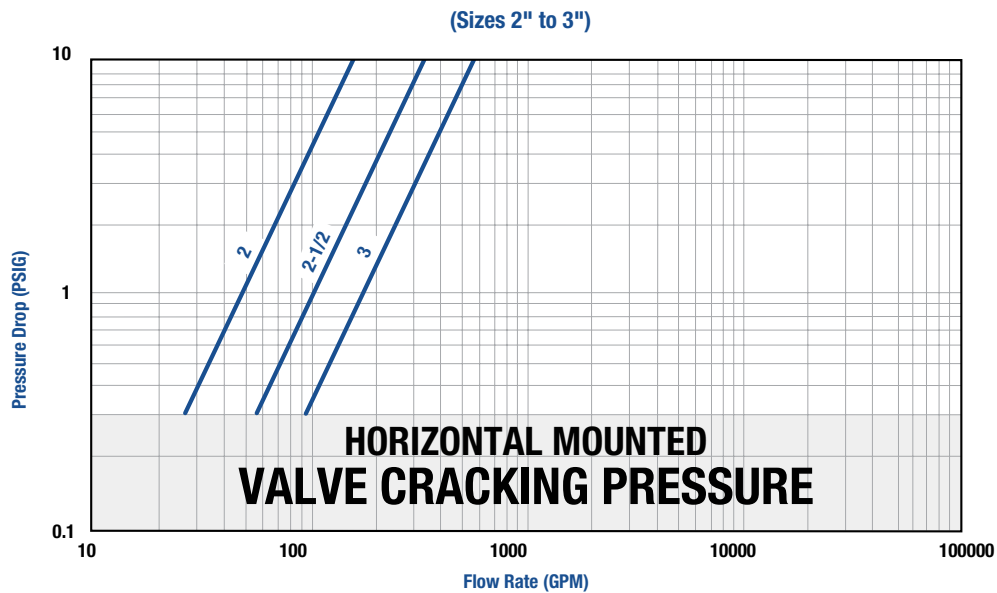
CRN

Dimensions																				
Size			A'		B*		C²		D		E		Stud Selection						Weight	
													Qty	Diameter		Length				
inch	mm		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	lbs	kg	
2"³	50	150#	2.38	60	4.13	105	—	—	2.38	60	—	—	4	0.63	15.9	6.00	152	6	2.7	
		300#/ 600#	2.38	60	4.38	111	—	—	2.38	60	—	—	8	0.63	15.9	6.88	175	6	2.7	
2½"³	65	150#	2.63	67	4.88	124	2	51	3.00	77	0.25	6	4	0.63	15.9	6.25	159	10	4.5	
		300#/ 600#	2.63	67	5.13	130	2	51	3.00	77	0.25	6	8	0.75	19	7.50	190	10	4.5	
3"³	80	150#	2.88	73	5.38	137	2	51	3.50	89	0.25	6	4	0.63	15.9	7.00	178	13	5.9	
		300#/ 600#	2.88	73	5.88	149	2	51	3.50	89	0.25	6	8	0.75	19	8.13	207	13	5.9	

¹ Dimensions in accordance with API 594 | ² Minimum bore diameter of companion flanges | ³ 300WT and 600WT are interchangeable, use 600WT for both applications

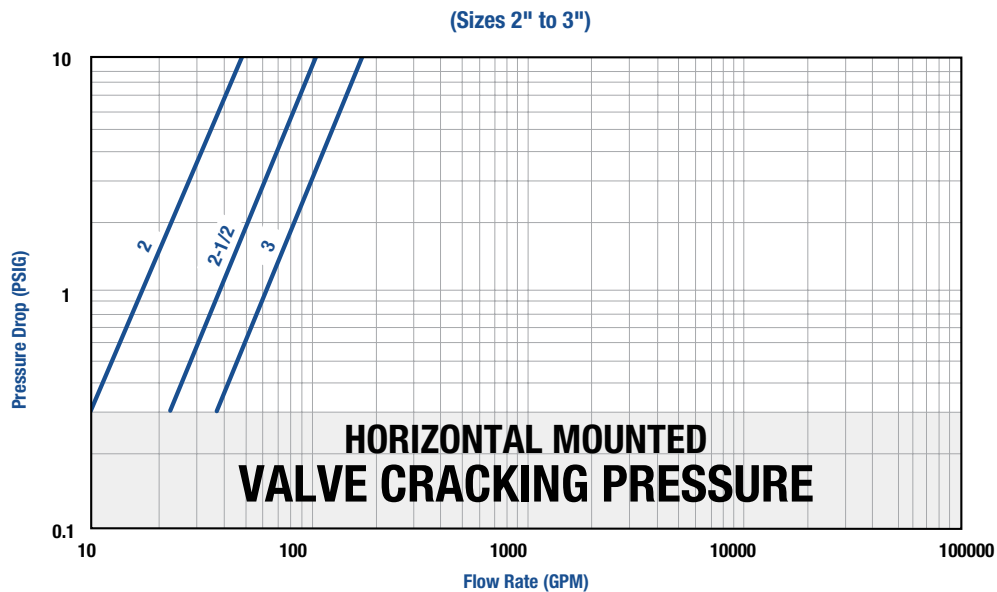
* Add the "B" dimension and the diameter of the stud to achieve the ANSI B16.5 bolt hole circle diameter | Dimensions shown are subject to change. Consult factory for certified drawings when required.

Pressure Drop - Liquids



- Pressure drop curves are based on water flow
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

Pressure Drop - Air



- Pressure drop curves are based on air flow at 60°F and 1 ATM pressure
- Valve cracking pressure is equal to or less than 0.3 psid when mounted horizontally
- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards

¹ For correct installation and maintenance please see our I&M manual | ² Horizontal installation – Disc pin must be installed in vertical position | ³ Vertical installation (downward flow) – Consult factory

Valve Location & Orientation in Piping

Check valves should be installed, if possible, a minimum of 6 pipe diameters from other line elements, i.e. elbows, pumps, valves, etc.

Horizontal Lines

- Valves installed in horizontal lines must be bolted in place with the hinge post in the vertical position, i.e. in such a manner that the hinge pin retainers are at the top and bottom of the installed valve, perpendicular to the flow.

Vertical Lines

- In the upward position, no special attention needs to be given to the hinge post position. The only exception being when mounted directly downstream of an elbow. In this case, the hinge post should be mounted perpendicular to the outermost portion of the elbow. Consult factory for vertical down flow applications.

Precautions

- Do not install Series WT check valves directly against another valve whereby the check valve discharges downstream directly into the valve.
- Do not install the valve whereby it directly discharges downstream into a tee or elbow fitting.
- Series WT check valves should not be used in severe pulsating services such as reciprocating compressor discharges.
- It is recommended that the check valves be installed a minimum of three pipe diameters downstream of a pump or compressor.

Maintenance

- SSI Series WT check valves are permanently lubricated and normally require no routine maintenance.

Reconditioning

IMPORTANT! BEFORE DISASSEMBLY, VALVE MUST FIRST BE ISOLATED FROM SYSTEM PRESSURE AND FLOW.

Disc & Shaft Removal

CAUTION! BEFORE ATTEMPTING THE FOLLOWING SHAFT EXTRACTION, BE SURE TO PRESS A HAND OVER THE DISC SPRING. FAILURE TO DO THIS MAY RESULT IN PERSONAL INJURY DUE TO THE SPRING "LAUNCHING" ITSELF UNEXPECTEDLY ONCE THE SHAFT IS PULLED FREE OF IT.

- After observing the above precaution, remove the valve from the pipeline and lay flat with open, body cavity side facing up. Remove pipe plugs from top and bottom of body with a wrench. Insert a punch and lightly tap the top of the shaft until it is accessible on the other side of the body. Pull shaft through body to remove. The internals of the valve are now ready to be cleaned and inspected.

Reassembly

- Use new replacement parts, as required and a liberal amount of general-purpose grease (such as Mystic JT-6) on seals and machined mating surfaces. Reinsert the disc into the body cavity with the shaft holes in-line with top and bottom shaft port. Slide the shaft into the body through the shaft opening on one side of the valve. Continue sliding the shaft through the disc, spring and remaining shaft port the opposite side of the body. Install pipe plugs into the body using a good industrial grade thread sealant compound

WARNING

This product operates in pipelines or with equipment that carries fluids and/or gasses at elevated temperatures and pressures. Caution should be taken to make sure that this equipment is installed correctly and inspected regularly. Caution should also be taken to protect personnel from fluid or gas leakage.