



Sizes
2" to 12"



Pressure
up to 740 PSIG



Temperature
up to 400°F



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

Features

- Silent non-slam closure
- Wafer body style
- Reduces surge and water hammer

End Connections

- Wafer Flat Faced
- Wafer Raised Face

Body Materials

- Cast Iron
- Carbon Steel
- Stainless Steel

Disc Materials

- Bronze
- Stainless Steel

Materials

- Cast Iron
- Carbon Steel
- Stainless Steel

ASME Ratings

- Class 125
- Class 150
- Class 300



Sizes

2" to 12"



Pressure

up to 200 PSIG
(13.8 BARG)



Temperature

up to 300°F
(149°C)



Applications

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

Features

- ASME Class 125 rated check valves
- Designed to reduce surge and water hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges

Applicable Codes (designed in accordance with)

- ASME Sec VIII and B16.1 Bodies
- API 598

Models

- 125WCIB - Cast Iron Body, Bronze Disc
- 125WCIT - Cast Iron Body, Stainless Steel Disc

Options

- EPDM Seats
- Other Spring Material
- Heavier or Lighter Springs

Canadian Registration - OC10274.5C

125WC Series Ordering Code

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

1	Inlet Size					
0200	2"	0400	4"	0800	8"	
0250	2½"	0500	5"	1000	10"	
0300	3"	0600	6"	1200	12"	

2	Model
125WCIB	Cast Iron Body, Bronze Disc
125WCIT	Cast Iron Body, Stainless Steel Disc

3	Seat
M	Metal

4	Spring
T	Stainless Steel

Flow Coefficient Values (Cv)

Size (in)	Min Cv (@ .3 PSID)	Cv (@ 1 PSID)	Max Cv (@ 10 PSID)
2"	51	58	73
2½"	84	90	106
3"	119	134	168
4"	179	210	285
5"	265	300	391
6"	383	430	548
8"	639	740	964
10"	1114	1250	1581
12"	1604	1800	2277

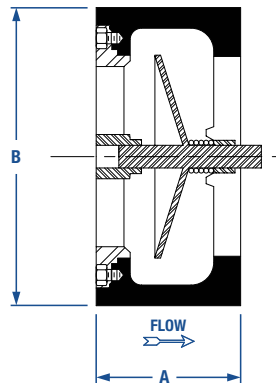
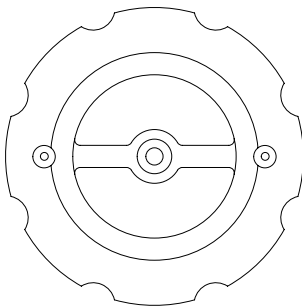
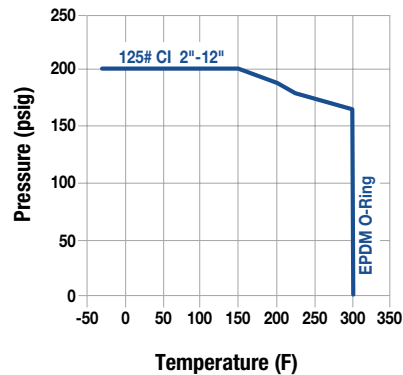
125WC Series

Wafer Silent Check Valves

Cast Iron Body | Wafer Style



Pressure / Temperature Chart
ASME B16.1



Description

SSI manufactures cast iron silent check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI cast iron silent 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 12"

Pressure

200 PSIG (13.8 BARG)

Temperature

300° F (149° C)

End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID

Vertical - 0.75 to 1.25 PSID

Features

- Designed to reduce surge and water hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges

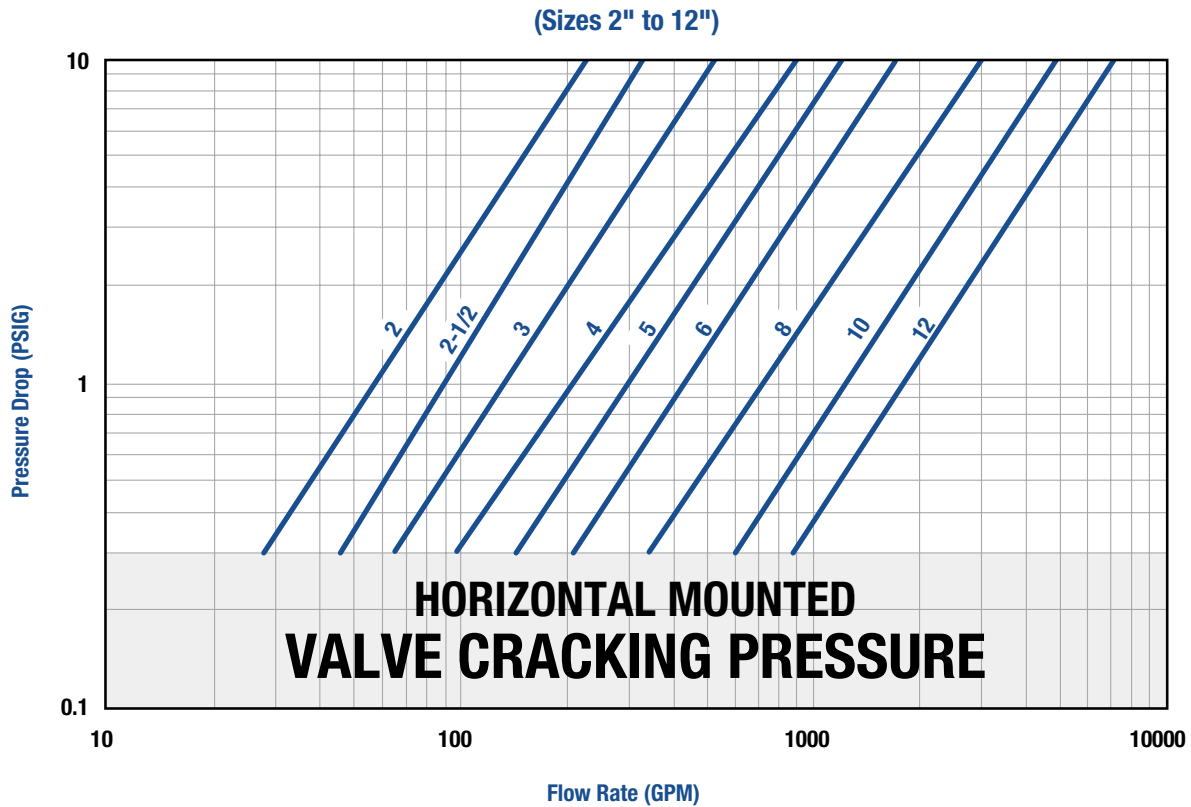
CRN

Dimensions												
Size		A		B*		Qty	Stud Selection				Weight	
							Diameter		Length			
inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	lbs	kg
2"	50	2.69	68	4.13	105	4	0.63	16	6.50	165	5	2.3
2½"	65	2.88	73	4.88	124	4	0.63	16	6.75	171	8	3.6
3"	80	3.19	81	5.38	137	4	0.63	16	7.00	178	10	4.5
4"	100	4.00	103	6.88	175	8	0.63	16	8.00	203	19	8.6
5"	125	4.63	118	7.75	197	8	0.75	19	8.75	222	30	13.6
6"	150	5.56	142	8.75	222	8	0.75	19	10.50	267	42	19.1
8"	200	6.50	165	11.00	279	8	0.75	19	11.25	286	87	39.5
10"	250	8.22	209	13.38	340	12	0.88	22	12.25	311	146	66.2
12"	300	11.25	286	16.13	410	12	0.88	22	16.50	419	304	137.9

Materials	
Part	Material
Body	A126-B
Discs	Al/Bz B148 C954 or 316SS A351-CF8M
Seat	Bronze or Stainless Steel
Spring	316 SS
O-Ring	EPDM

* 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 VS. Flow Rate



- 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.

¹ For correct installation and maintenance please see our I&M manual | ² Vertical installation (downward flow) – Consult factory | ³ Always use Strainers in upstream piping | ⁴ Not recommended for Steam Service

150WC Series

Wafer Silent Check Valves

Carbon & Stainless Steel Body | Wafer Style



Sizes

8" to 12"



Pressure

up to 285 PSIG
(19.7 BARG)



Temperature

up to 400°F
(204°C)



Applications

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

Features

- ASME Class 150 rated check valves
- Designed to reduce surge and water hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges
- Dual rating 150# and 300# in sizes 2" through 6"

Applicable Codes (designed in accordance with)

- ASME Sec. VIII and B16.34 Bodies
- API 598

Models

- 150WCCT – Cast Steel Body, Stainless Steel Disc
- 150WCCTT – Stainless Steel Body, Stainless Steel Disc

Options

- Viton Seats
- Other Spring Material
- Heavier or Lighter Springs

Canadian Registration - OC10274.5C

150WC Series Ordering Code

1 Inlet Size		2 Model		3 Seat		4 Spring
1 0 0 0	-	1 5 0 W C T T		M	-	T

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

2	Model
150WCCT	Carbon Steel Body, Stainless Steel Disc
150WCCTT	Stainless Steel Body, Stainless Steel Disc

3	Seat
M	Metal

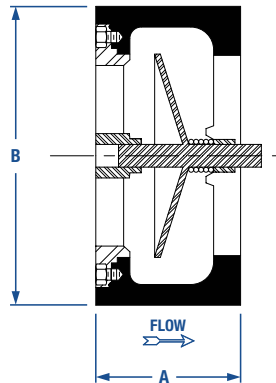
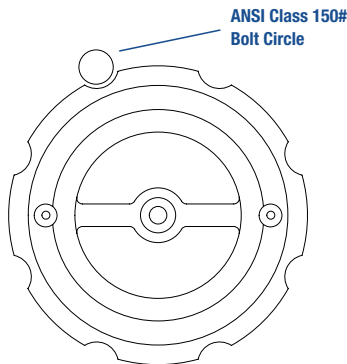
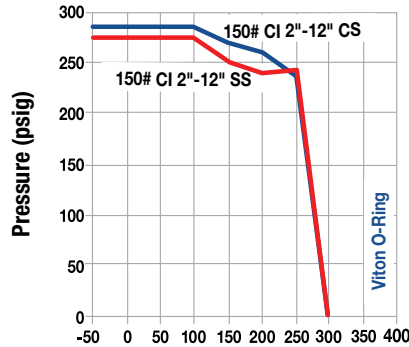
4	Spring
T	Stainless Steel

Flow Coefficient Values (Cv)

Size (in)	Min Cv (@ .3 PSID)	Cv (@ 1 PSID)	Max Cv (@ 10 PSID)
8"	639	740	1297
10"	1114	1250	1800
12"	1297	1992	2593



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



Description

SSI manufactures carbon steel silent check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI carbon steel silent 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

8" to 12"

Pressure

285 PSIG (19.7 BARG)

Temperature

400° F (149° C)

End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID

Vertical - 0.75 to 1.25 PSID

Features

- Designed to reduce surge and water hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges
- Dual rating 150# and 300# in sizes 2" through 6"

CRN

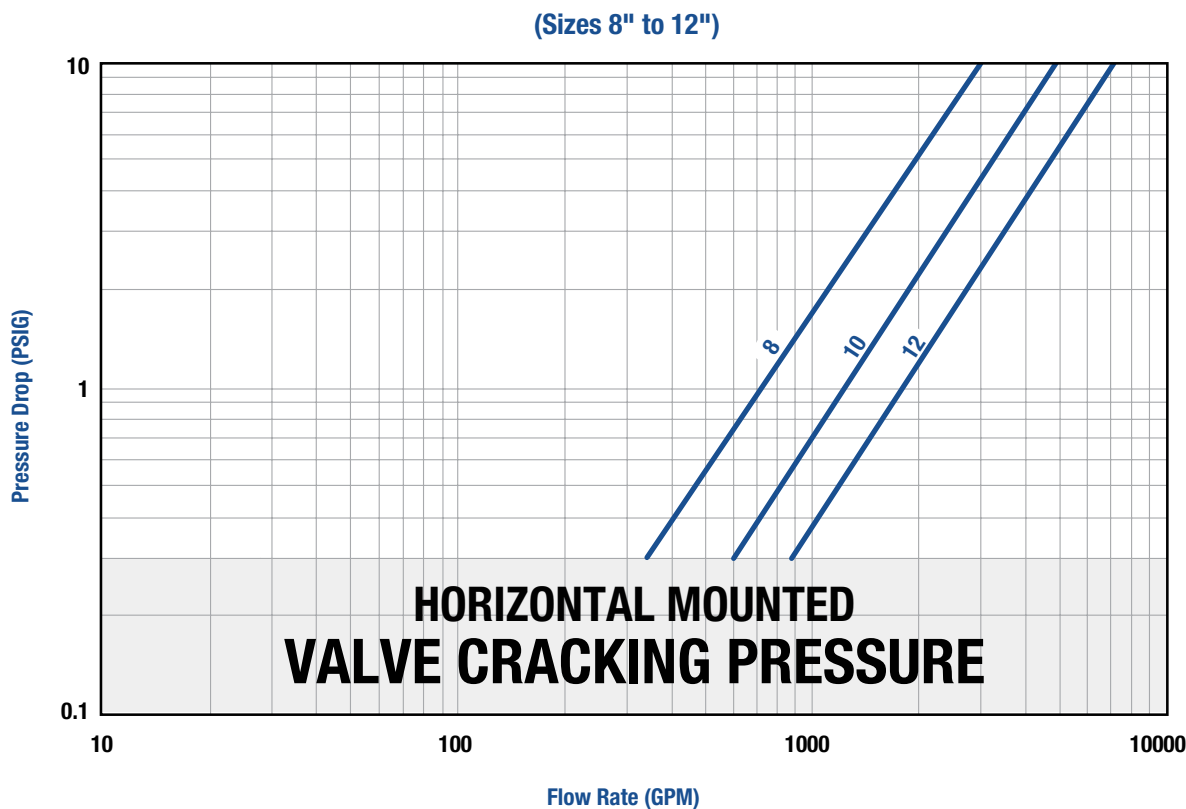
Dimensions												
Size		A		B*		Qty	Stud Selection				Weight	
							Diameter		Length			
inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	lbs	kg
2"				Use 2" 300WC on page 205								
2½"				Use 2½" 300WC on page 205								
3"				Use 3" 300WC on page 205								
4"				Use 4" 300WC on page 205								
5"				Use 5" 300WC on page 205								
6"				Use 6" 300WC on page 205								
8"	200	6.50	165	11.00	279	8	0.75	19	11.25	286	79	35.8
10"	250	8.25	209	13.38	340	12	0.88	22	12.25	311	147	66.7
12"	300	11.25	286	16.13	410	12	0.88	22	16.50	419	280	127

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

* Sizes 2" through 6" 150WC and 300WC are interchangeable, use 300WC for all applications in these sizes | 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 VS. Flow Rate



- 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.

¹ For correct installation and maintenance please see our I&M manual | ² Vertical installation (downward flow) – Consult factory | ³ Always use Strainers in upstream piping | ⁴ Not recommended for Steam Service



Sizes
2" to 6"



Pressure
up to 740 PSIG
(51 BARG)



Temperature
up to 400°F
(204°C)



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

Features

- ASME Class 300 rated check valves
- Designed to reduce surge and water hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges
- Dual rating 150# and 300# in sizes 2" through 6"

Applicable Codes (designed in accordance with)

- ASME Sec. VIII and B16.34 Bodies
- API 598

Models

- 300WCCT – Cast Steel Body, Stainless Steel Disc
- 300WCTT – Stainless Steel Body, Stainless Steel Disc

Options

- Viton Seats
- Other Spring Material
- Heavier or Lighter Springs

Canadian Registration - OC10274.5C

300WC Series Ordering Code

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

1	Inlet Size					
0200	2"	0300	3"	0500	5"	
0250	2½"	0400	4"	0600	6"	

2	Model
300WCCT	Carbon Steel Body, Stainless Steel Disc
300WCTT	Stainless Steel Body, Stainless Steel Disc

3	Seat
M	Metal

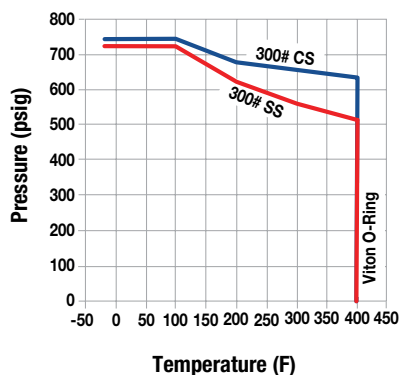
4	Spring
T	Stainless Steel

Flow Coefficient Values (Cv)

Size (in)	Min Cv (@ .3 PSID)	Cv (@ 1 PSID)	Max Cv (@ 10 PSID)
2"	51	58	73
2½"	84	90	106
3"	119	134	168
4"	179	210	285
5"	265	300	391
6"	383	430	548



Pressure / Temperature Chart
ASME B16.34



Description

SSI manufactures carbon steel silent check valves that are long-lasting, functional, cost-effective, and are well suited for commercial and industrial use. SSI carbon steel silent 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 6"

Pressure

740 PSIG (51 BARG)

Temperature

400° F (204° C)

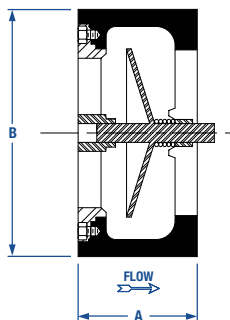
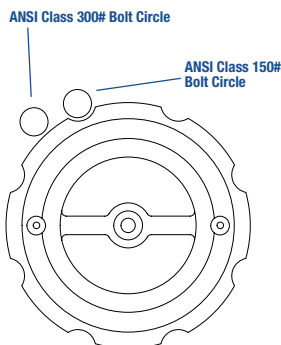
End Connections

Wafer Flanged

Cracking Pressure

Horizontal - 0.3 PSID

Vertical - 0.75 to 1.25 PSID



Features

- Designed to reduce surge and Water Hammer
- Silent, non-slam closure
- Center guided at both ends to prevent binding and cocking
- Compact face to face length for space saving
- Wafer body style fits between FF or RF flanges
- Dual rating 150# and 300# in sizes 2" through 6"

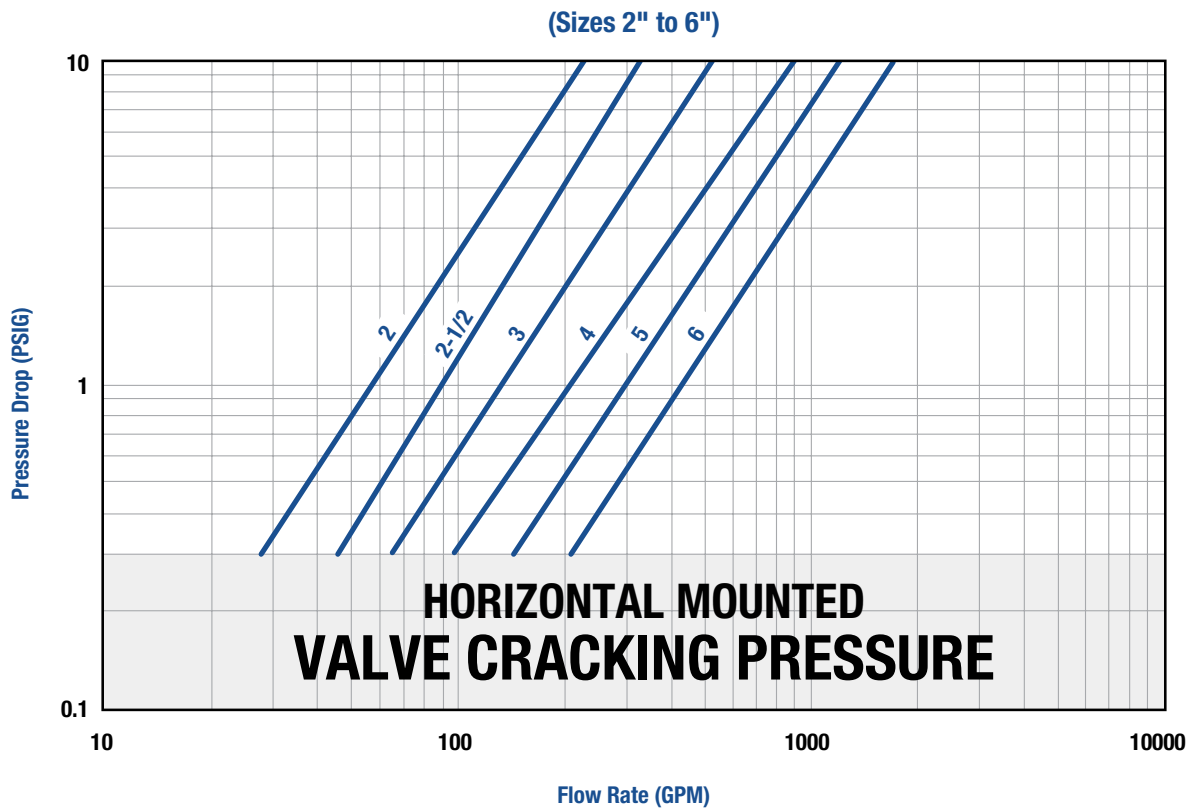
CRN

Dimensions													
Size			A		B*		Qty	Stud Selection				Weight	
								Diameter		Length			
inch	mm		inch	mm	inch	mm		inch	mm	inch	mm	lbs	kg
2"	50	150	2.63	67	4.13	105	4	0.63	16	6.25	159	5	2.3
		300	2.63	67	4.38	111	8	0.63	16	6.50	165		
2½"	65	150	2.88	73	4.88	124	4	0.63	16	6.75	171	7	3.2
		300	2.88	73	5.13	130	8	0.75	19	7.25	184		
3"	80	150	3.13	79	5.88	137	4	0.63	16	7.00	178	11	5.0
		300	3.13	79	5.88	149	8	0.75	19	7.75	197		
4"	100	150	4.00	102	6.88	175	8	0.63	16	8.00	203	20	9.1
		300	4.00	102	7.13	181	8	0.75	19	9.00	229		
5"	125	150	4.63	117	7.75	197	8	0.75	19	8.50	216	34	15.4
		300	4.63	117	8.50	216	8	0.75	19	9.75	247		
6"	150	150	5.56	141	8.75	222	8	0.75	19	10.00	254	42	19.1
		300	5.56	141	9.88	251	12	0.75	19	10.75	273		

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

* 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 VS. Flow Rate



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- Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards.

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Check Valve Installation

- Valves may be installed upward vertically, horizontally, or at other angles. For vertical downward flow please consult with the factory.
- Install the valve with proper positioning of the flow arrow.
- Support and align adjacent piping and the valve.
- Install lubricated flange bolts.
- Hand tighten, then torque the bolts using the cross-over flange bolt-tightening method to load the bolts evenly, and eliminate concentrated stresses.
- Valves must be mounted to ANSI flanges with conventional flat face or ring gaskets.
- Proper centering of the ring gaskets is important to prevent internal leakage.
- Never lift the valve by the bronze or stainless steel trim.
- Install a strainer in the piping.

Precautions

- Do not install 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.
- These valves are not suggested for installation in sewage ejector piping.
- Careful consideration should be given to the selection of valves for use in an air, steam, hot water and boiler feed systems. Consult our factory on these applications.
- Individuals performing removal and disassembly should be provided with suitable protection from possibly hazardous liquids.
- Before disassembly, the valve must first be isolated from system pressure and flow.
- Upon disassembly ensure spring pressure is released slowly to prevent personal injury due.

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.