



TITAN FLOW CONTROL, INC.

## SWING CHECK VALVE ♦ WAFER TYPE ♦ SINGLE DISC

### ANSI CLASS 150 ♦ CARBON AND STAINLESS STEEL



**MODELS:** CV 32-CS  
(CARBON - VITON SEAT)

CV 32-SS  
(STAINLESS - PTFE SEAT)

SIZES: 2" ~ 12"

## FEATURES

- ◇ SHUT-OFF IS ACHIEVED VIA THE FULLY AUTOMATIC, SPRING-ASSISTED, DISC THAT CLOSES AT ZERO FLOW VELOCITY
- ◇ QUICK CLOSURE OF THE DISC REDUCES WATER HAMMER BY CREATING A POSITIVE SHUTOFF PRIOR TO FLOW REVERSAL
- ◇ HEAD LOSS IS MINIMIZED BY PROVIDING A COMPACT FACE-TO-FACE AND A LARGE, VIRTUALLY UNOBSTRUCTED FLOW PATH
- ◇ CAN BE INSTALLED IN ANY POSITION VERTICAL (WITH UPWARD FLOW ONLY) OR HORIZONTAL
- ◇ ANTI-CORROSIVE, STAINLESS STEEL TRIM (DISC, SPRING, AND SHAFT) ARE STANDARD
- ◇ NARROW FACE-TO-FACE DIMENSIONS AND LIGHTWEIGHT DESIGN PROVIDE AN ECONOMICAL, SPACE-SAVING SOLUTION
- ◇ PRECISION MACHINED DISCS COUPLED WITH DYNAMIC SOFT SEATS (VITON FOR CARBON AND PTFE FOR STAINLESS) ENSURE A BUBBLE-TIGHT SEAL IS ACHIEVED

## TECHNICAL

**PRESSURE/TEMPERATURE RATING**  
CS - ASTM A216 GR. WCB - CLASS 150

WOG: 285 PSI @ 100 °F

**PRESSURE/TEMPERATURE RATING**  
SS - ASTM A351 GR. CF8M - CLASS 150

WOG: 275 PSI @ 100 °F

**SEAT MATERIAL (O-RING)**

VITON: -40 ~ 400 °F

PTFE: -100 ~ 400 °F

**MARKETS:** GENERAL INDUSTRY, CHEMICAL, PETROCHEMICAL, POWER, AND FOOD & BEVERAGE

**SERVICE:** INTENDED FOR LIQUID SERVICE THAT IS STEADY, CLEAN (NO ABRASIVES) AND NON-PULSATING. FLOW RATE SHOULD NOT EXCEED 15 FT/SEC. NOT RECOMMENDED FOR STEAM SERVICE OR RECIPROCATING COMPRESSOR SERVICE.

**PTFE PROPERTIES:** RECOMMENDED FOR MOST CHEMICAL ENVIRONMENTS INCLUDING ACIDS, BASES, OILS, STEAM AND OTHER PROCESS FLUIDS. OFFERS EXCELLENT TEAR, ABRASIVE, CHEMICAL, ACID, AND ALKALI RESISTANCE. NOT RECOMMENDED FOR HIGH PRESSURE STEAM OR LARGE TEMPERATURE VARIATION APPLICATIONS.

**VITON PROPERTIES:** OFFERS A BROAD RANGE OF CHEMICAL RESISTANCE AND EXCELLENT HEAT RESISTANCE. GOOD MECHANICAL PROPERTIES AND COMPRESSION SET RESISTANCE. OFTEN USED IN APPLICATIONS WHERE NOTHING ELSE WILL WORK. FAIR LOW TEMPERATURE RESISTANCE AND LIMITED HOT-WATER RESISTANCE AND SHRINKAGE.

*The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.*

## TITAN FLOW CONTROL, INC.

YOUR PIPELINE TO THE FUTURE!

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## APPLICATIONS



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**SWING CHECK VALVE • WAFERTYPE**

**SINGLE DISC**

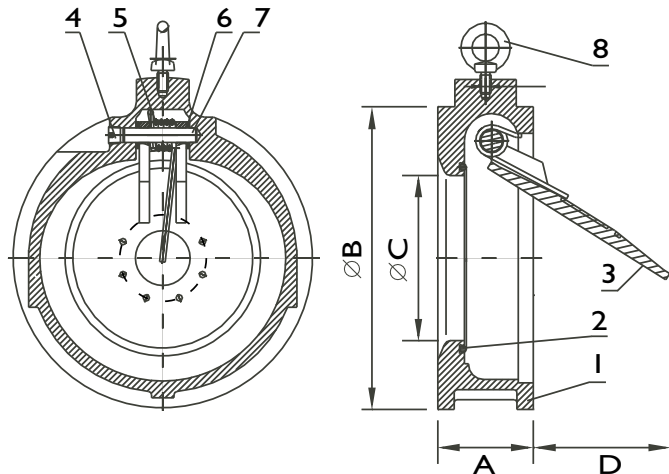
**MODELS: CV 32-CS (Carbon - Viton Seat)  
CV 32-SS (Stainless - PTFE Seat)**

ANSI Class  
150 lb

**BILL OF MATERIALS (1)**

No.	PART	CV 32-CS	CV 32-SS
1	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M
2	Seat (2)	Viton O-RING	PTFE Commercial O-RING
3	Disc (2)	Stainless Steel AISI 316	Stainless Steel AISI 316
4	Plug	Carbon Steel ASTM A307B	Stainless Steel AISI 316
5	Spring (2)	Stainless Steel AISI 304	Stainless Steel AISI 304
6	Spacer	PTFE Commercial	PTFE Commercial
7	Shaft	Stainless Steel AISI 316	Stainless Steel AISI 316
8	Eye Bolt	Carbon Steel ASTM A307B	Carbon Steel ASTM A307B

- Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion. All materials conform to ASTM specifications.
- Denotes recommended spare parts.

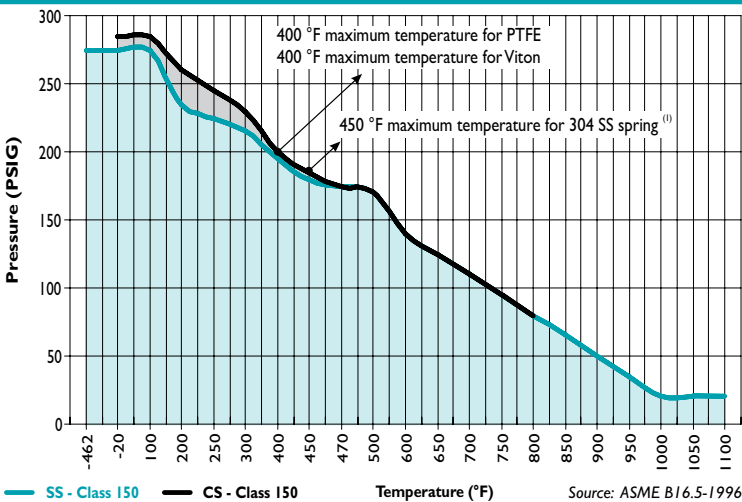


**DIMENSIONS AND PERFORMANCE DATA**

SIZE	in	2	2 1/2	3	4	5	6	8	10	12
	mm	50	65	80	100	125	150	200	250	300
A DIMENSION FACE TO FACE	in	1.75	1.875	2.00	2.25	2.50	2.75	2.875	3.125	3.375
	mm	45	48	51	58	64	70	74	80	86
ØB DIMENSION OVERALL DIAMETER	in	4.125	4.875	5.375	6.875	7.75	8.75	11.00	13.375	16.125
	mm	105	124	137	175	197	223	280	340	410
ØC DIMENSION INLET DIAMETER	in	1.313	1.85	2.063	3.00	3.75	4.75	6.438	7.625	9.50
	mm	34	47	53	77	96	121	164	194	242
D DIMENSION DISC MAX TRAVEL	in	.50	.75	1.31	2.31	2.75	3.38	4.00	4.75	5.00
	mm	13	20	34	59	70	86	102	121	127
ASSEMBLED WEIGHT	lb	5.0	6.0	8.0	12.0	18.0	22.0	35.0	57.0	85.0
	kg	2.3	2.7	3.6	5.4	8.2	10.0	15.9	25.8	38.5
Flow Coefficient	C <sub>v</sub>	62	109	166	318	471	720	1384	2298	4153
Cracking Pressure	psi	< .25	< .25	< .25	< .25	< .25	< .25	< .25	< .25	< .25

Dimensions and weights are for reference only. When required, request certified drawings.

**PRESSURE/TEMPERATURE: A216 Gr.WCB & A351 Gr. CF8M CLASS 150**



- As the temperature increases, the load capacity of the spring diminishes significantly. At higher temperatures, Inconel Springs must be used.

**REFERENCED STANDARDS & CODES**

CODE	DESCRIPTION
ANSI B16.34	Steel Valves - Flanged, Threaded, & Welding Ends
ANSI B16.10	Face-to-Face & End-to-End Dimensions of Valves
ANSI B16.5	Pipe Flanges & Flanged Fittings
API 594	Wafer, Wafer-Lug, & Double Flanged Type Check Valves
API 598	Valve Inspection and Testing
MSS SP-6	Standard Finishes for Connecting-end Flanges
MSS SP-25	Standard Marking System for Valves
MSS SP-55	Quality Standard for Valve Castings

**PRESSURE/TEMPERATURE RATING**

	A216 Gr.WCB	A351 Gr. CF8M
WOG (water, oil, gas)	285 PSI @ 100 °F	275 PSI @ 100 °F

**SEAT MATERIAL**

VITON:	-40 ~ 400 °F
PTFE:	-100 ~ 400 °F

Ordering Code: \_\_\_\_\_ Size: \_\_\_\_\_

Customer/Project: \_\_\_\_\_

Inq./P.O. No.: \_\_\_\_\_

Titan Order No.: \_\_\_\_\_

Certified By: \_\_\_\_\_ Date: \_\_\_\_\_

**Engineering Specification Submittal**

Titan FCI makes every effort to ensure the information presented on our literature accurately reflects exact product specifications. However, as changes occur, there may short-term differences between actual product specifications and the information shown on our literature. Titan FCI reserves the right to make specification changes to improve our products without prior notification.

**Wafer Type - Swing Check Valve - Single Disc • Models: CV 32-CS/SS**

Size	Model Number	Description	Drawing Number