

SWING CHECK VALVE * WAFER TYPE * SINGLE DISC

ANSI CLASS 150 * CARBON AND STAINLESS STEEL

TITAN FLOW CONTROL, INC

MODELS: CV 32-CS

(Carbon - Viton)

CV 32-SS

FEATURES

(Stainless - PTFE)



SIZES: 2" ~ 12"



LOW WEIGHT AND SHORT LAYING LENGTH PRODUCE SAVINGS IN INITIAL COST, SPACE REQUIREMENTS, AND INSTALLATION WHEN COMPARED TO FULL-BODY, SWING-TYPE CHECK VALVES.

♦ MINIMAL HEAD LOSS

HEAD LOSS IS MINIMIZED BY PROVIDING A SHORT, STRAIGHT AND VIRTUALLY UNOBSTRUCTED FLOW PATH. ADDITIONALLY, THE SPRING-LOADED DISC IS DESIGNED WITH VERY LOW CRACKING PRESSURE WHICH REDUCES THE AMOUNT OF ENERGY REQUIRED TO OPEN THE VALVE.

♦ QUICK CLOSURE TO REDUCE WATER HAMMER

SHUT-OFF IS ACHIEVED VIA THE FULLY AUTOMATIC, SPRING-ASSISTED DISC THAT CLOSES NEAR ZERO FLOW VELOCITY. THE LIGHTWEIGHT, SINGLE DISC DESIGN CREATES A POSITIVE SHUTOFF PRIOR TO FLOW REVERSAL WHICH HELPS TO KEEP SURGES TO A MINIMUM.

♦ DURABLE, HIGH QUALITY DESIGN

THE CV32 CHECK VALVE IS AVAILABLE IN EITHER CARBON STEEL OR STAINLESS STEEL BODY CONFIGURATIONS, WHICH ALLOW IT TO PERFORM WELL IN HIGHER TEMPERATURE APPLICATIONS. THE CARBON STEEL UNITS ARE EPOXY PAINTED. ADDITIONALLY, BOTH MODELS FEATURE ANTI-CORROSIVE, STAINLESS STEEL TRIM (DISC, SPRING, SHAFT) AS STANDARD.

RESILIENT SOFT SEATS

RESILIENT SOFT SEATS (VITON AND PTFE O-RING) COUPLED WITH PRECISION MACHINED SEALING SURFACES HELP TO ENSURE A BUBBLE TIGHT SEAL THAT MEETS OR EXCEEDS API 598 TEST REQUIREMENTS.

TECHNICAL

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

WOG (Non-shock): 285 PSI @ 100 °F

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

WOG (Non-shock): 275 PSI @ 100 °F

SEAT MATERIAL (O-RING) **TEMPERATURE RANGE**

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

> SPRING MATERIAL MAXIMUM TEMPERATURE

Series 300 Stainless Steel: 450 °F

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

SERVICE: INTENDED FOR LIQUID SERVICE THAT IS STEADY, CLEAN (NO ABRASIVES OR SOLIDS) AND NON-PULSATING. FLOW RATE SHOULD NOT EXCEED 15 FT/SEC. NOT RECOMMENDED FOR STEAM 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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SWING CHECK VALVE • WAFER TYPE SINGLE DISC

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

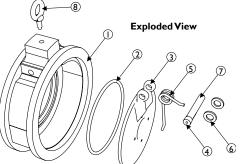
ANSI Class I 50

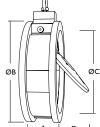
BILL OF MATERIALS (1)				
No.	PART	CV 32-CS	CV 32-SS	
ı	Body	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M	
2	Seat (2)	Viton O-Ring	PTFE Commercial O-Ring	
3	Disc (2)	Stainless Steel AISI 316	Stainless Steel AISI 316	
4	Plug	Carbon Steel ASTM A307B	Stainless Steel AISI 316	
5	Spring (2)	Series 300 Stainless Steel	Series 300 Stainless Steel	
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	

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

2. Denotes recommended spare parts.

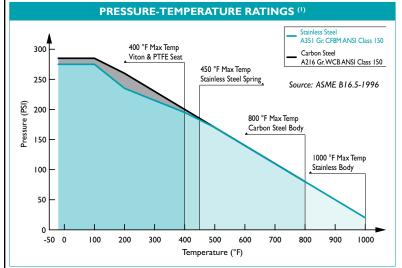
Illustrations are for representational purposes only. Request certified drawings when required.





Side View (shown with disc open)

- **DIMENSIONS AND PERFORMANCE DATA** (1) 2 2 1/2 3 4 8 10 12 in SIZE 50 80 100 125 150 200 250 300 65 mm **A** DIMENSION 1.75 1.875 2.00 2.25 2.50 2.75 2.875 3.125 3.375 FACE TO FACE (2) 45 48 51 58 80 mm 64 70 74 86 4.0 4.875 5.25 6.75 7.75 8.625 10.875 13.25 16.0 ØB DIMENSION in OVERALL DIAMETER 102 124 133 171 197 219 276 337 406 mm ØC DIMENSION 1.313 1.85 2.063 3.00 3.75 4.75 6.438 7.625 9.50 in **INLET DIAMETER** 47 96 121 194 mm 34 53 77 164 242 **D** DIMENSION in .50 .75 1.31 2.31 2.75 3.38 4.00 4.75 5.00 DISC MAX TRAVEL 13 20 34 59 70 86 102 121 127 mm 5.0 6.0 8.0 22.0 30.0 48.0 **ASSEMBLED** lb 12.0 18.0 64.0 WEIGHT 2.3 2.7 3.6 5.4 8.2 10.0 13.6 21.8 29.0 kg C_V Flow Coefficient 109 318 720 62 166 47 I 1384 2298 4153 Cracking Pressure (3) ≤ .25 ≤ .25 ≤ .25 ≤ .25 psi ≤ .25 ≤ .25 ≤ .25 ≤ .25 ≤ .25
- 1. Dimensions, weights, and flow coefficients are for reference only. When required, request certified drawings.
- 2. Face to face values have a tolerance of ±0.06 in (±2.0 mm) for sizes 10" and lower and a tolerance of ±0.12 in (±3.0 mm) for sizes 12" and larger.
- 3. Cracking pressure is for horizontal installations only. For vertical installations, please consult factory.



1. The above chart displays the pressure-temperature ratings for the valve's body material per ASME B16.5-1996. Max temperature limits have been added for seat and spring materials.

PRESSURE/TEMPERATURE RATING (1)				
Class 150	Carbon Steel A216 Gr.WCB	Stainless Steel A351 Gr. CF8M		
WOG (Non-shock)	285 PSI @ 100 °F	275 PSI @ 100 °F		

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			

SEAT AND SPRING TEMPERATURE RATINGS (1)				
SEAT (O-Ring)	Temperature Range			
Viton	-40 ~ 400 °F			
PTFE	-100 ~ 400 °F			
SPRING (2)	Maximum Temperature			
Series 300 Stainless Steel	450 °F			

- 1. The listed pressure and temperature ratings for the valve's body, seat, and spring are theoretical and may vary during actual operating conditions.
- 2. As the temperature increases, the load capacity of the spring diminishes significantly. At higher temperatures, a different material spring may be required. Please consult for specific application assistance.

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