CHECK VALVE • WAFER STYLE • DUAL DISC
ASME CLASS 150 • CARBON AND STAINLESS STEEL

MODELS:
CV 42-CS
(CARBON STEEL - WAFER)
CV 42-SS
(STAINLESS STEEL - WAFER)

FEATURES

♦ COST EFFICIENT DESIGN
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
CONTOUR OF BODY PROVIDES A SHORT AND STRAIGHT FLOW PATH THAT GENERATES VERY LITTLE TURBULENCE. ADDITIONALLY, THE SPRING-LOADED DISCS ARE 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 DISCS THAT CLOSE NEAR ZERO FLOW VELOCITY. THE LIGHTWEIGHT, SPLIT DISC DESIGN CREATES A POSITIVE SHUTOFF PRIOR TO FLOW REVERSAL AND HELPS TO KEEP SLAMMING AND SURGES TO A MINIMUM.

♦ DESIGNED FOR LONG SERVICE LIFE
THE SPRING AND DISCS ARE DESIGNED TO ALLOW THE DISCS TO LIFT LINEARLY BEFORE PIVOTING TO AVOID THE DISC HEAT FROM SCRUNCHING THE SEALING SURFACE. ALSO, DISCS ARE EQUIPPED WITH CAST-IN SHOCK BUMPERS THAT HELP TO REDUCE WEAR AND TEAR ON INTERNAL COMPONENTS.

♦ FUGITIVE EMISSION DESIGN
TITAN'S INNOVATIVE RETAINER DESIGN ELIMINATES POTENTIAL LEAK PATHS TO THE ENVIRONMENT SO THERE ARE NO BODY EMISSIONS.

♦ RESILIENT AND METAL SEATS
BROAD, LAPPED SEALING SURFACE (METAL) MEETS OR EXCEEDS API 598 TEST REQUIREMENTS. RESILIENT SEATS (VITON/BUNA) ENSURE A BUBBLE TIGHT SEAL.

MARKETS: WATER & WASTEWATER, PULP & PAPER, CHEMICAL & PETROCHEMICAL, POWER, PETROLEUM AND OIL & GAS

BUNA-N PROPERTIES: MOST WIDELY USED ELASTOMER. GOOD FOR MOST PETROLEUM OILS AND FLUIDS, SILICONE GREASES AND OILS, AND COLD WATER. EXCELLENT COMPRESSION SET, TEAR, AND ABRASION RESISTANCE. POOR WEATHER RESISTANCE AND MODERATE HEAT RESISTANCE. NOT RECOMMENDED FOR SEVERE OZONE-RESISTANT 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.

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
TEMPERATURE RANGE
VITON: -40 ~ 400 °F
BUNA-N: -20 ~ 250 °F

SPRING MATERIAL
TEMPERATURE MAXIMUM
INCONEL X-750: 1000 °F

1. The above listed temperatures are theoretical and may vary during actual operating conditions.
2. Max and min temperatures are for reference only. Prolonged use at these temperatures is not recommended for optimal service life.
1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer’s discretion.
2. Denotes recommended spare parts. May be substituted at the manufacturer’s discretion.
3. Cracking pressure is for horizontal installations only. For vertical installations, please consult factory.
4. Minimum Bore Diameter indicates the minimum internal diameter of the adjacent pipe.
5. Scallops to provide clearance for class 150 bolting.

**DIMENSIONS AND PERFORMANCE DATA**

**PRESSURE - TEMPERATURE RATINGS**

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. For ASME Class 300 ratings (Wafer-Style 2” ~ 6”), please refer to the CV 44-CC/SS specification sheet.

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**REFERENCE STANDARDS & CODES**

**CODE**

- API 594: Valve Design and Manufacture
- ASME 16.5: Flange Dimensions
- API 594: Valve Face to Face Dimensions
- API 598: Valve Inspection and Pressure Test

**PRESSURE - TEMPERATURE RATING**

**Body Material**

- A216 Gr. WCB
- A351 Gr. CF8M

- WOG (Non-shock): 285 PSI @ 100 °F 275 PSI @ 100 °F

**SEAT AND SPRING TEMPERATURE RATING**

- VITON: -40 ~ 400 °F
- INCONEL X-750: 1000 °F

- BUNA-N: -20 ~ 250 °F

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As Titan 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.