TITAN FLOW CONTROL, INC.

CHECK VALVE ❖ SINGLE DISC ❖ THREADED & SOCKET WELD

ASME CLASS 300 ❖ STAINLESS STEEL BODY

ONE-PIECE
BODY DESIGN!

MODEL: CV 88T-SS

(STAINLESS STEEL - THREADED)

CV 88S-SS

(STAINLESS STEEL - SOCKET WELD)

SIZE RANGE:
1/2" THROUGH 3"

FEATURES

◇ **SIMPLE DESIGN**

THE ALL STAINLESS-STEEL BODY COUPLED WITH A SIMPLIFIED DESIGN (ONLY THREE PARTS) HELPS TO ELIMINATE POSSIBLE FAILURE POINTS. THE NEED FOR O-RINGS OR GASKET SEALS IS NOT NEEDED.

◇ **MINIMAL HEAD LOSS**

THE CONTOUR OF BODY PROVIDES A SHORT AND STRAIGHT FLOW PATH THAT GENERATES VERY LITTLE TURBULENCE. 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, FLOATING 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 CV88-SS UTILIZES A HIGHLY RELIABLE INVESTMENT CASTING AND WELDED STAINLESS STEEL CONSTRUCTION THAT CAN PROVIDE A LONG SERVICE LIFE FOR A WIDE VARIETY OF APPLICATIONS.

◇ **VERSATILE AND ECONOMICAL DESIGN**

THE CV88-SS CAN BE INSTALLED IN ANY POSITION (HORIZONTAL OR VERTICAL WITH UPWARD FLOW) - CONSULT FACTORY FOR VERTICAL WITH DOWNWARD FLOW. HEX ENDS ARE PROVIDED FOR QUICK AND EASY INSTALLATIONS.

TECHNICAL

PRESSURE/ TEMPERATURE RATING SS - ASTM A351 GR. CF8M - CLASS 300
WOG (Non-shock): 720 PSI @ 100 °F Max Liquid: 435 PSI @ 700 °F Max Steam: 480 PSI @ 500 °F
SEAT MATERIAL TEMPERATURE RANGE
Stainless Steel: -325 °F to 1000 °F
SPRING MATERIAL MAXIMUM TEMPERATURE
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.*

APPLICATIONS

MARKETS: GENERAL INDUSTRY, CHEMICAL INDUSTRY, PETROCHEMICAL INDUSTRY, POWER, FOOD & BEVERAGE INDUSTRIES.

SERVICE: CHEMICAL / STEAM / NITROGEN LINES, GAS INJECTION, CONDENSATE RECOVERY, PUMP & COMPRESSOR DISCHARGE, PUMP JACK FLOW LINES, CHILLER & BOILER FEED

ICONEL PROPERTIES: X-750 IS A PRECIPITATION-HARDENABLE ALLOY WHICH HAS BEEN USED IN APPLICATIONS SUCH AS HIGH TEMPERATURE STRUCTURAL MEMBERS FOR GAS TURBINES, JET ENGINE PARTS, HEAT-TREATING FIXTURES, FORMING TOOLS, AND EXTRUSION DIES.

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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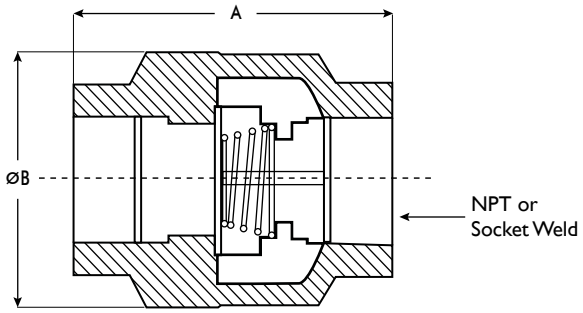
IN-LINE • SINGLE DISC CHECK VALVE
THREADED ENDS • SOCKET WELD ENDS
MODEL: CV 88T-SS Stainless Steel Body • Seat
MODEL: CV 88S-SS Stainless Steel Body • Seat

ASME Class 300

BILL OF MATERIALS (1)

No.	PART	MATERIAL
1	BODY	ASTM A351 CF8M Stainless Steel
2	DISC	ASTM A351 CF8M Stainless Steel
6	SPRING	Inconel X-750

Notes:
1. Bill of Materials represents standard materials. Equivalent materials may be substituted at the manufacturer's discretion.



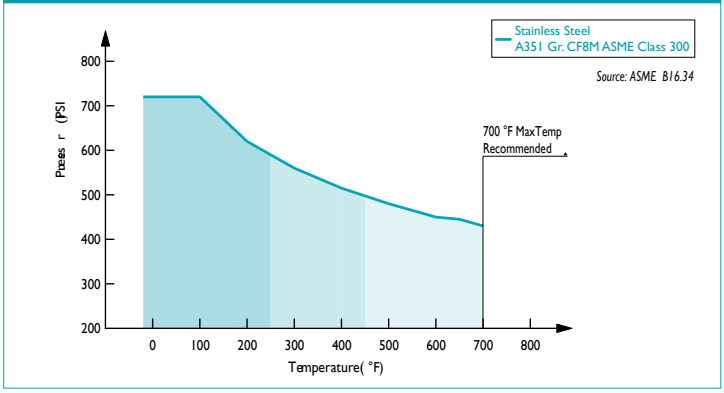
DIMENSIONS AND PERFORMANCE DATA (1)

SIZE		1/2	3/4	1	1 1/4	1 1/2	2	3
	mm	15	20	25	32	40	50	80
A DIMENSION FACE TO FACE	in	2.69	3.00	3.32	3.81	4.75	5.03	6.87
	mm	68	76	84	97	121	128	175
ØB DIMENSION BODY DIAMETER	in	1.62	2.12	2.56	3.06	3.44	4.38	6.19
	mm	41	54	65	55	78	111	157
ASSEMBLED WEIGHT	lb	1.0	1.5	2.3	3.5	5.3	8.5	21.0
	kg	0.5	0.7	1.0	1.9	2.4	3.9	9.5
Flow Coefficient	C_V	7	13	22	39	54	93	180
Cracking Pressure (3)	psi	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25

1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.
2. The listed valve cracking pressure only applies to horizontal installations. For vertical installations, cracking pressure is higher. Please consult factory.
3. Available with 5 PSI cracking pressure. Please consult factory.

Design Notes:
1. Size range: 1/2" ~ 3"
2. ASME Class 300
3. Low cracking pressure
4. Minimal head loss
5. Low pressure drop
6. Spring assisted design
7. Metal Seat for long service life

PRESSURE TEMP RATINGS FOR CF8M(1) CLASS 300



1. The above chart displays the pressure-temperature ratings for the valve's body material per ASME B16.34 - latest edition. For reference, maximum temperature limits have been added for spring materials. Stainless Steel not recommended for prolonged use above 1000 °F

PRESSURE - TEMPERATURE RATING

Body Material - ASTM A351 GR. CF8M - CLASS 300

WOG (Non-shock):	720 PSI @ 100 °F
Max Liquid:	435 PSI @ 700 °F
Max Steam:	480 PSI @ 500 °F

SEAT AND TEMPERATURE RATING

Seat Material	Temperature Range
Stainless Steel:	- 325 °F - 1000 °F

SPRING TEMPERATURE RATING

Spring Material	Maximum Temperature
ICONEL X-750	1000 °F

1. Max and min temperatures are for reference only. Prolonged use at these temperatures is not recommended for optimal service life.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ASME B1.1	Unified Inch Screw Threads
ASME B1.20.1	Pipe Threads - General Purpose
ASME B16.34	Valves - Flanged, Threaded & Welding Ends
ASTM A351 GR CF8M	Austenitic Steel Castings