



TITAN FLOW CONTROL, INC.

SILENT CHECK VALVE ♦ WAFER TYPE ♦ CENTER GUIDED ANSI CLASS 150/300 ♦ STAINLESS STEEL BODY

MODELS: CV 91-SS

2" TROUGH 12"

DUAL PRESSURE SERVICE (150/300): 2" ~ 6" ONLY



FEATURES

- ♦ SILENT SHUT-OFF IS ACHIEVED VIA THE FULLY AUTOMATIC, SPRING-ASSISTED, DOUBLE-GUIDED DISC THAT CLOSES AT ZERO FLOW VELOCITY
- ♦ SHORT TRAVEL DISTANCE AND QUICK CLOSURE OF THE DISC ELIMINATES WATER HAMMER BY CREATING A POSITIVE SHUTOFF PRIOR TO FLOW REVERSAL
- ♦ HEAD LOSS IS MINIMIZED BY PROVIDING A LARGE CROSS-SECTIONAL AREA WHICH EXCEEDS THAT OF THE ADJACENT PIPELINE
- ♦ HEAVY DUTY, SCALLOPED DESIGNED BODY THAT FITS PROPERLY BETWEEN ANY ANSI CLASS 125/250 OR 150/300 FLANGES
- ♦ CAN BE INSTALLED IN ANY POSITION (HORIZONTAL OR VERTICAL WITH UPWARD FLOW) - CONSULT FACTORY FOR VERTICAL INSTALLATION WITH DOWNWARD FLOW
- ♦ AVAILABLE WITH STAINLESS STEEL TRIM
- ♦ OPTIONAL RESILIENT SOFT SEATS ARE ALSO AVAILABLE

TECHNICAL

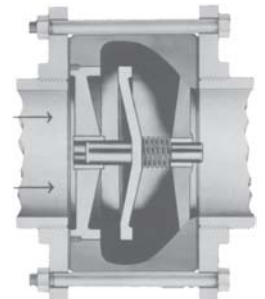
PRESSURE/ TEMPERATURE RATING
STAINLESS STEEL CLASS 150

WOG: 275 PSI @ 100 °F

STAINLESS STEEL CLASS 300

WOG: 720 PSI @ 100 °F (1)

INTERNAL
CUTAWAY
ILLUSTRATION



APPLICATIONS

MARKETS: OIL & GAS PRODUCTION, GENERAL INDUSTRY, CHEMICAL, PETROCHEMICAL, POWER GENERATION, PULP & PAPER, AND FOOD & BEVERAGE

SERVICE: PUMP DISCHARGE SERVICE IN MUNICIPAL WATER, IRRIGATION, AND INDUSTRIAL CLASS HVAC SYSTEMS. A TITAN FCI STRAINER SHOULD BE INSTALLED AHEAD OF THE PUMP TO ENSURE PROTECTION OF THE CHECK VALVE AND PUMP.

PRECAUTIONS: CHECK VALVE IS INTENDED FOR LIQUID SERVICE THAT DOES NOT EXCEED 10 FT/SEC. NOT RECOMMENDED FOR STEAM SERVICE. SHOULD BE INSTALLED AT LEAST FIVE PIPE DIAMETERS DOWNSTREAM FROM ANY TURBULENCE PRODUCING COMPONENTS. FLOW STRAIGHTENERS MAY BE REQUIRED IN CERTAIN APPLICATIONS.

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.

SERVICE ♦ QUALITY ♦ COMMITMENT

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**SILENT CHECK VALVE • WAFER TYPE
CENTER GUIDED DESIGN • STAINLESS STEEL**

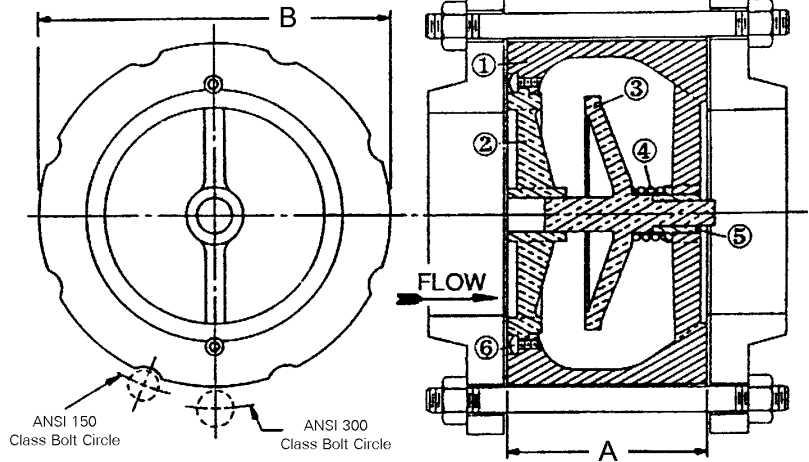
ANSI Class
150/300 lb

MODEL: CV 91-SS (Stainless Steel Trim)

BILL OF MATERIALS (1)

No.	PART	CV 91-SS
1	Body (2)	A351 Gr. CF8M Type 316
2	Seat (3)	A351 Gr. CF8M Type 316
3	Disc	A351 Gr. CF8M Type 316
4	Spring (4)	ASTM A313 Type 304 Stainless Steel
5	Bushing (4)	A351 Gr. CF8M Type 316
6	Screws (4)	ASTM A276 Type 304 Stainless Steel

1. Bill of Materials represents standard materials. Equivalent or better materials may be substituted at the manufacturer's discretion.
2. Ductile Iron Bodies (CV90 Series) are also available.
3. Resilient, soft seats also available.
4. 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
A DIMENSION FACE TO FACE	in	2.625	2.875	3.125	4.0	4.625	5.625	6.5	8.25	11.375
	mm	67	73	79	102	117	143	165	210	289
ØB DIMENSION OUTSIDE DIAMETER	in	4.25	5.0	5.75	7.0	8.375	9.75	13.5	16.0	19.25
	mm	108	127	146	178	213	248	343	406	489
ASSEMBLED WEIGHT	lb	4.5	6.5	8.5	16.0	25.0	37.5	83	159	324
	kg	2.0	2.9	3.9	7.2	11.3	17.0	37.6	72.0	146.8
Flow Coefficient	Cv	60	98	150	230	410	600	1200	1800	2600
Cracking Pressure	psi	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F

Design Notes:

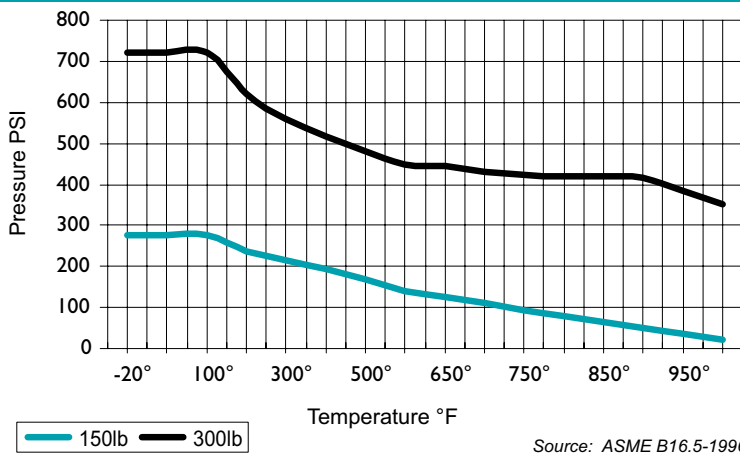
Sizes 2" through 6" utilize a unique scallop design that permits dual pressure service (150/300 lb). These sizes fit properly between any ANSI Class 125/250 or 150/300 Class flanges. Sizes 8" through 12" are only rated for ANSI 150 lb service. Actual design of Check Valve is ANSI Class 150/300.

Valves are designed for liquid service only. Install three to four pipe diameters downstream from pump discharge or elbows to avoid flow turbulence.

Valve is designed to be mated to standard steel flanges.

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

PRESSURE-TEMPERATURE RATINGS: A351 CF8M CLASS 150 & 300 (1)



1. At temperatures over 1000 °F, use only when carbon content is 0.04% or higher.

REFERENCED STANDARDS & CODES

CODE	DESCRIPTION
ANSI B16.5	Pipe Flanges and Flanged Fittings
MSS SP-6	Standards Finishes for Connecting-end Flanges
MSS SP-25	Standard Marking System for Valves
MSS SP-55	Quality Standard for Valve Castings
MSS SP-126	Steel, In-Line, Spring-Assisted, Center-Guided Valves

PRESSURE/TEMPERATURE RATING:

ANSI Class	150 lb Service 2" ~ 12"	300 lb Service 2" ~ 6" only
WOG (water, oil, gas)	275 PSI @ 100 °F (1)	720 PSI @ 100 °F (1)

TESTING:

Check Valves are individually, hydrostatically tested at 1.5 x WOG in accordance with ANSI and API specifications.

Ordering Code: _____ Size: _____

Customer/Project: _____

Inq./P.O. No.: _____

Titan Order No.: _____

Certified By: _____ Date: _____



TITAN FLOW CONTROL, INC.
Engineering Specification Submittal

Wafer Type Silent Check Valve - Center Guided • Models: CV 91-SS

Size	Model Number	Description	Drawing Number