

The **DSV Check Valve** is a non-slam spring-assisted check valve designed to prevent flow reversal in industries with strict cleanliness codes. To accommodate various piping arrangements, the DSV Check Valve is available as a "Vertical" or "Horizontal" valve. The Horizontal valve is for Horizontal lines requiring a self-draining valve. The "Vertical" design is for "Vertical" installations and "Horizontal" lines when a self-draining valve is not required. The DSV Check Valve, with a 316L stainless steel body and seat, is fastened with a quick release clamp and elastomeric gasket body seal to permit fast and easy access to the internals. The disc and seat are lapped to provide excellent shutoff.

Horizontal

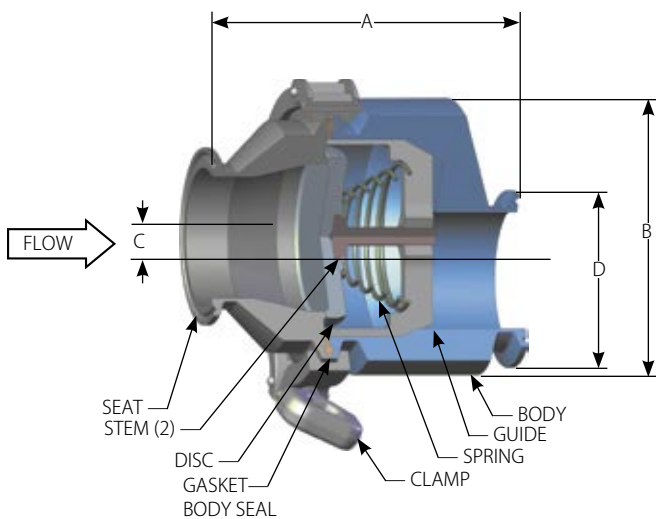


## FEATURES:

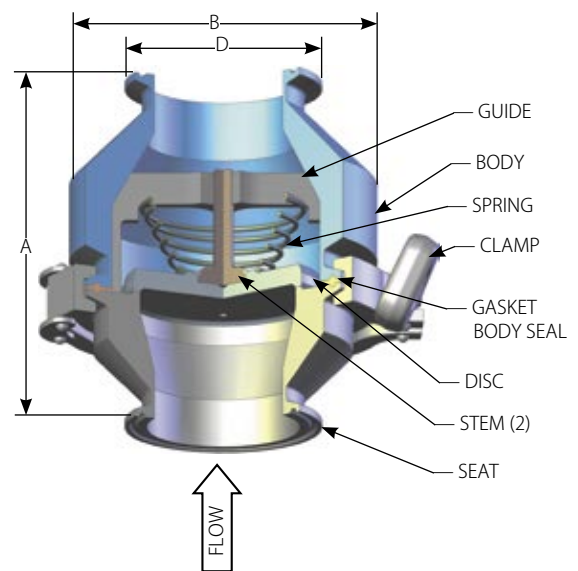
- Meets 3A Standard 58-01
- Spring-assisted silent closing
- Horizontal or vertical installation
- Sizes 1/2" thru 4"
- 150 CWP, 108 ANSI Pressure Class
- 316L body and seat (A351 CF3M)
- 316 disc, spring and guide assembly
- 32 Ra Internal Surface Finish (#4 Ground Finish)
- Edge-guided disc: 1/2" thru 2"
- Edge/center-guided disc: 2 1/2", 3", 4"
- Lapped "metal" seat and disc
- Springs:
  - Low cracking pressures
  - .16 psig to .66 psig
  - Conical design
  - Electropolished finish
- Standard gasket body seal:
- EPDM (300°F max temperature)
- Optional gasket body seal:
  - Tuf-Flex<sup>®</sup> (1) (300°F max temperature)
  - Viton<sup>®</sup> (400°F max temperature)
- CIP (Clean in Place)
- Clamped ends
- Seat leakage per MSS SP-61
- Options:
  - 15 Ra Internal Finish

Vertical

Horizontal



Vertical



Consult pages 44 and 45 for Pressure/Temperature ratings and soft seat materials.

HORIZONTAL		
1/2"	A	2.50
	B (Dia.)	1.50
	D (Dia.)	0.98
	Weight	1.4
	C	0.44
	Cv	2.4
CP	0.29	
3/4"	A	2.50
	B	1.50
	D (Dia.)	0.98
	Weight	1.4
	C	0.31
	Cv	7
CP	0.29	
1"	A	3.48
	B (Dia.)	3.00
	D (Dia.)	1.98
	Weight	3.7
	C	0.50
	Cv	12
CP	0.36	
1 1/2"	A	3.67
	B (Dia.)	3.12
	D (Dia.)	1.98
	Weight	4.0
	C	0.50
	Cv	36
CP	0.28	
2"	A	4.41
	B (Dia.)	3.62
	D (Dia.)	2.52
	Weight	5.8
	C	0.50
	Cv	47
CP	0.23	
2 1/2"*	A	5.56
	B (Dia.)	4.75
	D (Dia.)	3.05
	Weight	11.2
	C	0.73
	Cv	69
CP	0.54	
3"*	A	4.88
	B (Dia.)	4.75
	D (Dia.)	3.58
	Weight	9.9
	C	0.48
	Cv	90
CP	0.54	
4"*	A	6.25
	B (Dia.)	7.00
	D (Dia.)	4.68
	Weight	22.2
	C	0.97
	Cv	137
CP	0.50	

VERTICAL		
1/2"	A	2.50
	B (Dia.)	0.98
	D (Dia.)	0.98
	Weight	1.4
	Cv	2.4
	CP	0.26
Flow Down	0.26	
Flow Up	0.33	
3/4"	A	2.25
	B (Dia.)	0.98
	D (Dia.)	0.98
	Weight	1.3
	Cv	7
	CP	0.26
Flow Down	0.26	
Flow Up	0.33	
1"	A	2.92
	B (Dia.)	2.00
	D (Dia.)	1.98
	Weight	2.3
	Cv	18
	CP	0.31
Flow Down	0.31	
Flow Up	0.41	
1 1/2"	A	3.29
	B (Dia.)	2.50
	D (Dia.)	1.98
	Weight	2.8
	Cv	38
	CP	0.23
Flow Down	0.23	
Flow Up	0.33	
2"	A	4.03
	B (Dia.)	3.00
	D (Dia.)	2.52
	Weight	3.9
	Cv	53
	CP	0.16
Flow Down	0.16	
Flow Up	0.31	
2 1/2"*	A	5.56
	B (Dia.)	4.00
	D (Dia.)	3.05
	Weight	9.9
	Cv	81
	CP	0.42
Flow Down	0.42	
Flow Up	0.66	
3"*	A	4.38
	B (Dia.)	4.00
	D (Dia.)	3.58
	Weight	6.1
	Cv	109
	CP	0.42
Flow Down	0.42	
Flow Up	0.66	
4"*	A	5.50
	B (Dia.)	6.00
	D (Dia.)	4.68
	Weight	14.9
	Cv	174
	CP	0.40
Flow Down	0.40	
Flow Up	0.60	

## MATERIALS OF CONSTRUCTION

COMPONENT	
Body	A351 CF3M
Seat	A351 CF3M
Disc	316 SS
Spring	316 SS
	(electropolished)
Guide Assembly	316 SS
Gasket Body Seal	EPDM**
	(-75°F to 300°F)
Clamp	304 SS

\*\* Other gasket body seal materials available upon request

## PRESSURE/TEMPERATURE RATING

Temp. (°F)	Pressure	Material Temp. Limit
100	150	
200	125	
300	115	EPDM, Tuf-Flex <sup>®</sup> (1)
400	105	Viton <sup>®</sup>

**Notes:** 1. PTFE grafted to an EPDM rubber inner core. Good for steam applications. Meets USDA, FDA and 3A Sanitary Standards and U.S. Pharmacopeia Class VI Certification.

2. Sizes 2 1/2", 3", 4"

\* Edge/Center Guided Disc

All dimensions are in inches. Weights are in pounds. For metric measurements, visit [www.dft-valves.com](http://www.dft-valves.com). CP: Cracking Pressure (psig)