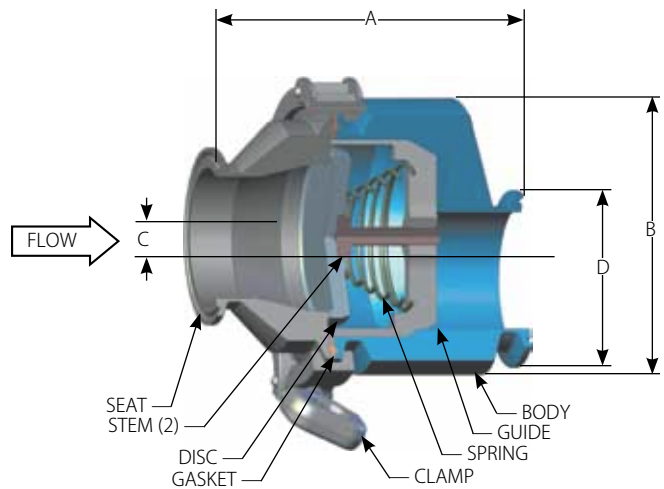


The **DSV Check Valve** is a non-slam spring-assisted check valve designed to prevent flow reversal in industries with strict cleanliness codes. To accommodate various piping arrangements, the DSV Check Valve is available as a "Vertical" or "Horizontal" valve. The Horizontal valve is for Horizontal lines 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 body seal to permit fast and easy access to the internals. The internal surface finish is 25 Ra while the disc and seat are lapped to provide excellent shutoff.



Horizontal



## FEATURES:

- 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
- 25 Ra Internal Surface 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 body seal:
  - EPDM (300°F max temperature)
- Optional 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 Electropolished Internal Finish

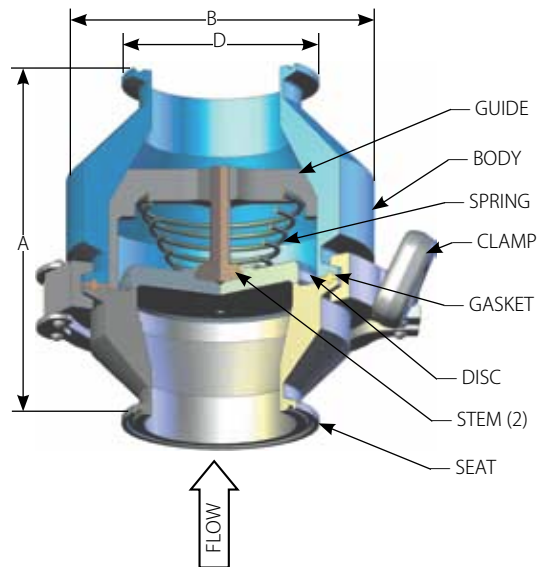
	Horizontal	Horizontal			
<b>1/2"</b>	<b>A</b>	2.50	<b>2"</b>	<b>A</b>	4.41
	<b>B (Dia.)</b>	1.50		<b>B (Dia.)</b>	3.62
	<b>D (Dia.)</b>	.98		<b>D (Dia.)</b>	2.52
	<b>Weight</b>	1.4		<b>Weight</b>	5.8
	<b>C</b>	.44		<b>C</b>	.50
	<b>Cv</b>	2.4		<b>Cv</b>	47
	<b>CP</b>	.29		<b>CP</b>	.23
<b>3/4"</b>	<b>A</b>	2.50	<b>2 1/2"*</b>	<b>A</b>	5.56
	<b>B (Dia.)</b>	1.50		<b>B (Dia.)</b>	4.75
	<b>D (Dia.)</b>	.98		<b>D (Dia.)</b>	3.05
	<b>Weight</b>	1.4		<b>Weight</b>	11.2
	<b>C</b>	.31		<b>C</b>	.73
	<b>Cv</b>	7		<b>Cv</b>	69
	<b>CP</b>	.29		<b>CP</b>	.54
<b>1"</b>	<b>A</b>	3.48	<b>3"*</b>	<b>A</b>	4.88
	<b>B (Dia.)</b>	3.00		<b>B (Dia.)</b>	4.75
	<b>D (Dia.)</b>	1.98		<b>D (Dia.)</b>	3.58
	<b>Weight</b>	3.7		<b>Weight</b>	9.9
	<b>C</b>	.50		<b>C</b>	.48
	<b>Cv</b>	12		<b>Cv</b>	90
	<b>CP</b>	.36		<b>CP</b>	.54
<b>1 1/2"</b>	<b>A</b>	3.67	<b>4"*</b>	<b>A</b>	6.25
	<b>B (Dia.)</b>	3.12		<b>B (Dia.)</b>	7.00
	<b>D (Dia.)</b>	1.98		<b>D (Dia.)</b>	4.68
	<b>Weight</b>	4.0		<b>Weight</b>	22.2
	<b>C</b>	.50		<b>C</b>	.97
	<b>Cv</b>	36		<b>Cv</b>	137
	<b>CP</b>	.28		<b>CP</b>	.50

\*Edge/Center Guided Disc

Consult pages 42 and 43 for Pressure/Temperature ratings and soft seat materials.



Vertical



### MATERIALS OF CONSTRUCTION

COMPONENT	
Body	A351 CF3M
Seat	A351 CF3M
Disc	316 SS
Spring	316 SS (electropolished)
Guide Assembly	316 SS
Body Seal	EPDM** (-75°F to 300°F)
Clamp	304 SS
Internal Surface Finish	25 Ra

\*\* Other body seal materials available upon request

### Pressure/Temperature Rating

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

	Vertical	
<b>1/2"</b>	<b>A</b>	2.50
	<b>B (Dia.)</b>	.98
	<b>D (Dia.)</b>	.98
	<b>Weight</b>	1.4
	<b>Cv</b>	2.4
	<b>CP</b>	
	<b>Flow Down</b>	.26
	<b>Flow Up</b>	.33
<b>3/4"</b>	<b>A</b>	2.25
	<b>B (Dia.)</b>	.98
	<b>D (Dia.)</b>	.98
	<b>Weight</b>	1.3
	<b>Cv</b>	7
	<b>CP</b>	
	<b>Flow Down</b>	.26
	<b>Flow Up</b>	.33
<b>1"</b>	<b>A</b>	2.92
	<b>B (Dia.)</b>	2.00
	<b>D (Dia.)</b>	1.98
	<b>Weight</b>	2.3
	<b>Cv</b>	18
	<b>CP</b>	
	<b>Flow Down</b>	.31
	<b>Flow Up</b>	.41
<b>1 1/2"</b>	<b>A</b>	3.29
	<b>B (Dia.)</b>	2.50
	<b>D (Dia.)</b>	1.98
	<b>Weight</b>	2.8
	<b>Cv</b>	38
	<b>CP</b>	
	<b>Flow Down</b>	.23
	<b>Flow Up</b>	.33

	Vertical	
<b>2"</b>	<b>A</b>	4.03
	<b>B (Dia.)</b>	3.00
	<b>D (Dia.)</b>	2.52
	<b>Weight</b>	3.9
	<b>Cv</b>	53
	<b>CP</b>	
	<b>Flow Down</b>	.16
	<b>Flow Up</b>	.31
<b>2 1/2"*</b>	<b>A</b>	5.56
	<b>B (Dia.)</b>	4.00
	<b>D (Dia.)</b>	3.05
	<b>Weight</b>	9.9
	<b>Cv</b>	81
	<b>CP</b>	
	<b>Flow Down</b>	.42
	<b>Flow Up</b>	.66
<b>3"*</b>	<b>A</b>	4.38
	<b>B (Dia.)</b>	4.00
	<b>D (Dia.)</b>	3.58
	<b>Weight</b>	6.1
	<b>Cv</b>	109
	<b>CP</b>	
	<b>Flow Down</b>	.42
	<b>Flow Up</b>	.66
<b>4"*</b>	<b>A</b>	5.50
	<b>B (Dia.)</b>	6.00
	<b>D (Dia.)</b>	4.68
	<b>Weight</b>	14.9
	<b>Cv</b>	174
	<b>CP</b>	
	<b>Flow Down</b>	.40
	<b>Flow Up</b>	.60

**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"

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)