

FOOD, BEVERAGE & PHARMACEUTICAL



FACILITY:	APPLICATION PROBLEM:	SOLUTION:	SUCCESS SINCE:
Pharmaceutical Facility North East USA	Sanitary Valve Clean in Place Requirement	DFT® Model DSV® Sanitary Check Valve	2009

Challenge:

Through a major engineering firm located in North East USA, home to numerous Pharmaceutical Companies, DFT was contacted to come up with a check valve solution for a waste drain. It was important that the check valve meet the following criteria: Sanitary connections, ability to steam clean in place, low cracking pressures, and a tight shut off.

The check valve would be used for medical non-corrosive waste that would be pumped through a drain to a waste drain, with no more than 10 psig at temperatures up to 300F° and low flow of 3 GPM. The line is then flushed with utility water into the waste inactivation line with a duration of 10 minutes flush at 5 GPM. The line is then steam sanitized with clean steam and condensate forced into the waste inactivation line at 330F° at about 30 psi for about 60 minutes. The line is then air dried with compressed air for about 30 minutes at about 20 PSI. This procedure is repeated at least 3 times a day.

Solution:

A DFT® 2" model DSV® Check Valve was used to meet the criteria. It is a non-slam spring-assisted check valve designed to prevent flow reversal in industries with strict cleanliness codes. The 2" DSV can be used in a Vertical Position, able to be equipped with a .1 psi cracking spring, is steam cleanable, and is a full body valve with Tri-clamp connections. This check valve was able to withstand the frequent cycles and has been in operation since 2009.

Note: A horizontal valve is available for horizontal lines requiring a self draining valve.

DFT® Model DSV® Sanitary Check Valve



Image above is the Vertical model DSV Check Valve

Features:

- Meets 3A Standard 58-01
- 1/2" to 4" line size
- 150 CWP, 108 ASME pressure class
- Clamped ends
- 316L body and seat
- 316 disc, spring & guide assembly
- 32 Ra internal surface finish
- Electropolished spring (15 Ra)
- .16 to .66 psig cracking pressure
- EPDM body seal
- Edge-guided disc (1/2" thru 2")
- Center-guided disc (2-1/2" thru 4")
- Spring assisted silent closing, non-slam
- Tight shutoff – lapped disc & seat
- Horizontal or vertical installation



Image shown above is the offset design, Horizontal model DSV Check Valve

Contact DFT for a solution to your problem.