DFT[®] Valves

Using Sanitary Valves in the Food, Beverage, and Life Science Industries







The food, beverage, and life science industries provide everyday products to people all over the world. As such, the processes that create these life-sustaining products must meet both governmental and industry standards that can be extremely stringent. Therefore, it is critical that the right equipment be specified.

Failing to maintain sanitary conditions can not only result in product recalls but it can also affect your business's reputation and even your ability to maintain your authorization to produce products. Maintaining sanitary standards within a process is especially important in the piping systems used to transport liquids and gases throughout your facility. Adequately and safely controlling liquids and gases movement ensures smooth facility operation and industry success.



Applications for Food, Beverage, and Life Science Industries

DFT[®] sanitary check valves are 3-A certified and appear across a range of high-profile industries. For example, pharmaceutical, chemical, beverage/beer, food, dairy, and cheese manufacturers use DFT[®] products because their high quality ensures that the valves can be thoroughly cleaned, in turn making their products stay fresher for longer.

We design our valves without crevices or cavities, which are known to cause bacteriological buildup within the valves. Because of our check valve's smooth, highly polished internal and external design, a variety of prominent companies use our products for applications ranging from pharmaceuticals to dish detergent.



Our check valves' highly polished internal features make it difficult for bacteria to embed in very tiny areas that otherwise might provide ideal environments for them to multiply and thrive. DFT® has designed the internal features of the valve to promote self cleaning and allow our products to be certified "Clean In Place." This key quality renders our product superior to other spring operated axial flow valves, whose reliance on complex internal components increases the risk of both contamination and equipment failure.

DSV® check valves work with cookers, refrigeration, cryogenics, and water lines. They also appear in:

- Condensate lines
- Evaporators
- Gas purgers
- Process lines

- Pump discharge
- Steam lines
- Vacuum breakers



Why Choose DSV[®] Valves for Your Industry Applications?



DSV[®] check valves consist of in-line, spring-assisted closure mechanisms that prevent flow reversal, in turn preventing product contamination. Our valves ensure that our end users can meet rigid cleanliness standards set by governmental and industry oversight groups.

Piping arrangements, as well as the locations where our valves need to be installed, vary greatly. Accordingly, we offer DSV® valves designed specifically for either vertical and horizontal piping configurations.

In addition to vertical and horizontal applications, DSV[®] also builds valves with elastomeric body seals and quick-release body joint clamps. These components ensure easy internal access to valves by operators to perform more in-depth cleaning and maintenance. In addition DFT[®] sanitary check valves are also certified for clean-in-place to facilitate in process cleaning between batches.



Key Valve Features

DSV[®] valves have a number of key features that make them ideal for sanitary applications, including:

DSV®

Vertical

- 3-A standard 58-01
- Tight shutoff (MSS SP61)
- Sizes ½" through 4"
- High-quality finish and polish to reduce bacteria buildup
- Optional small drilled drain holes to maintain pumps prime and temperature continuity
- Optional 15 RA Electro polished internals
- Low Cracking pressure options
- Certified "Clean in Place"
- Vertical or horizontal line designs

Quality Control and Inspection Process

After a stringent manufacturing process, our technicians use magnifying lenses to inspect each valve component for inconsistencies in surface finish, ensuring only the highest quality products make it to the customer. We also inspect valves to ensure they measure up to our standards of casting quality, machining, electro-polished finish, and final assembly and testing standards.

We offer an optional 15 Ra electro-polished finish, for those processes that demand an even higher degree of surface finish. All components are thoroughly inspected to ensure that they conform to our standards for 15 Ra surface finish and sanitary cleanliness requirements.

100% of all valves manufactured by DFT® are tested before being shipped to our customers.



DSV®

Horizontal

Our Certifications Guarantee Success

At DFT[®], we operate under highly controlled conditions during our manufacturing process. This allows us to guarantee the highest quality and sanitary standards possible. Our commitment to excellence has earned us numerous certifications including:

3-A Sanitary S	Standards
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PED Certification (EU)

ISO 9001:2015

We are proud of our certifications as they showcase our continuing commitment to remain a leader in the check valve industry. Our team is always looking to stay abreast of new technology and meet the ever-changing sanitary requirements of the food, beverage, and life science industries.





Pharmaceutical Success Story



In 2009, a major engineering firm contacted us on behalf of several pharmaceutical companies. The firm needed to find a check valve solution for their noncorrosive medical waste drain system. The check valve needed to operate at 20 psig or less with a flow of 3 GPM, have sanitary end connections, provide tight shutoff, have a low cracking pressure to open and be able to be steam cleaned in place.

The check valve had to withstand high temperatures, as the firm used 330°F steam to clean the entire medical waste process system 3 times a day. The valve also needed an extremely smooth finish to maintain sanitary conditions.

Responding to the challenge, a DFT[®] 2-in DSV vertical check valve was specified. Designed to prevent flow reversal, this non-slam, full-body valve came equipped with a 0.1-psi cracking pressure spring. We also designed it with tri-clamp connections for ease of disassembly. The product was so successful that the firm has continuously used DFT[®] DSV products for nearly a decade without failure or replacement.



DFT[®] Check Valves For All Your Sanitary Needs

DFT[®] offers a wide range of customized check valve solutions that will help you maintain your sanitary system standards goals. Our DSV[®] check valves come in many configurations and sizes depending on the fluid process conditions they will be required to handle.

To find the best DSV[®] valve for your process needs, contact us today.





About DFT®

DFT® Inc., formerly known as Durabla® Fluid Technology, manufactures world class, problem solving, inline, axial flow, nozzle style, silent check valves and severe service control valves. DFT® engineers design products using the latest CAD, FEA, and CFD design technology software. Our staff responds quickly and our systems are designed to deliver reliably within our ISO9001-2015 quality management system.

For more than seventy years DFT® has solved check valve problems, prevented check valve failure and water hammer, and solved severe service control valve problems.

We take pride in working closely with our customers to solve complicated problems. The results are valves that provide superior performance, long service life, and low maintenance costs. In addition, our customers enjoy confidence in product that is backed by a team of professionals ready to serve and support.



TO DISCUSS YOUR NEEDS () with one of our valve experts, reach out to your DFT[®] Inc representative today.

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GET INFORMATION () by checking out our resources, and find what you need to start your next project



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