





# INTRODUCTION

With more than 25 years manufacturing sanitary pressure regulators, control valves, clean steam traps and SIP accessories, Steriflow Valve is an industry leader and trusted name across the bio pharmaceutical and pharmaceutical markets.

Steriflow is bringing this expertise to the food, beverage, dairy, health and beauty industries, launching the Steriflow Food &

Beverage product line. Steriflow knows how to help you meet the stringent standards required for food and beverage production.

Our new line includes both clean and utility products. Our clean side products include sanitary pressure regulators, steam traps, control, butterfly and ball valves. Our utility products include industrial valves such as pressure regulators, control valves, gas regulators, steam traps and ball valves.





#### **FOOD**

Food manufacturers can count on us to deliver exceptional product quality to meet their needs. Our experience in the bio pharmaceutical and pharmaceutical markets means our products meet and exceed what's required to give you the utmost confidence when choosing Steriflow Food & Beverage.

Our pressure regulators feature a proprietary diaphragm design that not only offers exceptional performance, it is guaranteed for life.



#### **BREWING**

For many breweries, valves are almost as important as hops and barley to create a quality product that meets sanitation standards. Steriflow Food & Beverage provides unmatched performance while meeting all required standards. Our valves are 3A approved, meeting the sanitary standards for the brewing industry. All soft parts, including O-rings, seats and diaphragms, meet FDA approval standards.



#### **BEVERAGE**

The beverage industry can count on Steriflow Food & Beverage to provide exceptional valves that meet all requirements and help manufacturers produce a consistently quality product.

The majority of our valves are 3A approved, meeting the sanitary standards for beverages. All soft parts, including O-rings, seats and diaphragms, meet FDA approval standards.



#### **DAIRY**

Dairy producers are under constant scrutiny and pressure to deliver consistent quality products. They can now turn to Steriflow Food & Beverage to provide valves for their manufacturing facilities. We have complementary experience that helps us understand the demands of this industry.

Most of our valves are 3A approved, meeting the sanitary standards for the dairy industry. All soft parts, including O-rings, seats and diaphragms, meet FDA approval standards.





# SANITARY VALVES

Steriflow Food & Beverage provides reliable sanitary valves and other products that can be trusted by food, beverage, dairy, health and beauty producers. We specialize in the needs of these industries, providing products used in various steam applications including plant steam, filtered steam, clean steam and pure steam. Products include back pressure regulators, pressure regulators, steam traps, check valves, butterfly valves, ball

valves and other ancillary products. We comply with industry requirements and most products hold the 3A Sanitary Certification.

3-A Sanitary Standards Inc. is an independent, not-for-profit corporation dedicated to advancing hygienic equipment designed for the food, beverage and pharmaceutical industries. They represent the interests of food processors, regulatory sanitarians, and equipment fabricators with a common commitment to promoting food safety and the public health. The 3A symbol is a registered mark used to identify equipment that meets 3-A Sanitary Standards for sanitary design and fabrication.

#### **PRODUCTS**

Products designed to exceed the demands of the food and beverage manufacturing industry, including sanitary pressure regulators, butterfly valves, check valves and ball valves.







# FBCV-OR SERIES

**Control Valve** 



The FBCV O-Ring Series is designed to meet the rigid specifications for sanitary process control valves for customers who prefer an O-ring style stem seal. This valve series is suitable for a wide variety of applications in the cosmetic, dairy and food & beverage industries.

Conforming to 3A guidelines, the FBCV is ideally suited for a wide range of flowing media in both the utility and process areas of sanitary systems.

High rangeability, characterized trim, high capacities, superior temperature and pressure ratings along with a selection of sealing methods make the FBCV the sanitary control valve for liquid, gas and steam services.

Whether the need is to control pressure, temperature, flow pH or another variable, the FBCV is the right valve for your process.

Sizes	1" - 3" (DN25 - DN80)
End Connections	ASME, DIN and ISO Tri-Clamp, Extended Tube Weld
Max Pressure/ Temperature	450 psi (31 bar) at 100°F (38°C), dependent upon construction 450 psi (31 bar) at 450°F (232°C) body and o-ring dependent upon costruction
Cv & Flow Characteristic	3.5 - 100, Linear, Equal Percentage or Quick Opening Trim Characteristics
Approvals	3A 53-06
Wetted Material & Surface Finish	32 Ra (standard) on all wetted parts; exterior as cast
Soft Seat Option ( $Cv \ge 3.5$ only)	PTFE FDA; PEEK FDA
Stem Seal O-Ring	Various - all certified to FDA

# FB5C SERIES

#### **Back Pressure Valve**

The FB5C Series is a sanitary back pressure regulator which is designed to regulate pressure in systems requiring the maintenance of sanitary conditions. This regulator is ideal for purified water, clean utilities and media in the Food & Beverage and Consumer health and beauty industries. Suitable for a range of applications including CIP, SIP, centrifuges, autoclaves, culinary equipment, sterilizers and process tanks. Soft seats available - consult factory.

Sizes	3/4" - 3" (DN20 - DN80)
End Connections	Sanitary-clamp; tube weld ends (optional)
Cv (Kv)	1.5 - 29 (1,3 - 25)
Setpoint Range	3 psi (0,2 bar) to 135 psi (9,3 bar) dependent on size and construction
Approvals	3A 64-00
Seat Materials	Standard hard seat - integral 316L SST seat
Wetted Material & Surface Finish	32 Ra (standard) on wetted parts; exterior as cast
Diaphragm Material	EPDM/Nylon (FDA), Jorlon (FDA)





#### FB6C SERIES

#### **Pressure Reducing Valves**

The FB6C Series is a sanitary pressure regulator which is designed to regulate pressure in systems requiring the maintenance of sanitary conditions. This regulator is ideal for purified water, clean utilities and media in the Food & Beverage and Consumer health and beauty industries. Suitable for a range of applications including CIP, SIP, centrifuges, autoclaves, culinary equipment, sterilizers and process tanks. Soft seats available - consult factory.

Sizes	3/4" - 3" (DN20 - DN80)
End Connections	Sanitary-clamp; tube weld ends (optional)
Cv (Kv)	1.5 - 29 (1,3 - 25)
Setpoint Range	3 psi (0,2 bar) to 135 psi (9,3 bar) dependent on size and construction
Approvals	3A 64-00
Seat Materials	Standard hard seat - integral 316L SST seat
Wetted Material & Surface Finish	32 Ra (standard) on wetted parts; exterior as cast
Diaphragm Material	EPDM/Nylon (FDA), Jorlon (FDA)

# FB6903 SERIES

#### **Check Valve**

The FB6903 Series is a sanitary check valve which is needed when it is necessary to prevent the product from flowing in the wrong direction. The valve is kept open by the liquid flow in the correct direction. If the flow stops, the plug is forced against its seat by the spring and closes against reversal of the flow. The valve is ideal for CIP/SIP, sanitary pump skids, batch processing, mixing and backflow prevention.

Sizes	1/2" - 4" (DN15 - DN100)
End Connections	Sanitary-clamp
Max Pressure/ Temperature	230 psi @ 100°F (15,9 bar @ 38°C) depending on material
Approvals	3A 58-01
Wetted Material & Surface Finish	ASTM A351 CF3M 32 Ra on all wetted parts



# FB7904 SERIES

**Butterfly Valve** 



The manual FB7904 Series is a sanitary butterfly valve with clamp-ends and stainless steel body with EPDM (or Viton) seats, seals and 12 position stainless steel handle. Ideal for Food & Beverage and Consumer Health & Beauty industries. The valve is ideal for CIP/SIP, sanitary pump skids, batch processing, mixing and backflow prevention.

Sizes	1/2" - 4" (DN15 - DN100)
End Connections	Sanitary-clamp with butt-weld option
Max Pressure/ Temperature	145 psi @ 266°F (10 bar @ 130°C) with EPDM; 145 psi @ 284°F (10 bar @ 140°C) with Viton
Approvals	3A does not approve any butterfly valves
Wetted Material & Surface Finish	ASTM A351 CF3M 32 Ra on all wetted parts

## FB7904 SERIES

#### **Automated Butterfly Valve**

The automated FB7904 Series is a sanitary butterfly valve with clamp-ends and stainless steel body with EPDM (or Viton) seats, seals and is available with automated packages. Ideal for Food & Beverage and Consumer Health & Beauty industries. The valve is ideal for CIP/SIP, sanitary pump skids, batch processing, mixing and backflow prevention.

Sizes	1/2" - 4" (DN15 - DN100)
End Connections	Sanitary-clamp with butt-weld option
Max Pressure/ Temperature	145 psi @ 266°F (10 bar @ 130°C) with EPDM; 145 psi @ 284°F (10 bar @ 140°C) with Viton
Approvals	3A does not approve any butterfly valves
Wetted Material & Surface Finish	ASTM A351 CF3M 32 Ra on all wetted parts
End Connection	Threaded, Flanged, Socket Weld, Butt Weld



## FB8905 SERIES

#### Three Piece Ball Valve



The FB8904 Series is a three-piece 3A approved sanitary ball valve with 316L construction. It is ideal for clean utility applications and the Food & Beverage and Consumer Health & Beauty industries. This valve is cavity-filled to minimize media collection. Sanitary clamp ends are standard. The inner diameter of the end connections is the same as the ID of the ball ensuring no obstruction of flow from inlet to outlet.

Sizes	1/4" - 4" (DN15 - DN100)
End Connections	Sanitary-clamp
Max Pressure/ Temperature	1/2" - 2": 1000 psi (69 bar); 2-1/2" - 4": 800 psi (55 bar)
Approvals	3A 68-00
Wetted Material & Surface Finish	ASTM A351 CF3M 32 Ra on all wetted parts

# **DTCS SERIES**

#### **Disc Trap**

The DTCS Series is a 316L polished, stainless steel thermodynamic disc trap that is compact with a lightweight design and tri-clamp end connections. Though non-sanitary in the traditional sense, the exterior is polished to 20 Ra and can be used in clean room environments on plant steam, or non-validated clean steam applications. It is ideal for fluctuating steam loads and pressures.

Sizes	1/2" & 3/4" (DN15 & DN20)
End Connection	Tri-clamp
Body Material	Casting, AISI 316L
Pressure Max Allowable	227 psig (15,6 barg)
Temperature Max Allowable	840°F (450°C)



# **BTCS SERIES**

#### Clean Steam Trap

The BTCS Series is a two piece, tri-clamp body, balanced port, high flow thermostatic sanitary steam trap with vertical or horizontal inlet and/or outlet connections for pure steam SIP and loop drainage applications in aseptic food & beverage and consumer health and beauty industry applications.



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Sizes	3/4", 1", 1-1/2" (DN20, DN25, DN40)
Installation Connection	Vertical, Horizontal
Connection Type	ASME, DIN, ISO Tri-Clamp, Tube Weld Ends
Max. Allowable Pressure/Temp	145 psig (10 barg); 350°F (177°C)
Max Operating Pressure	50 psi (3,4 bar)
Subcooling	Less than 3°F (1,8°C)



# UTILITY VALVES

**INTRODUCTION** 

Whether they will be used in the clean or utility side of your operation, you need valves you can count on for years. In addition to our line of sanitary valves, Steriflow Food & Beverage offers high-quality valves for non-sanitary applications.

These valves meet the same manufacturing and reliability standards of our sanitary valves, but are not designed for use in sanitary environments. Steriflow Food & Beverage offers a true one-stop solution for food and beverage production valve needs.





# MK60 SERIES

#### **Pressure Regulators**

The Mark 60 Series handles a broad range of applications including steam, water, oil, gas, air and chemicals. It is a self-operating pressure regulator used to regulate the downstream pressure to a predetermined setpoint. The sliding gate seats offer excellent control and extreme longevity in a compact, lightweight design.

S	izes	1/4" - 4" (DN8 - DN100)
C	Cv (Kv)	up to 200 (up to 172)
D	Diaphragm	Jorlon, Stainless Steel, Hastelloy C, Alloy 20
S	hutoff	ANSI Class IV shutoff
В	Body Material	Ductile Iron, Bronze, Carbon Steel, Stainless Steel, Cast Iron
Ε	and Connection	Threaded, Flanged, Socket Weld, Butt Weld



# MK608 SERIES

**Gas Pressure Regulator** 



The Mark 608 Series gas pressure regulator is used on large tank blanketing applications or other low pressure gas regulation. In tank blanketing applications, the Mark 608 is used to control the flow of the blanketing gas into the tank to maintain the proper positive pressure. Once the blanket has been established, a small flow of nitrogen is continually admitted to the tank to keep the blanket fresh.

Sizes	1-1/2" - 2" (DN40 - DN50)
Body Material	Bronze, Carbon Steel, Stainless Steel
End Connection	Thread, Flanged
Diaphragm	Buna-N/Nylon, Viton/Nomex, EPDM with Polyester Reinforcement
Setpoint	2" w.c. to 5 psi (5,0 mbar to 0,34 bar)
Max Inlet Pressure	60 psi (4 bar)
Shutoff	ANSI Class VI

# MK508 SERIES Gas Back Pressure Regulator

The Mark 508 Series works in conjunction with the Mark 608, in a low pressure tank blanketing valve system The Mark 508 can be used to vent gas from the tank to prevent the blanketing pressure from rising to a level that could damage the tank while maintaining a small constant flow to keep the blanket fresh. The Mark 508 will also work well in any other type of low back pressure application.

Sizes	3/4" - 2" (DN20 - DN50)
Body Material	Carbon Steel (A216, WCB); Stainless Steel (A351/CF8M)
End Connections	Threaded, Flanged
Diaphragm	Buna-N, Viton, EPDM
Setpoint	2" w.c. to 5 psi (5,0 mbar to 0,34 bar)
Max Pressure Drop	up to 25 psig (1,7 bar)



# MK75 SERIES

Wafer Style, Compact Size



The Mark 75 is a lightweight, compact wafer-style body that weighs 10 times less than a traditional valve. We manufacture the valves using less steel and other raw materials. The shipping size, weight, packaging waste and costs decrease dramatically. The Mark 75 uses fewer fossil fuels not only when it is built and shipped, but also less power in its day-to-day operations and fewer resources when it needs maintenance.

Sizes	1"- 8" (DN25 - DN200)
Body Material	Stainless Steel, Carbon Steel
Cv (Kv)	up to 600 (up to 519)
Ranges	3-15, 3-9*, 9-15*, 6-30 psi (0,2-1,0; 0,2-0,6*; 0,6-1,0*; 0,4-2,1 bar) * positioner required
Turndown Ratio	100:1
Shutoff	ANSI Class IV tightness

### MK75PTP SERIES

#### Piston Operated Valve

The Mark 75PTP is a Mark 75 wafer style control valve with an 80mm stainless steel piston actuator. The Gemu cPOS smart positioner is standard and required for control applications. For on/off service, the valve may be supplied without a positioner. The JVCV should be used for sizing selection. The "T" slot design connection allows for quick and easy reversing of function - from reverse acting to direct acting (or vice versa).

Sizes	1" - 2" (DN25 - DN50)
Body Material	Stainless Steel, Carbon Steel
Max Pressure Drop	125 psi (8,6 bar) with standard piston actuator and spring
Ranges	1": 12.7 - 14,7 psi (0,88 - 1,01 bar); 1-1/2": 12.7 - 16.7 psi (0,88 - 1,15 bar); 2" 12.7 - 19.1 psi (0,88 - 1,32 bar)
Turndown Ratio	100:1
Shutoff	ANSI Class IV tightness



## MK78 SERIES

#### Globe Style Control Valve



The Mark 78 Series is designed for accurate performance and simplified maintenance. This versatile product can be used on a variety of applications including viscous/corrosive liquids, process gases or steam in process or utility service. The top entry cage design allows maintenance while the valve is in the line. Characterized flow options including linear, equal percentage, quick opening or an equal-linear combination.

Sizes	1/2" - 2" (DN15 - DN50)
Body Material	Bronze, Carbon Steel, Stainless Steel
End Connection	Threaded, Flanged, Socket Weld, Butt-Weld
Cv (Kv)	up to 50 (up to 43)
Seat	ANSI Class IV (hard seat); ANSI Class VI Teflon (soft seat)
Control Ranges	3-15 psi; 6-30 psi (0,2-1,0 bar; 0-4-2,1 bar) or split ranges* **positioner required)

# MK708 SERIES

#### Fractional Flow Control Valve

The Mark 708 Series provides accurate control on fractional flow applications. It is a complete line of pneumatic and electrically actuated control valves designed to enhance performance to ensure precision control on your most critical micro flow applications. The valve is ideal on pilot plant installations, test standards, R & D facilities, processing plants and specialized processing plants (dosing, injection and venting).

Sizes	1/4" - 3/4" (DN8 - DN20)
Seat Type:	Globe - Class IV or VI
End Connections	Threaded, Socket Weld, Integral Tube, Welded Flange
Body Materials	Carbon Steel, Stainless Steel, Hastelloy C, Monel, Alloy 20, others
Cv (Kv)	0.00001 to 4.0 (0,000009 to 3,4)
Ranges	3-15 psi or 6-30 psi (0,2-1,0 bar or 0-4-2,1 bar); split ranges are available with optional positioner





## JR SERIES

#### High Pressure / Low Flows

The JR Series line of high pressure regulators have the ability to handle very high pressures and very low flows. USDA and FDA approved soft goods available upon request. The series is ideal for research and sampling systems along with general, corrosive and specialty gas and liquid services (non-cavitating).

Sizes	1/4", 3/8", 1/2" (DN8, DN10, DN15)
Seat Type	PTFE, PEEK, KEL-F
End Connection	Threaded, socket weld, flanged, others
Body Material	316L Stainless Steel, Hastelloy C, Monel, Alloy 20, others
Cv (Kv)	0.012, 0.03, 0.08, 0.20 (0,01; 0,026; 0,07; 0,17)
Spring Range	up to 750 psi (52 bar)

# JRH SERIES

#### Very High Pressure / Low Flow

The JRH Series of high pressure regulators have the ability to handle high pressures as well as low flows. USDA and FDA approved soft goods available upon request. It is ideal for research and sampling systems along with general, corrosive and specialty gas and liquid services.

Sizes	3/8" & 1/2" (DN10 & DN15)
Seat Type	KEL-F / Viton
End Connection	Threaded, socket weld, flanged, others
Body Materials	316L Stainless Steel, Hastelloy C, Monel,   Alloy 20, others
Cv (Kv)	0.08 (0,69)
Spring Range	2 - 10 psi (0,14 - 0,69 bar) to 75 - 450 psi (5,2 - 31 bar)





## JRPH/JRPL SERIES

**Piston Operated** 

The JRPH & JRPL Series are piston operated, balanced trim pressure regulators with high Cv's (Kv's) and a KEL-F soft seat for ANSI Class VI shutoff. There are three set ranges for each model. Elastomer seals are used throughout with Buna-N, EPDM and Viton being standard options, along with matching back up seals. USDA and FDA approved soft goods available upon request. Ideal for a variety of gases, water, acids and oil applications.

Sizes	1/2", 3/4", 1" (DN15, DN20, DN25)
Seat Type	KEL-F
End Connection	Threaded, socket weld, flanged, others
Body Material	316L Stainless Steel, Hastelloy C, Monel, Alloy 20, others
Cv (Kv)	2.1 (1,8)
Spring Range	up to 5800 psi (up to 400 bar)

Mounting Pad

### 3L/T2100F-A SERIES 3-Way Ball Valves

The 3I/T 2100F-A is a three way ball valve with threaded or welded ends. A single 3-way can replace several 2-ways. Flow may be mixed, diverted or shutoff. With side entry 3-ways, there is always mixing when switching positions, which facilitates switching between devices or pumps.

Sizes	1/2" - 4" (DN15 - DN100)
Body Material	Carbon Steel, Stainless Steel
End Connection	Threaded or welded
Temperature Range	-20°F to 400°F -29°C to 204°C
Operator/	Manual operator / ISO 5200 direct mount





# 2000F SERIES

#### **Automated Flanged Valves**

The 2000 Series flanged ball valve is designed to handle process applications. Low torque, combined with a large mounting pad, makes this valve ideal for automation. It offers a wide range of automated accessories including actuators (electric and pneumatic), limit switches, solenoids and gear operators. Seat type: PTFE, PEEK, and KEL-F.

Sizes	1/2" - 6" (DN15 - DN150)
Body Material	Carbon Steel, Stainless Steel
End Connection	Flanged
Temperature Range	-20°F to 400°F / 150 psi steam -29°C to 204°C / 10 bar steam
Automation	Actuators, limit switches, solenoids and gear operators

# 4700 SERIES

#### Three Piece Ball Valves

The 4700 Series represents the leading technology in three piece ball valves. This versatile 2000 WOG-rated valve is standard with API 607 5th Edition fire test qualification.

Sizes	1/2" - 4" (DN15 - DN100) Full Port
Body Material	Carbon Steel, Stainless Steel
End Connection	FNPT, FSW
Body Material	LCC, WCB, CF8M, CF3M, WCC
Temperature Range	-20°F to 450°F / 150 psi steam -29°C to 232°C / 10 bar steam
Operator/ Mounting Pad	Manual locking lever / ISO 5211





#### UNIVERSALTRAP

Steam Trap

The Universal Trap is a bimetallic steam trap for plant applications requiring standardized connections. The mounting connections allow trap use on any manufacturer's universal mount. The two bolt replacement module allows for ease in installation and replacement. A built-in check valve prevents back flow. It automatically adjusts to operating pressure and load changes, overcoming problems associated with cycle discharge.

Sizes	1/2", 3/4", 1" (DN15, DN20, DN25)
Material	Stainless Steel Internals
Max Allowable Pressure	650 psi (44,8 bar)
Max Allowable Temperature	650°F (343°C)



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