





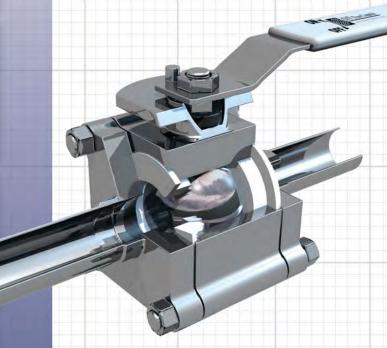






SVF Flow Controls

Product Specification Guide



Valves
Actuators
& Controls



SVF Flow Controls

What do you need today?"

SVF Flow Controls, **Inc.** specializes in the design, development, manufacturing and marketing of ball valves, actuators and accessories.

Since 1982, our engineering expertise, quality product and unparalleled service have earned us a leadership position in the marketplace. Our ball valves and related products are specified in the chemical, petro-chem, power, pulp & paper, water/wastewater, oil & gas, refining, pharmaceutical, food & beverage, safety and fire systems markets as well as many others.

Our products are backed by a customer focused service staff, full applications support and field service as well as complete training in all aspects of our products and their applications. As an ISO9001:2000 certified company, we are committed to quality and continuous improvement in all that we do.

We welcome your inquiries and guarantee that our team will work diligently to satisfy your requirements. If you don't see what you need here, we will be happy to work with you to develop a product to meet your exact specifications.









Valve Finder Use the table below to find the right SVF products for your application. Actuators & Controls Secondary Containment (Fugitive Emission) Anti-Static/Fire Safe Steam & Thermal Fluid Specialty Alloy High-Pressure High-Purity Directional Cryogenic Specialty Jacketed Economy Flanged Chlorine "V" Port Product Page# 4,10 R8 4,10 **B8 N8/BN8** 4 5 L8 5 F8/FB8 6 41/B41 6 EZ9 6 EZ6 7 BEV 7 REV 8 SB7 8 SB7F 8 TSB7 9 SMC9 Opus 9 SB6 10 P4 11 H7 11 **HBEV** 12 C8 12 D8/T7 12 RJ8 13 K8 13 V8 12 TB 13 SC 12 R89 H-C 12 Duplex 12 AL6XN 14 Aero 2™ 14 E Series 14 LS820-05 P&E-P 15 Device-ID™ 15

Industrial Valves Pages 4-5

Widely Compatible, Easy to Install

& Flanged Valves Pages 6-7

Economy and Performance

High-Purity Valves Pages 8-9

Designed to Meet Demanding Requirements

High-Pressure Valves Pages 10-11

Precision Engineering, Rugged Construction

Specialty Valves Pages 12-13

Unique Applications, Specialty Materials

Actuators & Controls Pages 14-15

Complete Line of Control Devices

■What do you need today?™



R8

Process-Quality
Regular Port
3-Piece Ball Valve

Sizes:

1/4" to 6"

Materials:

316SS, Carbon Steel, Brass, Alloy-20, Hastelloy-C, Duplex Alloys

Connections:

NPT, Butt Weld, Socket Weld, Flanged, Tube, Solder (TE), specialty connections including SAE available

Seat Materials:

TFM, Delrin, UHMWPE, PEEK

Port Size:

Regular Port

Service Applications

Critical fluid processing plant-wide

Chemicals

Steam (up to 450°F) See "N8" for steam and thermal fluids ratings

Vacuum

Oil/Gas

Hydraulics



B8

Process-Quality
Full Ported
3-Piece Ball Valve

Sizes:

1/2" to 3"

Materials:

316SS, Carbon Steel, Brass, Alloy-20, Hastelloy-C, Duplex Alloys

Connections:

NPT, Butt Weld, Socket Weld, Flanged, Tube, Solder (TE), specialty connections including SAE available

Seat Materials:

TFM, Delrin, UHMWPE, PEEK

Port Size:

Full Port

Service Applications

Critical fluid processing plant-wide

Chemicals

Steam (up to 450°F) See "N8" for steam and thermal fluids ratings

Vacuum

Oil/Gas

Hydraulics



N8/BN8

Steam & Thermal Fluids 3-Piece Ball Valve

Sizes:

1/4" to 3" (N8) 1/2" to 21/2" (BN8)

Materials:

316SS, Carbon Steel, Duplex Alloys

Connections:

NPT, Butt Weld, Socket Weld, Flanged

Seat Materials:

SupraLon

Port Size:

Regular Port (N8) Full Port (BN8)

Service Applications

Steam

Thermal Fluids

Max Pressure: 1500 psi Max Temperature 650°F



L8

Instrument Tubing 3-Piece Ball Valve

Sizes:

1/4" to 1"

Materials:

Stainless Steel

Connections:

Compression with Silver Plated Nuts

Seat Materials:

TFM Standard, SupraLon (steam and thermal fluids), Delrin, PEEK, UHMWPE

Port Size:

Regular Port

Service Applications

Instrument Isolation/Shutoff

Hydraulics

Steam

Oxygen

Vacuum

Thermal Fluids

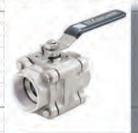
Chemicals

Alternate Fuels

Petrochem

Pulp & Paper

Semi-Conductor Instrumentation for Leak-Tight Sealing



F8/FB8

Anti-Static/Fire Safe 3-Piece Ball Valve (API-607)

Sizes:

1/4" to 2" (F8) 1/4" to 2" (FB8)

Materials:

Stainless Steel, Carbon Steel

Connections:

NPT, Socket Weld, Flanged

Seat Materials:

TFM Standard, NRG (FS7 3" and 4")

Port Size:

Reduced Port (F8) Full Port (FB8)

Service Applications

Anti-Static Design/Piping requirements

Fire Safe

Flammable Liquids & Gasses

Oil & Gas

Refining

Semi-Conductor

Petro-Chemical

Industrial

Valves

"Series 8"

These industrial valves from SVF Flow Controls are anything but ordinary. Designed for durability, our process quality ball valves have features which make them widely compatible and easy to install.

- 3-Piece construction enables valve to meet a wide range of piping requirements.
- Bi-directional flow, pressure-assisted sealing guarantees tight shut-off; low torque.
- Blowout proof stem design, self-compensating stem seal design automatically adjusts for wear and thermal cycling.
- Encapsulated body seals allows field welding without disassembly.
- Wide variety of materials, options and accessories.
- ISO 5211 mounting pad design
- 3 pc. valve features swing out design for ease of maintenance



What do you need today?"



41/B41/B42

Regular and Full Ported Flanged Ball Valves Anti-Static & Fire Safe Flanged Ball Valve (API607)

Sizes:

1/2" to 12"

Materials:

Carbon Steel, Stainless Steel, Alloy-20, Hastelloy-C

Connections:

Flanged 150#, 300#

Seat Materials:

(41/B41) TFM and SupraLon; (B42) Carbon Filled and Reinforced Teflon

Port Size:

Regular Port (41): 1½" - 8" Full Port (B41): ½"-10" Full Port (B42): ½"-10"

Service Applications:

Anti-Static Design/Piping requirements Fire Safe (tested to API-607) Flammable Liquids Refining Petro-Chemical

Oil & Gas

Chemical

Steam & Thermal Fluids



EZ9

General Purpose
3-Piece Ball Valve
ISO 5211 Integral Mounting Pad

Sizes:

1/4" to 2"

Materials:

Carbon Steel, Stainless Steel

Connections:

NPT, Socket Weld (available Sch. 40 BW)

Seat Materials:

TFM Standard

Port Size:

Full Port

Service Applications:

Compact automated assembly with direct mount automation

Steam

Water

Oil/Gas

General purpose fluids

1000# WOG

Temperature to 450°F



EZ6

General Purpose 3 -Piece Ball Valve (with Lever Handle Only)

Sizes:

1/4" to 4"

Materials:

Carbon Steel, Stainless Steel

Connections:

NPT, Socket Weld

Seat Materials:

RTFE

Port Size:

Full Port

Service Applications:

Steam

Water

Oil /Gas

General purpose fluids

1000# WOG

Temperature to 450°F



BEV

Full Port Economy 2-Piece Ball Valve

Sizes:

1/4" to 3" for Stainless Steel 1/4" to 4" for Brass Valves

Materials:

316SS, Forged Brass

Connections:

NPT

Seat Materials:

Reinforced Teflon for 316SS PTFE for Brass

Port Size:

Full Port

Service Applications:

Steam up to 450°F

Water

Oil/Gas

Instrument Isolation



REV

Reduced Port Economy
1-Piece Ball Valve
Latch Lock Handle, 800# WOG

Sizes:

1/4" to 2"

Materials:

316SS

Connections:

NPT

Seat Materials:

Reinforced Teflon

Port Size:

Reduced Port

Service Applications:

Hydraulics

Steam

Oxygen

Vacuum

Chemical

Oil/Gas

Food Processing

& Flanged Valves

Economy

SVF Flow Controls' general purpose valves are built for economy and performance under a variety of process control conditions, with solid construction, versatile designs and the most widely compatible materials.

- EZ Valve Line offers direct-mount actuation
- Offers a variety of connections to suit most applications.
- Includes valves for antistatic, fire safe and highpressure applications.
- Lightweight and compact designs.
- High-performance stem seal and blow-out proof stem design.



■What do you need today?™



SB7

High Purity Steam 3-Piece Ball Valve

Sizes:

1/2" to 6"

Materials:

316L SS, Hastelloy-C

Connections:

Extended Tube OD (ETO), Tri-Clamp (TS ends available upon request)

Seat Materials:

TFM-1600 (optional cavity-filled)

Port Size:

"Tube ID" Port

Service Applications:

Clean Steam

Pharmaceutical

Biotech

Semiconductor

Cosmetics

Food Processing

Vacuum



SB7F

High Purity Steam
3-Piece Forged Ball Valve

Sizes:

1/2" to 2"

Materials:

Forged 316SS A-182

Connections:

Extended Tube OD (ETO), Tri-Clamp, (TS ends available upon request)

Seat Materials:

TFM-1600

Port Size:

"Tube ID" Port

Service Applications:

Clean Steam

Pharmaceutical

Biotech

Semiconductor

Cosmetics

Food Processing

Vacuum



TSB7

High Purity Diverter 3-Piece Ball Valve

Sizes:

1/2" to 4"

Materials:

316L SS

Connections:

Extended Tube OD (ETO), Tri-Clamp (TS ends available upon request)

Seat Materials:

TFM-1600 (optional cavity-filled)

Port Size:

"Tube-ID" Port

Porting:

Multi-Port Diverter,

Side Port and Bottom Port

Service Applications:

Clean Steam

Pharmaceutical

Biotech

Semiconductor

Cosmetics

Food Processing

Vacuum



SMC9

High Purity
Multi-Ported Ball Valve

Sizes: 1/2" -2"

Materials: 316SS

Connections: Extended Tube OD

(ETO), Tri-Clamp

Seat Materials: TFM 1600

Port Size: 4-Seat Shut-off

Service Applications:

High Purity, Pharmaceutical, Biotech, Semi-conductor, Cosmetics, Food Processing,

Steam



SB6

High Purity Food & Beverage

3-Piece Ball Valve

Manually Operated w/ Latch Locking Device

Sizes: 1/2" to 4"

Materials: 316SS

Connections: Extended Tube OD (ETO), Tri-Clamp (TS ends

available on request)

Seat Materials: TFM-1600

Port Size: "Tube ID" Port

Service Applications: High Purity, Food Processing, Clean Steam



Opus

Steam Trap Test Valve

Sizes:

1/2" - 2 1/2"

Materials:

316L SS, Forged 316SS A-182

Connections:

"Tube OD" (ETO), Tri-Clamp

Seat Materials:

TFM 1600

Port Size:

Tube ID Port

Service Applications:

High Purity

Pharmaceutical

Biotech

Semiconductor

Cosmetics

Food Processing

Clean Steam Trap Test

Valves

High Purity

Clean Flow[™] ball valves, by SVF Flow Controls, are true process components, specifically engineered to meet the demanding requirements of pharmaceutical, biotech, semiconductor, cosmetics, food and other industries where particle generation and contamination can threaten the outcome of processing. All Clean Flow[™] valves are available with controlled delta-ferrite chemistry.

- Meet or exceed the latest ASME/BPE guidelines for valve and tubing designs.
- Tube-ID" feature provides predictable flow rates and pressure drops, ensuring thorough cleaning and full drainability mandated by ASME/BPE.
- Use only the highest grade materials, sourced from certified suppliers.
- High-performance TFM seat material is standard.
- Wide range of options and accessories for industryspecific applications.



What do you need today?™



R8

Process Quality
Regular Port 3-Piece
Ball Valve up to 3,000 psi

Sizes:

1/4" to 2"

Materials:

316SS, Carbon Steel, Alloy-20, Hastelloy-C

Connections:

NPT, Butt Weld, Socket Weld, Flanged

Seat Materials:

Delrin, PEEK

Port Size:

Regular Port

Service Applications:

Critical fluid processing plantwide

Chemicals

Steam

Hydraulics

Oil/Gas

Steam and Thermal Fluids

Industrial Gasses

Variety of actuation & control options



B8

Process Quality
Full Port 3-Piece
Ball Valve up to 3,000 psi

Sizes:

1/4" to 11/2"

Materials:

316SS, Carbon Steel, Alloy-20, Hastelloy-C

Connections:

NPT, Butt Weld, Socket Weld, Flanged

Seat Materials:

Delrin, PEEK

Port Size:

Full Port

Service Applications:

Hydraulics

Steam

Industrial Gasses

Thermal Fluids

Chemical

Oil/Gas

Variety of actuation & control options



P4

High Pressure 3-Piece Ball Valve 5,000 psi

Sizes:

1/4" to 1"

Materials:

316SS, Carbon Steel

Connections:

NPT, Socket Weld, Flanged

Seat Materials:

Delrin, PEEK

Port Size:

Regular Port

Service Applications:

Hydraulics

Oil/Gas

Chemical

Steam

Industrial Gases

Compressed Gas

Compressor Applications

CNG/LNG Dispensers

Fuel Injections

Variety of actuation & control options



H7

High Pressure 3-Piece Ball Valve 6,000 psi

Sizes:

1/2" to 2"

Materials:

316SS, Carbon Steel

Connections:

NPT, Socket Weld, Flanged (1/2" to 2" Class 2500)

Seat Materials:

Delrin, PEEK

Port Size:

Reduced Port

Service Applications:

Hydraulics

Oil/Gas

Chemical

Steam

Industrial Gasses

Compressed Gas

Compressor Applications

CNG/LNG Dispensers

Fuel Injections

Variety of actuation & control options



HBEV

High Presure Fire Safe Seal Welded 2-Piece Ball Valve 6,000 psi

Sizes:

1/4" to 2"

Materials:

316SS

Connections:

NPT, Socket Weld

Seat Materials:

Delrin, PEEK

Port Size:

Full Port

Service Applications:

Hydraulics

Oil/Gas

Chemical

Steam

Industrial Gasses

Compressed Gas

Compressor Applications

Variety of actuation & control options

Valves

High Pressure

High-pressure applications require precision engineering, rugged construction and special features for enhanced performance and safety.

SVF Flow Controls offers a full range of high-pressure valves for all high-pressure applications including hydraulics, steam, oxygen, vacuum, thermal fluids, chemical, oil and gas, food processing, dry or liquid chlorine.

- Blow-Out-Proof Stem
- Downstream sealing design uses the force of flow for a tighter seal with less wear and lower operating torque.
- Unidirectional and bidirectional flow.
- 3-Piece construction enables valve to meet a wide range of piping requirements.



-What do you need today?™



C8

Chlorine 3-Piece Ball Valve Meets Chlorine Institute Pamphlet 6

Sizes: 1/4" to 2"

Materials: Carbon, Hastelloy-C,

Monel

Connections: NPT, Socket Weld

Port Size: Regular Port, Full port

available for 1/2" to 11/2"

Service Applications: Dry and

Liquid Chlorine



C32

Chlorine 3-Piece Flanged Ball Valve

Meets Chlorine Institute Pamphlet 6

Sizes: 1/2" to 4"

Materials: Carbon, Hastelloy-C,

Monel

Connections: ANSI 300#

Port Size: Regular Port

Service Applications: Dry and

Liquid Chlorine.



D8/T7

3-Piece Diverter Valve (D8) 3-Way Valve (T7)

Sizes: 1/4" to 2"

Materials: 316SS, Carbon Steel

Connections: NPT, Butt Weld,

Socket Weld, Flanged

Seat Materials: (D8) TFM 1600, PEEK, UHMWPE, SupraLon, NRG,

(T7) PTFE and NRG

Port Size: Regular Port, Full Port Available for ½" -1 ½" (BT7 and

BD8)

Service Applications:

Chemicals, Steam and Thermal Fluids, Hydraulics, Oxygen



TB

Tank Bottom 3-Piece Ball Valve

Sizes: 1/2" to 2"

Materials: 316SS.

Connections: Tank Pad X NPT, Butt Weld, Socket Weld, Flanged

Seat Materials: TFM, Delrin,

UHMWPE, PEEK

Port Size: Regular or Full Port Reduced Port = 1/2" to 2"

Full Port = 1/2" to 1 1/2"

Service Applications: Tank

Bottom



RJ8

Steam-Jacketed 3-Piece Ball Valve

Sizes: 1/4" - 2" (41R2) 11/2"- 4"

Materials: 316SS

Connections: NPT, Butt Weld, Socket Weld, 150# Flanged

Seat Materials: TFM 1600, PEEK, UHMWPE, SupraLon (J41R2/BJ41R2) = TFM, Carbon

Filled

Port Size: 1/4" - 21/2"

Service Applications: Viscous Fluids such as: Asphalt, Chocolate, Jam, Resins, Tar, Wax or Syrup



Specialty Alloy

3-Piece Ball Valve

Cast:

Hastelloy-C ASTM-A494 (body)

Cast: Duplex (Typical):

Duplex SS, ASTM-A351CK3MCUN (body)

Bar: AL6XN:

Nickel/Chromium/ Molybdenum/Iron composition

SVF can produce valves & components from a wide selection of exotic metals. Consult factory.



K8

Cryogenic Ball Valve

Sizes: 1/2" to 2"

Materials: 316SS, Brass

Connections: NPT, Butt Weld, Socket Weld, 150# Flanged

Seat Materials: TFM 1600,

SupraLon

Port Size: Regular Port, Full Port available on ½" to 1 ½"

Service Applications:

Cryogenic Fluids, Gas Systems, C02, Nitrogen Injection, LNG-LPG Trailers.



SC

Secondary Containment (Fugitive Emissions) Module

Sizes: Available for valves 1/2" to 4"

Materials: 316SS

Mounting Connections: ISO

5211 Mounting Pad

Seal Materials: PTFE (optional

seals available)

Port: Two 1/8" NPT sniffer ports

Service Applications:

Secondary containment for the monitoring of fugitive emissions. Stem Extension for insulated lines.



V8

Characterized V-Ball 3-Piece Ball Valve

Size Range:

1/4" to 2"

Materials:

316SS, Carbon Steel

Connections:

NPT, Butt Weld, Socket Weld, 150# Flanged, Sanitary Connections

Seat Materials:

TFM 1600, Delrin, PEEK, UHMWPE, SupraLon

Port Size:

Regular Port

Service Applications:

Ideal for a wide range of fine control of fluids, such as:

Temperature Control

Steam and Heat Transfer Fluids

pH Control

Flow/Level/Pressure Control Filling Applications

Valves

Specialty

Unique applications, specialty materials, specific handling requirements for hazardous substances - whatever the processing need - SVF Flow Controls has a valve to meet it. All of our products are designed to meet or exceed industry performance and safety standards.

- Secondary containment/fugitive emissions.
- Chlorine Service.
- Characterized V-Port, tank bottom and multi-ported designs.
- Cryogenic
- Specialty alloys, including Hastelloy-C, AL6XN, and Duplex SS
- Valve Manifold



- What do you need today?™



aero 2™

Actuator



E Series

Electric Actuator



LS 820-05

High Performance Limit Switch

Type:

Rack and Pinion pneumatic rotary actuator

For valve types:

All quarter-turn ball, plug and butterfly valves

Control Options:

On/Off, Modulating

Positioning:

Bi-Directional stroke adjustment to +/- 5%

Torque Range:

146 to 28,565 LbF/ln.

Configurations:

Double Acting, Single Acting, 90° and 180° Rotation

Applications:

Automation and control of all guarter-turn valves

Material:

Aluminum, Stainless Steel, Nickel Infused (NiEX)

Type:

Reversing, geared electric, 90° turn, 180° turn

For valve types:

All quarter-turn ball, plug and butterfly valves

Control Options:

On/Off (Modulating with optional analog positioner)

Positioning:

Unidirectional, Bi-directional, 3-position, 180° Rotation

Torque Range:

100 to 3,840 LbF/In.

Enclosure Specs:

NEMA 4, NEMA 7 Variety of AC and DC voltages

Enclosure:

Weatherproof NEMA 4/4X (IP67)

Ambient Temperature:

-4° F to 176° F (-20° C to 80° C)

Conduit Entry:

2 X 1/2" NPT

Position Indicator:

Closed (Red) Open (Yellow)

Switches:

2 Mechanical SPDT (Optional Prox-Type Sensors)

Exterior:

Polyester powder coating

Shaft Length:

To NAMUR, includes SS mounting kit and hardware

Actuators



P&E-P

Pneumatic or Electro-Pneumatic Positioner

Materials:

Non-metallic housing, SS trim

Connections:

High performance design

Signal:

Pneumatic (3-15 psi) or Electro-Pneumatic (4-20 mADC)

Air Inlet/Outlet Size:

1/4" FNPT

Variety of Characterized Cams, Feedback and Hazardous Area Options

Device-ID™

Provides a selection of products and protocols for two-wire, addressable systems including:

ASi

DeviceNet

All BUS systems.

& Controls

SVF Flow Controls offers a complete line of control devices, from pneumatic and electric actuators to limit switches, positioners, pilot valves and two-wire controls to complement our high performance aero-2TM rack and pinion pneumatic actuator.

- Our aero-2[™] pneumatic actuator is designed for universal operation of all quarter-turn valves. Comes with a full array of control options for On/Off and modulating service.
- Device IDTM provides a selection of products and protocols for two-wire, addressable systems including: ASi, DeviceNet, and all BUS systems.
- Our controls and control packages are feature-rich and performance engineered.
- Controls are available to meet international standards such as ATEX.



SVF Flow Controls

What do you need today?"

SVF offers a complete line of ball valves, actuators and accessories to meet and exceed your requirements. As an ISO9001:2000 certified company, we are committed to quality and continuous improvement in all that we do.

Don't see what you need here? Our design team is ready to develop a product that meets your exact requirements.

Call us today: 1-800-783-7836 or 1-562-802-2255.







Complete product specifications
Interactive CAD drawings
Ordering information

SVF Flow Controls, Inc.

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