

**Product Selection Guide** 

# Valves

<b>R8</b>	<ul> <li><u>"Process-Quality"</u> <u>Regular Port</u></li> <li>Weldable without disassembly</li> <li>Live-Loaded Stem Seal</li> <li>ISO Mounting Pad</li> <li>316L Grade Ends</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloy-20, Hastelloy-C (in stock), Brass</li> <li>NPT, Butt Weld, Socket Weld and Flanged</li> <li>1/4" to 2-1/2"</li> <li>Reduced Port</li> </ul>
<b>B</b> 8	<ul> <li><u>"Process-Quality" Full</u></li> <li><u>Port</u></li> <li>Weldable without disassembly</li> <li>Live-Loaded Stem Seal</li> <li>ISO Mounting Pad</li> <li>316L Grade Ends</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloy-20, Hastelloy-C (in stock), Brass</li> <li>NPT, Butt Weld, Socket Weld and Flanged</li> <li>1/4" to 2"</li> <li>Full Port</li> </ul>
NB	<ul> <li>Steam and thermal fluids.</li> <li>Temperatures to 600 F</li> <li>Weldable without disassembly</li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloys</li> <li>NPT, Butt Weld, Socket Weld and Flanged</li> <li>1/4" to 2-1/2" (N8), to 2" (BN8)</li> <li>Reduced (N8) Full Port (BN8)</li> </ul>
<b>P4</b>	<ul> <li>High Pressure 5,000 psi design manufactured from forged steel.</li> <li>Variety of options</li> <li>Lightweight design</li> </ul>	<ul> <li>Forged Carbon Steel and SS</li> <li>NPT, Butt Weld, Socket Weld and Flanged</li> <li>1/4" to 1"</li> <li>Reduced Port</li> </ul>
H7	<ul> <li>High Pressure 6,000         psi design manufactured from forged steel or from bar stock to meet specific requirements.     </li> <li>Variety of options and materials</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloys</li> <li>NPT, Butt Weld, Socket Weld and Flanged</li> <li>1/4" to 4" (H7), ¼" to 3"(HB7)</li> <li>Reg Port (H7), Full Port (HB7)</li> </ul>

What do you need today?



**Product Selection Guide** 



HBEV HBEV	<ul> <li>High Pressure 6,000 psi design.</li> <li>ISO-5211 Actuator Mounting</li> <li>Integral Locking Device</li> </ul>	<ul> <li>Carbon Steel and Stainless Steel</li> <li>NPT with Delrin Seats</li> <li>1/4" to 1"</li> <li>Full Ported flow path</li> </ul>
41/B41	<ul> <li><u>Anti-Static and Fire Safe</u> to API 607-4</li> <li>Live-Loaded Stem Seal</li> <li>Blowout Proof Stem</li> <li>Stainless Externals</li> <li>Full Range of Versatile Options</li> <li>Locking Device</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloys</li> <li>Selection of seats/seals</li> <li>Flanged 150#, 300#</li> <li>1/2" to 8"(B41)</li> <li>1-1/2" - 6" (41)</li> <li>Reduced (41) Full Port (B41/42)</li> </ul>
E29	<ul> <li>General Purpose Three- <u>Piece Ball Valve</u></li> <li>Full Ported Design</li> <li>316SS Throughout</li> <li>ISO Mount</li> <li>Live Load Packing</li> <li><i>EZ</i> Automation</li> </ul>	<ul> <li>316SS or 316 X CS for weld end valves</li> <li>NPT, SW, BW</li> <li>1/4" to 2"</li> <li>Full Port</li> <li>Pressures to 1000 psi</li> <li>Locking handle</li> </ul>
BEV	<ul> <li><u>General Purpose Ball</u> <u>Valve</u></li> <li>316SS Throughout</li> <li>Ideal for use with Insertion Probes and general purpose plant-wide applications</li> </ul>	<ul> <li>316SS or Brass Nickel Plated Body</li> <li>NPT</li> <li>1/4" to 3" (SS) to 4" (Brass)</li> <li>Full Port</li> </ul>
REV	<ul> <li><u>General Purpose Ball</u> <u>Valve</u></li> <li>Reduced port design</li> <li>316SS Throughout</li> <li>NPT Ends</li> </ul>	<ul> <li>Reinforced TFE seats</li> <li>One-piece design</li> <li>1/4" to 2" (SS)</li> <li>Ideal for instrument systems and gauge isolation</li> </ul>





## Valves

С8	<ul> <li><u>Meets Chlorine</u> <u>Institute standards</u></li> <li>Full Range of Options</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>Carbon-Hastelloy/Monel</li> <li>NPT, Socket Weld and Flanged</li> <li>1/4" to 2-1/2" (C8) 1/4" to 2" (BC8)</li> <li>Reduced (C8), Full Port (BC8)</li> </ul>
	<ul> <li>Instrumentation / flared-compression fittings</li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>316SS with silver plated threads</li> <li>Compression ends</li> <li>1/4" to 1" Reduced (L8) 1/4" to 1" Full Tube Port (SB7)</li> </ul>
<b>D8/T7</b>	<ul> <li>Diverter Valve</li> <li>ISO Mounting Pad</li> <li>316L Grade Ends</li> <li>Blowout Proof Stem</li> <li>Stainless Externals</li> <li>Full Range of Versatile Options</li> </ul>	<ul> <li>316SS, Carbon Steel</li> <li>NPT, BW, SW and Flanged</li> <li>1/4" to 2"</li> <li>Reduced Port</li> </ul>
<b>F8/FB8</b>	<ul> <li><u>Anti-Static and Fire Safe</u> <u>to API 607-4</u></li> <li>Live-Loaded Stem Seal</li> <li>Blowout Proof Stem</li> <li>ISO Pad</li> <li>Full Range of Versatile Options</li> </ul>	<ul> <li>316SS, Carbon Steel</li> <li>NPT, SW, BW and Flanged</li> <li>1/4" to 2" (F8), to 2" (FB8) 3" and 4" reduced port (FS7)</li> <li>Reduced (F8) Full Port (FB8)</li> </ul>
RJ	<ul> <li>Jacketed Valves</li> <li>Multiple Steam Inlets</li> <li>Seal Welded Design</li> <li>Live-Loaded Stem Seal</li> <li>Stainless Trim</li> <li>Ideal for viscous fluids</li> </ul>	<ul> <li>316SS, Carbon Steel, Alloys</li> <li>NPT, BW, SW and Flanged</li> <li>1/4" to 4"</li> <li>Reduced or Full Port</li> </ul>

What do you need today?



# **Specialty Valves**

K8	<ul> <li><u>Cryogenic</u></li> <li>Extended Bonnet</li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> <li>Stainless Externals</li> <li>Full Range of Versatile Options</li> <li>Selection of materials: 316, Brass</li> </ul>	<ul> <li>For a full range of cryogenic applications</li> <li>316SS, Brass</li> <li>NPT, BW, SW and Flanged</li> <li>1/4" to 2"</li> <li>Reduced or Full Port</li> </ul>
<b>V8</b>	<ul> <li><u>Characterized "V" ball in</u> <u>V-30, V-60, V-90, slotted</u> <u>and custom designs.</u></li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>316SS, Carbon Steel</li> <li>NPT, SW, BW and Flanged</li> <li>1/2", 1", 2"</li> <li>Reduced Port</li> </ul>
TB	<ul> <li><u>Tank Bottom Valve</u></li> <li>Ideal for all Fluid Distribution Systems</li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> <li>Stainless Externals</li> </ul>	<ul> <li>316SS, Carbon Steel Valve Bodies</li> <li>Tank Pad X NPT, Butt Weld, Socket Weld and Flanged</li> <li>1" to 4"</li> <li>Reduced or Full Port (to 3")</li> </ul>
SC	<ul> <li>Fugitive Emission Module meets ISA SP-93 guidelines</li> <li>Live-Loaded Stem Seal</li> <li>Encapsulated Body Seal</li> <li>ISO Mounting Pad</li> <li>Blowout Proof Stem</li> </ul>	<ul> <li>Designed to fit ISO-Style valves</li> <li>1/4" to 4"</li> <li>Reduced or Full Port</li> </ul>



## **Specialty Alloys**

*SVF Flow Controls* is a leading producer of ball valves constructed from exotic alloys. Our products have been used in a wide range of industries and applications including an extensive presence in the pharmaceutical marketplace. To facilitate material confirmation and validation we record and archive MTRs in our database for easy retrieval and digital transfer.

In addition to our standard cast products we produce specialty valves from bar stock to meet unique requirements.



### **Duplex** (Typical)

R89 H-C HASTELLOY® Alloy C ASTM A494-CW12MW Materials

ltem	Description	Material
1	Body	Hastelloy-C ASTM-A494
2	Body Connector	Hastelloy-C ASTM-A494
3	Ball	Hastelloy-C ASTM-A494
4	Stem	Hastelloy-C ASTM-A494
5	Seat	TFM,SupraLon,Delrin, UHMWPE, PEEK
6	Body Connector Seal	TFM,SupraLon,BUNA, EPDM, Viton, UHMWPE

#### Materials

ltem	Description	Material
1	Body	Duplex SS ASTM-A351CK3MCUN
2	Body Connector	Duplex SS ASTM-A351CK3MCUN
3	Ball	Duplex SS ASTM-A351CK3MCUN
4	Stem	Duplex SS ASTM-A351CK3MCUN
5	Seat	TFM,SupraLon,Delrin, UHMWPE, PEEK
6	Body Connector Seal	SupraLon,BUNA,Viton, UHMWPE,EPDM

### Chemical Composition, %

**AL6XN** 

Element	Min	Max.
Nickel	23.50	25.50
Chromium	20.00	22.00
Molybdenum	6.00	7.00
Carbon	-	0.03
Nitrogen	0.18	0.25
Manganese	-	2.00
Silicon	-	1.00
Phosphorus	-	0.04
Sulphur	-	0.03
Copper	-	0.75
Iron	Remainder	

### **Chlorine Service - Monel & H-C**

#### Material Recommendations

Environment	Service	Max. Chlorine Conc. PPM of H2O	Recommendation for Ball& Stem Material
Clean (no Chlorine in the air)	Mid-Line	20 ppm 50 ppm 150 ppm	Monel Ball & Stem Hastelloy C Ball, Monel Stem Hastelloy C Ball & Stem
Chlorine Contaminated	Mid-Line	150 ppm	Hastelloy C Ball & Stem
Chlorine	End of Line	150 ppm	Hastelloy C Ball & Stem



# **CleanFlow High Purity Valves**

SB7	<ul> <li><u>High Purity Ball Valve</u></li> <li>"Tube ID" Drainable</li> <li>ASME/BPE Compliant</li> <li>Exclusive "<i>Fine Adjust</i>" positioning handle</li> <li>Controlled delta ferrite for plant-wide applications.</li> </ul>	<ul> <li>316L Grade &amp; Hastelloy-C</li> <li>¼" to 4"</li> <li>Extended Tube OD, Tri-Clamp</li> <li>ISO Actuator Mounting</li> <li>20 Ra ID-standard, E-P available</li> </ul>
TSB7	<ul> <li><u>Multiported Diverter -</u> <u>High Purity Ball Valve</u></li> <li>Side or Bottom Ported</li> <li>ASME/BPE Compliant</li> <li>Controlled delta ferrite for plant-wide applications. Exclusive "<i>Fine Adjust"</i> positioning handle</li> </ul>	<ul> <li>316L Grade</li> <li>1⁄4" to 2"</li> <li>Extended Tube OD, Tri-Clamp</li> <li>ISO Actuator Mounting</li> <li>20 Ra ID-standard, E-P available</li> </ul>
	<ul> <li><u>4-Seated Multiported</u> <u>Diverter - High Purity</u> <u>Ball Valve</u></li> <li>Side Ported</li> <li>ASME/BPE Compliant</li> <li>Controlled delta ferrite for plant-wide applications.</li> </ul>	<ul> <li>316L Grade</li> <li>1/2" to 3"</li> <li>Extended Tube OD, Tri-Clamp</li> <li>ISO Actuator Direct Mounting</li> <li>20 Ra ID-standard, E-P available</li> </ul>
SBTF-Forged	<ul> <li>Forged 316 (A-182) High <u>Purity Ball Valve</u></li> <li>Exclusive "<i>Fine Adjust"</i> positioning handle</li> <li>ASME/BPE Compliant</li> <li>&lt;0.5% delta ferrite chemistry.</li> </ul>	<ul> <li>316L Grade</li> <li>Extended Tube OD, Tri-Clamp</li> <li>ISO Actuator Mounting</li> <li>20 Ra ID-standard, E-P available</li> </ul>



*SVF Flow Controls* has developed the *3PI* program to assist end users with <u>third party inspection</u>. By using our *3PI* program our customers find real savings in time and money. The inspection is performed in house at the *SVF* facility and is designed to eliminate returns and field rejections.



# **Actuators and Controls**

-aero2-	<ul> <li><u>"aero<sup>2</sup>" Pneumatic R/P</u> <u>actuator</u></li> <li>10 models to 13,000 Lbf. In.</li> <li>Double Acting or Spring Return</li> <li>ISO/NAMUR design</li> <li>Dual-Direction Stroke Adjustment</li> </ul>	<ul> <li>Aluminum Hard Anodized</li> <li>Optional Stainless Steel Housing or Nickel Infused for full protection against corrosion</li> <li>Compact, "clean line" design</li> <li>Ideal for High Cycle applications</li> </ul>
	<ul> <li><u>"<i>E-Series</i>"Electric</u> <u>Actuators</u></li> <li>8 models to 4,000 Lbf.In.</li> <li>Rugged construction resists moisture</li> <li>ISO/NAMUR design</li> <li>Full Range of Options and Controls</li> </ul>	<ul> <li>Aluminum with Baked Polyester coating</li> <li>Stainless Steel fasteners and shaft to meet NEMA 4X</li> <li>Enclosures to meet NEMA 7, 4 and 4X</li> <li>Input voltages include AC and DC</li> </ul>
	<ul> <li><u>"LS-820"Limit Switch</u></li> <li>Mechanical or Prox switch elements.</li> <li>NEMA 4, 4X housing</li> <li>ISO/NAMUR design</li> <li>High Visibility Indicator</li> <li>Aluminum housing</li> </ul>	<ul> <li>Optional NEMA 7 housing</li> <li>Optional non-metallic housing</li> <li>Optional ASi, DeviceNet control boards</li> <li>LS-820 package includes NAMUR mounting bracket (SS)</li> <li>Captive bolts</li> </ul>
PV	<ul> <li><i>"PV"</i> NAMUR Pilot Valve</li> <li>4-Way, 3-Way in same package.</li> <li>NEMA 4, 4X housing</li> <li>ISO/NAMUR design</li> <li>High Flow Rate (Cv=1.2)</li> <li>1/2" Electrical connection</li> </ul>	<ul> <li>1/4" NPT air connections</li> <li>Manual override</li> <li>Available with Low Watt (&lt;3W) for ASi and DeviceNet interface</li> <li>Optional Speed Controls</li> <li>Optional NEMA 7 housing</li> <li>AC/DC coils</li> </ul>
	<ul> <li><u>"P &amp; E-P" Positioner</u></li> <li>Accepts Pneumatic or Electro-pneumatic input signals</li> <li>NEMA 4, 4X housing</li> <li>Non-metallic housing for corrosion resistance</li> <li>Compact design</li> </ul>	<ul> <li>1/4" NPT air connections</li> <li>Excellent performance, repeatability and sensitivity</li> <li>Easy dial setup of Zero and span</li> <li>Optional transducer</li> <li>Optional continuous feedback or limit switches</li> </ul>



### **Networking Solutions**

	<ul> <li>"<i>Device ID</i>" for ASi and <u>DeviceNet protocols</u></li> <li>Fully enclosed logic/circuit board</li> <li>NEMA 4, 4X housing</li> <li>LED readout</li> <li>Compact design</li> </ul>	<ul> <li>Up to 64 valves per field installation</li> <li>Excellent performance, repeatability and sensitivity</li> <li>Onboard diagnostics</li> <li>Low wattage power coils for pilot valves</li> <li>Compatible with all SVF-AV</li> </ul>
-aero2-	<ul> <li><u>"aeroValve" Direct Mount</u> <u>Automated Valve</u></li> <li>Low profile assembly is compact and lightweight</li> <li>High performance, long-life actuator</li> <li>Full range of control accessories and options</li> </ul>	<ul> <li>Direct mount to all EZ-Valve series products.</li> <li>Actuator available in stainless steel or with exclusive infused Nickel treatment</li> <li>EZ to assemble and maintain</li> <li>Competitively priced</li> </ul>
	<ul> <li><u>"electroValve"Direct</u> <u>Mount Automated Valve</u></li> <li>Low profile assembly is compact and lightweight</li> <li>High performance, long-life actuator</li> <li>Full range of control accessories and options</li> </ul>	<ul> <li>Direct mount to all EZ-Valve series products.</li> <li>Actuator available in a variety of voltages, feedback and controls</li> <li>EZ to assemble and maintain</li> <li>Competitively priced</li> </ul>
Clean <b>FL</b>	<b>DW</b> .net	ENet C C
PRD-SPEG.NET	Flow Controls orporated CAD Now?	SVF is proud to maintain the ISO-9001:2000 QMS certificate. For more information about our products and services please visit our websites: www.SVF.net www.CleanFlow.net www.Pro-Spec.net

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