

SV SERIES 2-PIECE BALL VALVES

Split Body metal seated ball valves for industrial and process applications.



The Jarecki SV Series ball valve is an economical choice for your high temperature and abrasive media valve needs. SV Series valves are used for applications in the Chemical, Power, Pulp and Paper, Petrochemical, Oil and Gas, and Mining Industries.

Standard Applications:

Green, Black, White Liquor Hot Oil Saturated Steam Feedwater Abrasive Media Chlorine Nitrogen TICL4

Seat Leakage Class:

RTFE Seats Bubble Tight RTFE Seats API 598 Metal Seats Class V - **Standard** Metal Seats Class VI Metal Seats Zero Leakage Metal Seats API 598 Metal Seats ISO 5208

Design

Pressure Rating

- 150# Available in Sizes ½" to 12"
- 300# Available in Sizes ½" to 12"

Valve Size

- 1/2" to 12" Full Port
- 6" to 12" Reduced Port

End Connections

- Flanged
- Butt weld Available On Request

Valve Construction

- 2 Piece Valve Design
- Investment Cast Body Size ½" to 4"
- Split Body
- Floating Ball
- Spiral Wound Body Gasket with Secondary Metal to Metal Seal
- · Actuator Mounting Pad
- · Live Loaded Stem Packing
- Designed to B16.34
- Blow Out Proof Stem
- Heavy Duty Stem For High Torque

Seat Designs

- Bi-Direction RTFE Seats
- Bi-Direction Metal Seats
- Uni-Directional Metal Seats Standard

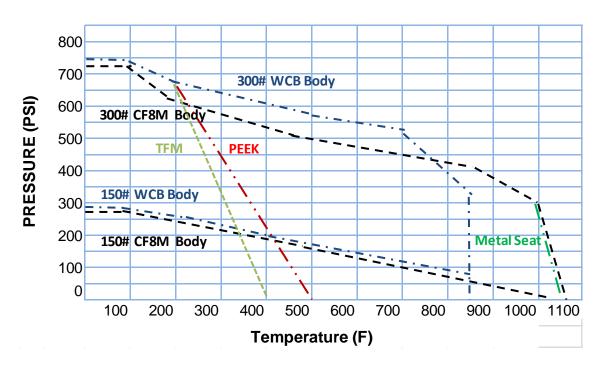
Service Conditions

- Temperatures Up to 1000 deg F
- Pressures as low as Vacuum Service
- Pressures as High as 740 psi
- For Clean and Abrasive Services

www.jareckivalves.net Bulletin SV 01-15



PRESSURE / TEMPERATURE CHART



Live Loaded Packing System

- Blow-Out proof stem design to ensure workman safety.
- Live-Loaded stem packing to compensate for temperature fluctuations and normal wear.
- Care is taken not to over torque the stem packing at the testing facility.

Reliable Body Seal

- The body and end connections are bolted with a metal to metal contact to ensure that proper compression on the body gasket is achieved.
- This metal to metal contact also guarantees that the dimensions inside the valve are correct. The torque is constant, and both the body and seat seal gaskets will always have the proper compression.

Specifications

Valves covered in this bulletin are available to conform to the following industry standards and specifications

- Flanged Ends meet ANSI B16.10 and B16.5
- Butt Weld end connections meet MSS SP72
- Pressure Testing Of Valves MSS-SP-61
- Standard Marking for Valves MSS-SP-25
- Valves are tested per ANSI FCI 70-2-1976
- Minimum wall thickness meets ANSI B16.34
- Valves are tested per ANSI FCI 70-2-1991 and B16.34

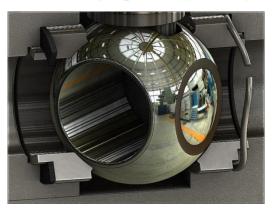
- ASME B31.1 Power Piping
- ASME B31.3 Chemical Plant Piping
- MSS SP-55 Quality Standards For Castings
- MSS SP-6 Standard Finishes for Contact Faces of Pipe Flanges
- API 607 Fire Test For Soft Seated Valves
- NACE MRO175 Sulfide Stress Cracking Resistant Materials For oilfied Equipment*
- API 6D Specifications for Pipeline Valves

^{*} Must specify this as a requirement at time of order



SEAT STYLES

P Seat - Spring Loaded (Standard)



For unidirectional applications. The sealing seat is available as a separate seat ring for reparability, or integral with the tailpiece for high temperature applications. The spring seat OD seal prevents media from building up between the spring and the back of the seat.

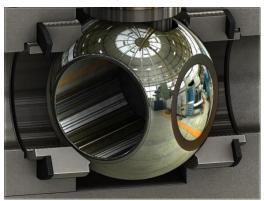
Temperature Range: -40 to 1000 deg F

Application: Steam, Hot Air, Gases, Low Pressure

Differentials, High Temperatures

Shut-Off: Class V, Class VI, Bubble Tight

G Seal - Graphite Sealed Seat



A series of Graphite seal rings behind the metal seat prevents media from building up behind the seat. The rings also allow for expansion of the internal valve components in high temperature applications. This design is great for applications involving fine solids as the graphite prevents the media from building up behind the seats.

Temperature Range: -20 to 1000 deg F

Application: Steam, Abrasion, High Temperatures, Fine Solids,

Slurry

Shut-Off: Class V, Class VI, Bubble Tight

O Seal – O Ring Sealed Seat



A double seal design providing both spring loading and excellent sealing capabilities. There is no area for media to build up behind the seat, which prevents the valve from locking up.

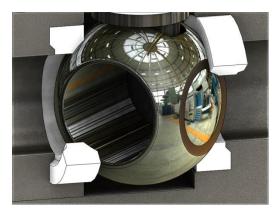
Temperature Range: --40 to 650 deg F

Application: Steam, Abrasion, Low Pressure Differentials, Fine

Solids, Emulsions

Shut-Off: Class V, Class VI, Bubble Tight

T Seat - Reinforced TFE Seat



The T Seat Style designates a soft seat material. There are many seat materials available with TFM being the standard option. A metal lip on the body and tailpiece provides fire safety and meets API 607 requirements.

Temperature Range: -20 to 450 deg F

Application: Steam, Low Pressure Differentials, Emulsions,

Nonabrasive Media

Shut-Off: Class VI, Bubble Tight



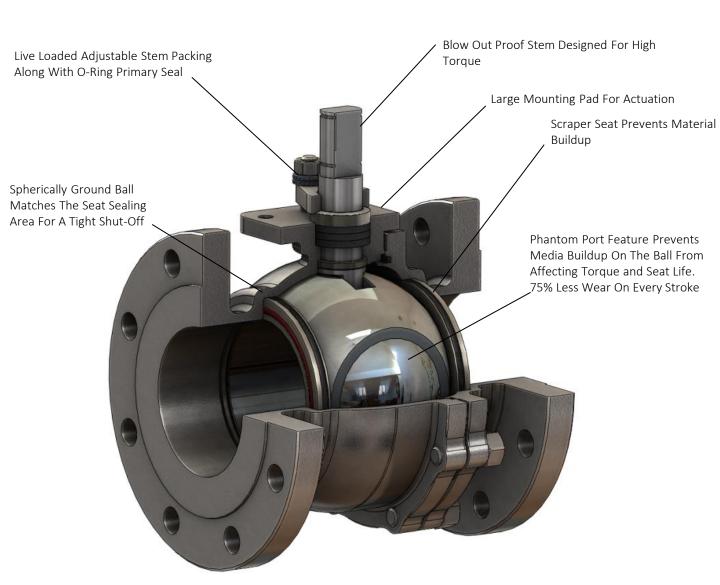
FEATURES

Reliable Shut-Off

- Tight shut-off is accomplished by grinding every ball to very tight tolerances and excellent finish, generating a true radius each individual seat to its mating ball, and then carefully lapping them together through our proven polishing process.
- Every valve that leaves the plant has both a hydrostatic, torque and cycle test, and seat leakage test performed on it.
- Standard Shut-Off is Class V. ISO 5208 Rate A,B,C and ANSI Class VI available As Options.

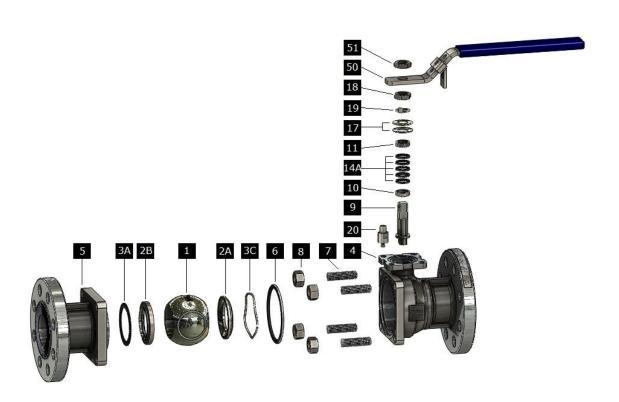
Quality

- Jarecki Valves is an ISO 9000 Company and quality is an important part of our culture
- In Metal Seat Valves, .003 Thousands of an inch can make all the difference in torque, shut-off and overall valve performance. Our quality system requires this.
- At Jarecki Valves, 95% of our business is metal seated ball valves. The employees understand and excel at producing the highest quality metal seated valves available.





BILL OF MATERIAL

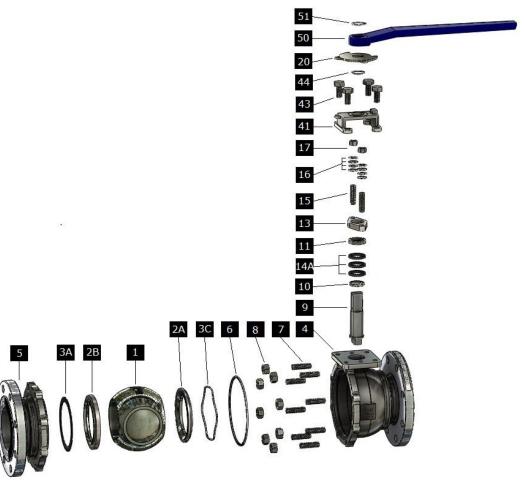


ITEM NO.	NAME	STAINLESS STEEL	CARBON STEEL	ALLOY 20	DUPLEX
1	BALL	316 W/ HARD CHROME*	316 W/ HARD CHROME*	ALLOY 20 W/ COLMONOY*	2205 W/ Tantalum Chrome Oxide *
2A	GUIDE SEAT (IF APPLICABLE)	316 W/ STELLITE HF*	316 W/ STELLITE HF*	ALLOY 20 W/ COLMONOY*	2205 W/ Tantalum Chrome Oxide *
2B	SEALING SEAT	316 W/ STELLITE HF*	316 W/ STELLITE HF*	ALLOY 20 W/ COLMONOY*	2205 W/ Tantalum Chrome Oxide *
3A	SEAT SEAL	TFE/Viton/Graphite	TFE/Viton/Graphite	TFE/Viton/Graphite	TFE/Viton/Graphite
3C	SEAT SPRING (IF APPLICABLE)	17-7 SST/ A286	17-7 SST/ A286	ALLOY 20	2205 DUPLEX SST
4	BODY	A351 CF8M	A216 WCB	A351 2 CN7M	A351 CD3MN
5	TAILPIECE	A351 CF8M	A216 WCB	A351 2 CN7M	A351 CD3MN
6	BODY GASKET	316sst w/ Graphite Filler*	316sst w/ Graphite Filler*	ALLOY 20 w/ Graphite Filler*	2205sst w/ Graphite Filler*
7	BODY STUD	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8
8	BODY NUT	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8
9	STEM	17-4SST/XM-19*	17-4SST/XM-19*	ALLOY 20*	2205 DUPLEX SST*
10	THRUST WASHER	Nitronic 60/TFE*	Nitronic 60/TFE*	STELLITE*	STELLITE*
11	COMPRESSION RING	316 SST	316 SST	ALLOY 20	2205 DUPLEX SST
14A	STEM PACKING	TFE/GRAPHITE	TFE/GRAPHITE	TFE/GRAPHITE	TFE/GRAPHITE
16	GLAND NUT	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8
17	BELLEVILLE WASHER	301 SST	301 SST	301 SST	301 SST
18	PACKING NUT	304 SST	304 SST	304 SST	304 SST
19	PACKING NUT LOCK	304 SST	304 SST	304 SST	304 SST
50	LEVER W/ LOCKING DEVICE	304 SST	304 SST	304 SST	304 SST
51	NUT	304 SST	304 SST	304 SST	304 SST

 $[\]ensuremath{^{*}}$ Other materials and coatings available upon request



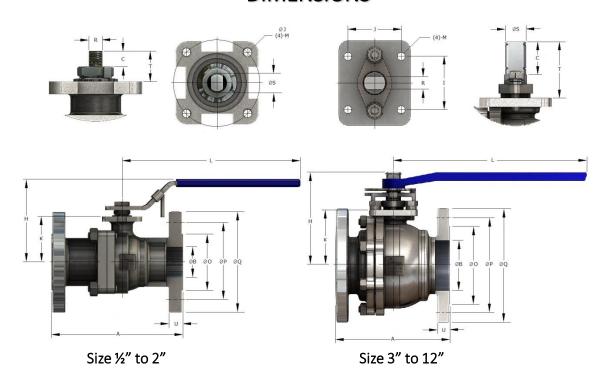
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2A	GUIDE SEAT (IF APPLICABLE)	316 W/ STELLITE HF*	316 W/ STELLITE HF*	ALLOY 20 W/ COLMONOY*	2205 W/ Tantalum Chrome Oxide *
2B	SEALING SEAT	316 W/ STELLITE HF*	316 W/ STELLITE HF*	ALLOY 20 W/ COLMONOY*	2205 W/ Tantalum Chrome Oxide *
3A	SEAT SEAL	TFE/Viton/Graphite	TFE/Viton/Graphite	TFE/Viton/Graphite	TFE/Viton/Graphite
3C	SEAT SPRING (IF APPLICABLE)	17-7 SST/ A286	17-7 SST/ A286	ALLOY 20	2205 DUPLEX SST
4	BODY	A351 CF8M	A216 WCB	A182 CN7M	A351 CD3MN
5	TAILPIECE	A351 CF8M	A216 WCB	A182 CN7M	A351 CD3MN
6	BODY GASKET	316sst w/ Graphite Filler*	316sst w/ Graphite Filler*	ALLOY 20 w/ Graphite Filler*	2205sst w/ Graphite Filler*
7	BODY STUD	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8
8	BODY NUT	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8
9	STEM	17-4SST/XM-19*	17-4SST/XM-19*	2205 DUPLEX SST*	2205 DUPLEX SST*
10	THRUST WASHER	Nitronic 60/TFE	Nitronic 60/TFE	STELLITE	STELLITE
11	COMPRESSION RING	316 SST	316 SST	ALLOY 20*	2205 DUPLEX SST*
13	COMPRESSION PLATE	304 SST	304 SST	304 SST	304 SST
14a	STEM PACKING	TFE/GRAPHITE	TFE/GRAPHITE	TFE/GRAPHITE	TFE/GRAPHITE
15	GLAND STUD	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8	ASTM A193 B8
16	BELLEVILLE WASHER	301 SST	301 SST	301 SST	301 SST
17	GLAND NUT	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8	ATM A194 Gr. 8
20	TRAVEL STOP	304 SST	304 SST	304 SST	304 SST
41	STOP HOUSING	304 SST	304 SST	304 SST	304 SST
43	BOLTS	304 SST	304 SST	304 SST	304 SST
44	SNAP RING	301 SST	301 SST	301 SST	301 SST
50	LEVER	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
51	SNAP RING	301 SST	301 SST	301 SST	301 SST



DIMENSIONS



ANSI 150# FULL PORT

SIZE	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
Α	4.25	4.61	5.00	5.50	6.50	7.00	7.85	8.00	9.00	14.00	15.50	18.00	21.00	24.00
ØВ	0.58	0.78	1.00	1.25	1.50	2.00	2.55	3.00	4.00	5.00	5.99	7.90	9.85	11.82
ØR	1.38	1.69	2.00	2.50	2.88	3.62	4.12	5.00	6.19	7.31	8.50	10.62	12.75	15.00
ØS	2.38	2.75	3.12	3.50	3.88	4.75	5.50	6.00	7.50	8.50	9.50	11.75	14.25	17.00
ØF	3.50	3.88	4.25	4.62	5.00	6.00	7.00	7.50	9.00	10.00	11.00	13.50	16.00	19.00
Cv	20	45	80	150	260	410	650	1000	1730	3650	5250	10075	15250	21500
WEIGHT	5	6	8	11	15	25	39	43	69	110	182	305	555	672

ANSI 300# FULL PORT

SIZE	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
Α	5.50	6.00	6.50	7.00	7.50	8.50	9.50	11.12	12.00	15.00	15.88	19.75	22.40	25.50
ØВ	0.58	0.78	1.00	1.25	1.50	1.98	2.55	2.99	3.99	5.00	5.98	7.88	9.85	11.82
ØR	1.38	1.69	2.00	2.50	2.88	6.32	4.12	5.00	6.19	7.31	8.50	10.62	12.75	15.00
ØS	2.62	3.25	3.50	3.88	4.50	5.00	5.88	6.62	7.88	9.25	10.62	13.00	15.25	17.75
ØF	3.75	4.62	4.88	5.25	6.12	6.50	7.50	8.25	10.00	11.00	12.50	15.00	17.50	20.50
Cv	15	40	75	140	255	405	645	990	1715	3500	5000	10000	15000	21000
WEIGHT	6	8	11	14	23	28	47	74	106	160	255	395	715	875

ANSI 150# REDUCED PORT

SIZE	6	8	10	12
Α	10.50	11.50	13.00	14.00
ØВ	5.98	7.88	9.85	11.82
ØR	8.50	10.62	12.75	15.00
ØS	10.62	13.00	15.25	17.75
ØF	12.50	15.00	17.50	20.50
Cv	1795	4835	10398	17852
WEIGHT	85	199	335	530

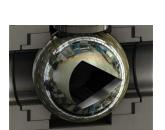
MOUNTING DIMENSIONS

SIZE	1/2 - 3/4"	1"	1 1/2" - 2"	2 1/2" - 4"	6"	8"	10 - 12"
Ø١	1.650	1.970	2.760	4.020	NA	NA	NA
J	NA	NA	NA	NA	3.370	3.370	4.530
1	NA	NA	NA	NA	3.370	3.370	4.530
С	0.320	0.430	0.550	1.750	1.610	1.610	2.130
T	0.550	0.750	0.910	3.070	3.580	3.580	3.860
ØS	0.366	0.429	0.618	1.102	1.713	1.713	1.969
R	0.250	0.315	0.374	0.669	1.024	1.024	1.378
M	#10-24	1/4 - 20	5/16-18	1/2 -13	1/2 -13	1/2 -13	5/8" -11
ISO	F04	F05	F07	F10	F12	F12	F16



OTHER BALL DESIGNS AVAILABLE





Patented Phantom Port

- Greatly extends valve life in corrosive applications
- Seat sealing area protected from flow media which adheres to the ball diameter
- Proven to last three times longer than a standard ball in difficult services
- 75% less wear on seats
- Excellent choice for Green and Black Liquor

V Port Control Valve

- Accurately Cut V-Port For Excellent Control
- Jarecki's V-Port Design Offers Great Rangeability
- Tight Stem To Ball Contact Provides A Valve With Very Low Hystersis
- •V-Port Ball Design Provides Both Excellent Shut-Off And Control

ORDERING INFORMATION

SIZE	- SERIES	PORT SIZE		SEAT	S	SEAT MATERIAL		BALL	BALI	LCOATING	BOD	ργ	- C	LASS	END	CONNECTION
1/2"	SV	F FULL	0	NONMETAL	В	Boronizing	Α	316SST	В	Boronizing	Α	CF8M	0	1 150#	В	FLANGED
TO		R REDUCED	1	O SEAT	С	COLMONOY	D	Inconel	С	CHROME	В	WCB	0	3 300#	D	BUTTWELD
12"			2	G SEAL	G	Graphite	F	Hastelloy	Ε	ENP	Н	Alloy 20				
			4	P SEAT	Μ	Tantalum	G	Incoloy	M	Tantalum	Χ	2205 SST				
			5	P SEAT		Chrome Oxide	Н	Alloy 20		Chrome Oxide						
				>750 F	Р	PEEK	-1	Monel	L	Colmonoy						
			7	G SEAL	R	CHROME CARBIDE	Χ	2205 SST	R	CHROME CARBIDE						
				Uni-Direction	S	STELLITE			S	STELLITE						
			9	P Seat	Т	TFE			Т	TFE						
				OD O-Ring	U	UHMWPE			w	TUNGSTEN CARBIDE						
					w	TUNGSTEN CARBIDE			О	no coating						

Example: 2" SV Series, Full Port, Spring Loaded Unidirectional Seats, Stellite Seats, 316ss Ball with Chrome Plating, CF8M body, 150# Flanged RF, 90 deg V Port

2 - SV F 4 S A C A - 01 B

