

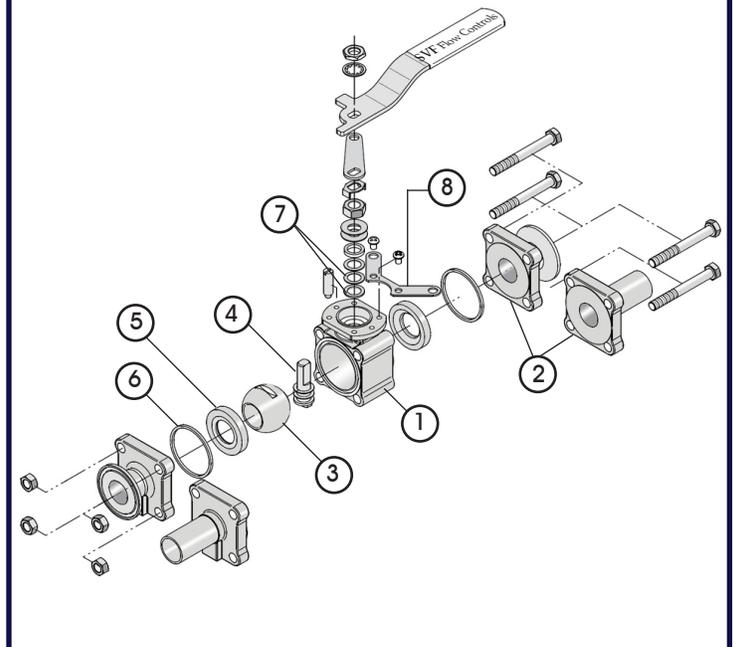
CleanFLOW™ SB7 ball valves are engineered to be a true process piping component to specifically meet the demanding processes found in the pharmaceutical and food & beverage industries. The "Tube-ID" port opening is dimensionally identical to the adjacent tubing to comply with ASME-BPE guidelines. The standard TFM1600™ seat material complies with 21CFR 177.1550.

### SERIES SB7 DESIGN FEATURES

- ✓ ASME-BPE compliant
- ✓ Silicone Free
- ✓ Cavity filled TFM1600™ seat option available
- ✓ Complete 316L Stainless Steel cast construction
- ✓ Drainable design with "Tube-ID" dimensions
- ✓ Weld bosses for easy purge porting on ends
- ✓ ISO 5211 mounting pad for easy actuation
- ✓ Encapsulated body seals to facilitate welding without disassembly
- ✓ End connections include Tri-Clamp and Extended Tube O.D.
- ✓ Controlled delta ferrite chemistry
- ✓ Chevron (V-Ring) Stem Seals assures low friction and leak tight performance (Sizes 2-1/2" ~ 4" only)
- ✓ Standard interior finish is 20Ra or better
- ✓ ETO ends are designed for Orbital Welding
- ✓ Exclusive "Fine Adjust" handle for precise positioning on sizes 1/2" ~ 2"
- ✓ Locking device is standard on 3" and 4" valves



The Series SB7 Ball Valve is available with additional options. Contact SVF for more information.



### MATERIALS OF CONSTRUCTION

ITEM #	DESCRIPTION	MATERIALS SPECIFICATIONS (Additional options available)
1	Body	316L Stainless Steel (ASTM A351 CF3MN)
2	End Connector	316L Stainless Steel (ASTM A351 CF3MN)
3	Ball	316L Stainless Steel (ASTM A351 CF3MN)
4	Stem	316L Stainless Steel (ASTM A351 CF3MN)
5	Seat	TFM1600™
6	Body Seal	PTFE/TFM1600™
7	Stem Seal	TFM1600™
8	Locking Device (Optional)	304 Stainless Steel

There are no elastomers used for any of the components on the SB7 valves. Only PTFE and TFM are used for seats and seals.

**What do you need today?™**

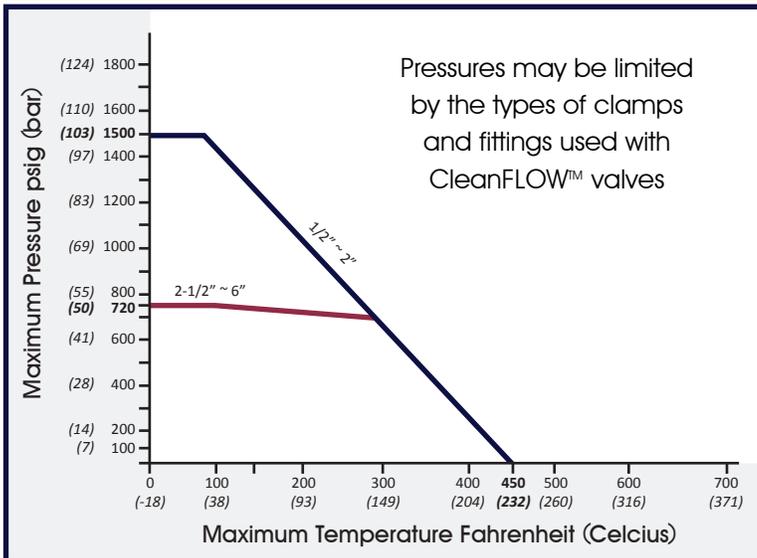
## Three-Piece CleanFLOW™ High Purity Ball Valve, Sizes 1/2" ~ 6"

**SB7**

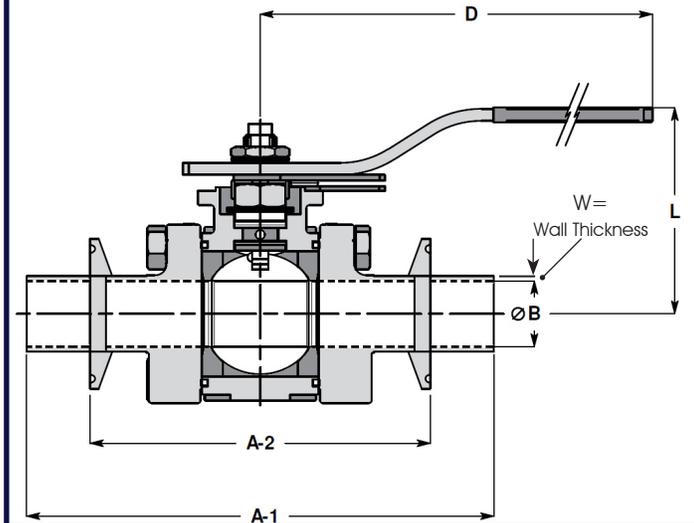
### DIMENSIONS, WEIGHT, Cv, TORQUE

Size	A-1		A-2		B		D		L		W		Weight		Cv	Torque*	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg		in-lbf	Nm
1/2"	5.50	140	3.50	89	0.37	9	5	114	2.22	56	0.065	1.7	2	0.9	8	60	7
3/4"	6.00	152	4.00	102	0.62	16	5	114	2.28	58	0.065	1.7	2	0.9	29	60	7
1"	6.50	165	4.50	114	0.87	22	6	146	2.56	65	0.065	1.7	4	1.8	66	100	11
1-1/2"	7.50	191	5.50	140	1.37	35	7	178	3.09	78	0.065	1.7	8	3.6	192	200	23
2"	8.00	203	6.25	159	1.87	47	7	178	3.45	88	0.065	1.7	13	5.9	434	250	28
2-1/2"	9.50	241	6.75	171	2.37	60	10	254	5.35	136	0.065	1.7	23	10.4	723	450	51
3"	10.50	267	7.00	178	2.87	73	14	348	6.55	166	0.065	1.7	31	14.1	1124	1300	147
4"	12.50	318	8.50	216	3.83	97	22	559	7.14	181	0.083	2.1	46	20.9	2100	1400	158
6"	16.00	406	17.00	432	5.78	147	26	660	12.00	305	0.109	2.8	196	88.5	4700	4160	470

### SB7 - PRESSURE/TEMPERATURE CHART



\* At full differential pressure for clean fluids with TFM1600™ Non-Cavity Filled Seats



**CSI** 417.831.1411  
csidesigns.com

## Three-Piece CleanFLOW™ High Purity Ball Valve, Sizes 1/2" ~ 6"

Ordering Code Sequence (Columns 1 thru 11)

1	2	3	4	5	6
SERIES	BODY	ENDS	BALL	STEM	SEAT MATERIAL
SB70 = Series SB7	6 = 316L Stainless Steel ASTM A351 CF3MN	6 = 316L Stainless Steel ASTM A351 CF3MN	6 = 316L Stainless Steel ASTM A351 CF3M	6 = 316L Stainless Steel ASTM A351 CF3M	A = TFM1600™  Q = TFM1600™ Cavity Filled

7	8	9	10	11
BODY SEAL	END CONNECTIONS	VALVE SIZE	OPTIONS*	SPECIAL SERVICES*
T = PTFE  A = TFM1600™ (6" Size Only)	TR0 = Tri-Clamp Ends  ETO = Extended Tube-OD Ends  JAA = Tri-Clamp End X Extended Tube-OD End (Tri-Clamp End is under the handle on manual valves)  JAH = Extended Tube-OD End X Tri-Clamp End (Extended Tube-OD End is under the handle on manual valves)	005 = 1/2"  007 = 3/4"  010 = 1"  015 = 1-1/2"  020 = 2"  025 = 2-1/2"  030 = 3"  040 = 4"  060 = 6"	00 = None OH = Oval Handle LK = Locking Device SX = ISO Cast Stem Extension BX = Bar Stem Extension AD = Anti-Static Device SC = Secondary Containment AA = Oval Handle & Locking Device AB = Oval Handle & ISO Cast Stem Extension AC = Locking Device & Anti-Static Device AG = ISO Cast Stem Extension & Locking Device JA = Oval Handle, ISO Cast Stem Extension & Locking Device JE = Locking Device, ISO Cast Stem Extension & Anti-Static Device	00 = None XC = Oxygen Cleaned EP = Electropolished HS = High Cycle Stem Kit (Sanitary Valve) VV = Vacuum & Searching Gas Stem Kit SA = 15Ra ID Finish SB = 10Ra ID Finish SC = 5Ra ID Finish AA = Electropolished & 15Ra ID Finish AB = Electropolished & 10Ra ID Finish AC = Electropolished & 5Ra ID Finish AD = Oxygen Cleaned & Electropolished JA = Electropolished, Oxygen Cleaned & 15Ra ID Finish JB = Electropolished, Oxygen Cleaned & 10Ra ID Finish

Order Example: (SB706666ATTR00050000) The Part Number will contain 20 digits.

Ordering Code Sequence >>	1	2	3	4	5	6	7	8	9	10	11
Sample Part Number >>	SB70	6	6	6	6	A	T	TR0	005	00	00
	Valve Series	Body Material	End Material	Ball	Stem	Seat Material	Body Seal	End Connections	Valve Size	Options*	Special Services*

\* Not all Options or Special Services available on all ball valves. Consult CSI for additional information.