## Series SB7 Ball Valve <br> Three-Piece CleanFLOW ${ }^{T M}$ High Purity Ball Valve

CleanFLOW ${ }^{T M}$ 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 latest ASME-BPE guidelines. All materials are compliant with FDA, USDA and 3A standards.

## SERIES SB7 DESIGN FEATURES

$\checkmark$ ASME-BPE compliant
$\checkmark$ Silicone Free
$\checkmark$ Cavity filled TFM1600 ${ }^{\text {rM }}$ seat option available
$\checkmark$ Complete 316L Stainless Steel cast construction
$\checkmark$ Drainable design with "Tube-ID" dimensions
$\checkmark$ Weld bosses for easy purge porting on ends
$\checkmark$ ISO 5211 mounting pad for easy actuation
$\checkmark$ Encapsulated body seals to facilitate welding without disassembly
End connections include Tri-Clamp and Extended Tube O.D.
$\checkmark$ Controlled delta ferrite chemistry
$\checkmark$ Chevron (V-Ring) Stem Seals assures low friction and leak fight performance (Sizes 2-1/2" ~ 4" only)
$\checkmark$ Standard interior finish is 15 Ra or better $\checkmark$ ETO ends are designed for Orbital Welding
$\sqrt{ }$ Exclusive "Fine Adjust" handlle for precise positioning on sizes 1/2" ~ 2"
$\checkmark$ Locking device is standard on $3^{\prime \prime}$ and 4 " valves

## MATERIALS OF CONSTRUCTION

| ITEM | DESCRIPTION | MATERIALS SPECIFICATIONS |
| :---: | :---: | :---: |
| 1 | Body | 316 L Stainless Steel (ASTM A351 CF3MN) |
| 2 | End <br> Connector | 316 L Stainless Steel (ASTM A351 CF3MN) |
| 3 | Ball | 316 L Stainless Steel (ASTM A351 CF3MN) |
| 4 | Stem | 316 L Stainless Steel (ASTM A351 CF3MN) |
| 5 | Seat | TFM1600im |
| 6 | Body Seal | PTFE, TFM1600'm |
| 7 | Stem Seal | TFM1600im |
| 8 | Locking Device <br> (Optional) | 304 Stainless Steel |



The Series SB7 Ball Valve is available with additional options.

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

# Series SB7 Ball Valve 

## DIMENSIONS, WEIGHT, Cv, TORQUE

| Size | A-1 |  | A-2 |  | B |  | D |  | L |  | W |  | Weight |  | Cv | Torque* Non-Cavity |  | Torque* Cavity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | Ibs | kg |  | in-llbf | Nm | 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 | 100 | 11 |
| $3 / 4{ }^{\prime \prime}$ | 6.00 | 152 | 4.00 | 102 | 0.62 | 16 | 5 | 114 | 2.28 | 58 | 0.065 | 1.7 | 2 | 0.9 | 29 | 60 | 7 | 140 | 16 |
| 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 | 210 | 24 |
| 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 | 490 | 55 |
| 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 | 520 | 59 |
| 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 | 900 | 102 |
| $3 "$ | 10.50 | 267 | 7.00 | 178 | 2.87 | 73 | 16 | 348 | 6.55 | 166 | 0.065 | 1.7 | 31 | 14.1 | 1124 | 1300 | 147 | 1400 | 158 |
| 4" | 12.50 | 318 | 8.50 | 216 | 3.83 | 97 | 16 | 559 | 7.14 | 181 | 0.083 | 2.1 | 46 | 20.9 | 2100 | 1400 | 158 | 1500 | 170 |
| $6 "$ | 16.00 | 406 | 17.00 | 432 | 5.78 | 147 | 30 | 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


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# Series SB7 Ball Valve 

Three-Piece CleanFLOW ${ }^{m}$ High Purity Ball Valve<br>Sizes 1/2" ~ $6^{" \prime}$

How To Order Guide (Columns 1 thru 11)

| $\begin{gathered} 1 \\ \text { SERIES } \end{gathered}$ | $\begin{gathered} 2 \\ \mathrm{BODY} \end{gathered}$ | $\begin{gathered} 3 \\ \text { ENDS } \end{gathered}$ | $\begin{gathered} 4 \\ \text { BALL } \end{gathered}$ | $\begin{gathered} 5 \\ \text { STEM } \end{gathered}$ | SEAT MATERIAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SB70 | $6=316$ Stainless Steel ASTM A351 CF3MN | $6=316$ Ltainless Steel ASTM A351 CF3MN | $6=316 \mathrm{~L}$ Stainless Steel ASTM A351 CF3M | $6=316$ L Stainless Steel ASTM A351 CF3M | $\begin{aligned} & A=\text { TFM } 1600^{\mathrm{T}} \mathrm{M} \\ & Q=\text { TFM } 1600^{\mathrm{TM}} \\ & \text { Cavity Filled } \end{aligned}$ |


| $\begin{gathered} 7 \\ \text { BODY SEAL } \end{gathered}$ | $8$ <br> END CONNECTIONS | $9$ <br> VALVE SIZE | 10 <br> OPTIONS* | $11$ <br> SPECIAL SERVICES* |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { T = PTFE } \\ & \text { A = TFM1600M } \\ & \text { (Size 6" only) } \end{aligned}$ | TRO = Tri-Clamp Ends <br> ETO = Extended Tube-OD <br> Ends <br> JAH = Extended Tube-OD <br> End X Tri-Clamp End <br> (Extended Tube-OD End <br> is under the handle on manual valves) <br> $J A A=$ Tri-Clamp End $X$ Extended Tube-OD End (Tri-Clamp End is under the handle on manual valves) | $\begin{aligned} & 005=1 / 2^{\prime \prime} \\ & 007=3 / 4^{\prime \prime} \\ & 010=1^{\prime \prime} \\ & 015=1-1 / 2^{\prime \prime} \\ & 020=2^{\prime \prime} \\ & 025=2-1 / 2^{\prime \prime} \\ & 030=3^{\prime \prime} \\ & 040=4^{\prime \prime} \\ & 060=6^{\prime \prime} \end{aligned}$ | $00=$ None <br> LK = Locking Device <br> $\mathrm{OH}^{* *}=$ Oval Handle <br>  <br> Locking Device <br>  <br> Anti-Static Device <br> AG = ISO Stem Extension <br> \& Locking Device <br> JA = Oval Handle, <br> ISO Stem Extension <br> \& Locking Device <br> $\mathrm{JB}=$ Oval Handle, <br> ISO Stem Extension <br> \& Anti-Static Device <br> $\mathrm{JE}=$ Locking Device, <br> ISO Stem Extension <br> \& Anti-Static Device <br> SX = ISO Stem Extension <br> AD = Anti-Static Device | 00 = None <br> XC = Oxygen Cleaned <br> EP = Electropolished <br> SB = 10Ra ID Finish <br>  <br> 10Ra ID Finish <br>  <br> Electropolished <br> $\mathrm{JB}=$ Electropolished, <br>  <br> 10Ra ID Finish |

Order Example: (SB706666ATETO0050000) The Part Number will contain 20 digits.

*Not all Options or Special Services available on all ball valves. Consult SVF for additional information.
**Oval handles are only available up to size 2"
Note: Self cleaning option, available upon request
SVF Flow Controls • 5595 Fresca Drive • La Palma, CA 90623 • Tel: 800.783.7836 • Sales@SVF.net 10Specifications subject to change w/o notice. All Data Sheets on our website supersede prior publications • (SVF.SB7. 1022)


[^0]:    Class 600 (Sizes: 1/2" to 2")
    Class 300 (Sizes: 2-1/2" to 6")

