

## Three-Piece Forged Brass Ball Valve, Sizes 1/4" ~ 2"

# R81

The SVF Series R81 Standard Port Ball Valves represent the next generation in design and performance. These process-quality, high performance valves have been engineered and manufactured to meet all of the industry standards for quality and performance.

### SERIES R81 DESIGN FEATURES

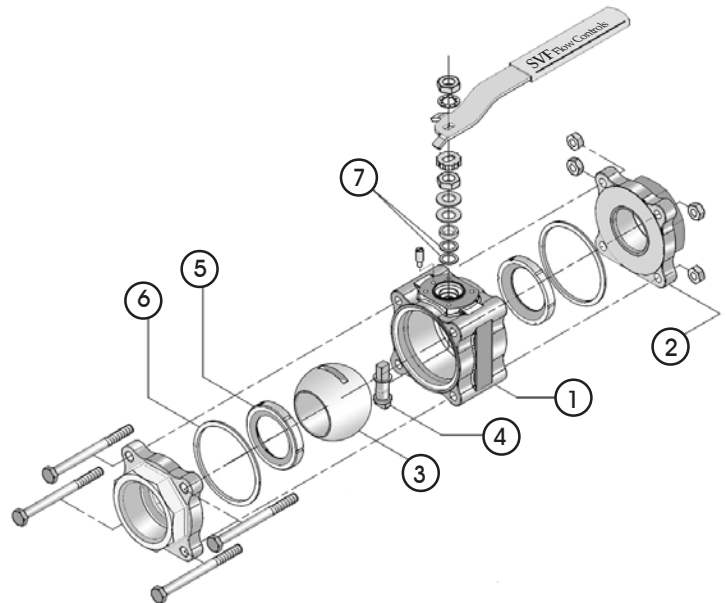
- ✓ High performance design for process-quality applications
- ✓ Encapsulated body seals to facilitate welding without disassembly
- ✓ Live-loaded stem packing ensures seal-tight pressure containment even under thermal cycling
- ✓ Three-piece "swing out" design offers easy access for in-line maintenance
- ✓ ISO 5211 mounting pad for easy actuation
- ✓ Standard seat material is TFM1600™
- ✓ Blowout proof stem adds safety & reliability
- ✓ Stainless Steel externals - hardware, stem and handle
- ✓ 316 Stainless Steel Ball and Stem



The Series R81 Ball Valve is available with additional options. Contact SVF for more information.

### MATERIALS OF CONSTRUCTION

ITEM	DESCRIPTION	MATERIALS SPECIFICATIONS (Additional options available)
1	Body	Forged Brass (ASTM B283 C3770)
2	End Connector	Forged Brass (ASTM B283 C3770)
3	Ball	316 Stainless Steel (ASTM A351 CF8M)
4	Stem	316 Stainless Steel (ASTM A276)
5	Seat	TFM1600™, Delrin®, UHMWPE, SupraLon™
6	Body Seal	PTFE, Buna "N", SupraLon™, UHMWPE, Viton®, EPDM
7	Stem Seal	SupraLon™



### SPECIFICATION STANDARDS OF COMPLIANCE

SVF Series R81 Ball Valves are available in designs that meet the following Industry Standards:

- ANSI
- DIN
- BPE
- ASME
- ISO
- NACE
- API
- MSS
- ASTM

Contact SVF for specific applications

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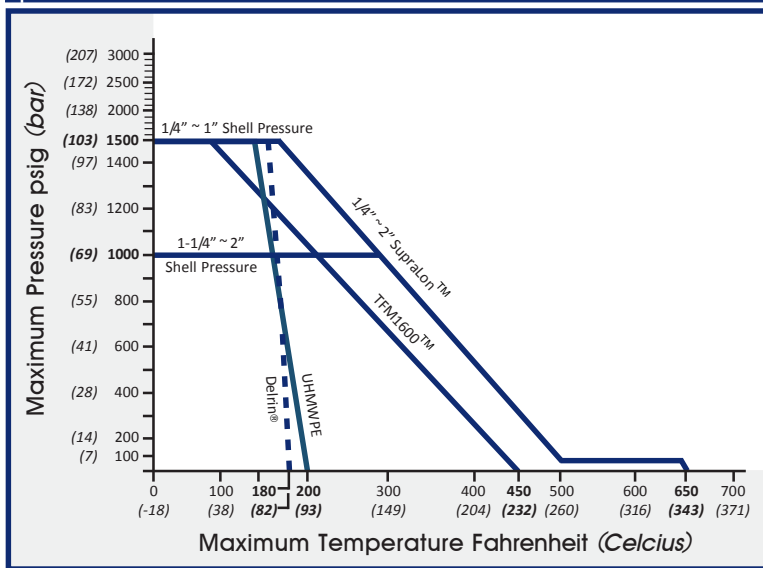
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**R81**

### DIMENSIONS, WEIGHT, C<sub>v</sub>, TORQUE

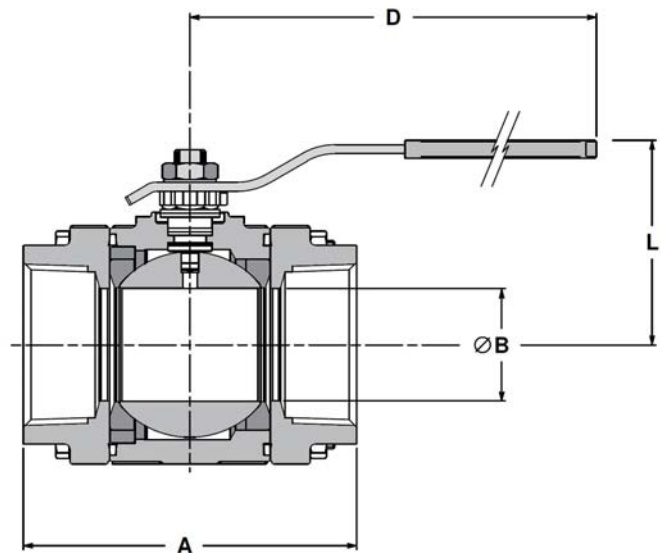
Size	A		B		D		L		Weight.		C <sub>v</sub>	Torque**	
	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg		in-lb <sub>f</sub>	Nm
1/4" *	2.60	66	0.44	11	5	127	1.8	46	2	0.9	3	45	5
3/8" *	2.60	66	0.44	11	5	127	1.8	46	2	0.9	5	45	5
1/2"	2.60	66	0.44	11	5	127	1.8	46	2	0.9	8	45	5
3/4"	2.81	71	0.56	14	5	127	1.9	48	2	0.9	12	45	5
1"	3.70	94	0.81	21	6	152	2.4	61	4	1.8	32	100	11
1-1/4"	4.25	108	1.00	25	6	152	2.6	66	5	2.3	57	130	15
1-1/2"	4.57	116	1.25	32	7	178	3.2	81	7	3.2	80	280	32
2"	5.04	128	1.50	38	7	178	3.3	84	11	5.0	104	360	41

### R81 - PRESSURE/TEMPERATURE CHART



\* 1/4" and 3/8" are Full Port

\*\* At full differential pressure for clean fluids with TFM1600™ Seats



### HOW TO ORDER SERIES R81 BALL VALVES

SERIES	BODY & END MATERIAL	BALL & STEM MATERIAL	SEAT	BODY SEAL	ENDS	SIZE
R8 = Standard Port	11 = Forged Brass ASTM B283 C3770	66 = 316 Stainless Steel ASTM A351 CF8M Ball A276 316 Stem	A = TFM1600™ D = Delrin® U = UHMWPE S = SupraLon™	T = PTFE B = Buna "N" S = SupraLon™ U = UHMWPE V = Viton® E = EPDM	SE = Screwed Ends (FNPT) TE = Sweat Ends	02 = 1/4"* 03 = 3/8"* 05 = 1/2" 07 = 3/4" 10 = 1" 12 = 1-1/4" 15 = 1-1/2" 20 = 2"
<b>Order Example: (R81166ATSE05)</b> <b>Example Description: Forged Brass Body &amp; Ends, 316 Stainless Steel Ball &amp; Stem, TFM1600™ Seat, PTFE Body Seal, Screwed Ends (FNPT), 1/2" Size</b>						<div style="border: 1px solid black; padding: 2px; display: inline-block;">                     *1/4" and 3/8" are Full Port                 </div>
R8	11	66	A	T	SE	05