

Series R88/89 Ball Valve

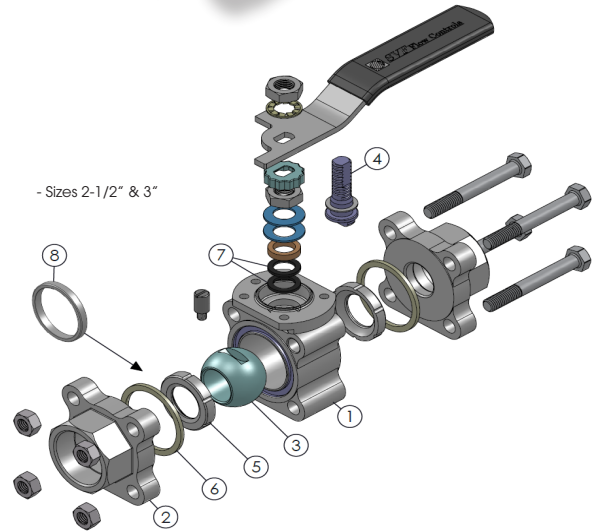
Three-Piece Ball Valve, Standard Port
 Sizes 1/4" ~ 3"



The SVF Series R89 Ball Valve is part of our family of exotic alloy products designed for demanding applications. This process-quality, high performance valve engineered and manufactured to meet applications requiring all wetted metal parts to be Hastelloy or Alloy 20.

SERIES R88/89 DESIGN FEATURES

- ✓ High performance design for process-quality applications
- ✓ Encapsulated body seals to facilitate welding without disassembly
- ✓ Live-loaded stem seal 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 valves have 316L ends
- ✓ Full range of options to suit specific requirements
- ✓ All wetted parts are either 100% Hastelloy (ASTM A494, CW-12MW) or Alloy 20 (CN7M)



MATERIALS OF CONSTRUCTION

ITEM	DESCRIPTION	MATERIALS SPECIFICATIONS
1	Body	Hastelloy C276 (ASTM A494, CW-12MW) Alloy 20 (ASTM A351-CN7M)
2	End Connector	Hastelloy C276 (ASTM A494, CW-12MW) Alloy 20 (ASTM A351-CN7M)
3	Ball	Hastelloy C276 (ASTM A494, CW-12MW) Alloy 20 (ASTM A351-CN7M)
4	Stem	Hastelloy C276 (ASTM A494, CW-12MW) Alloy 20 (ASTM A351-CN7M)
5	Seat	TFM1600™, Delrin®, SupraLon™, UHMWPE
6	Body Seal	PTFE, Buna "N", GRAFOIL®, SupraLon™, UHMWPE, Viton®, EPDM
7	Stem Seal	SupraLon™, TFM1600™ (Optional)
8	Retainer Sizes 2-1/2" & 3"	Hastelloy C276 (ASTM A494, CW-12MW) Alloy 20 (ASTM A351-CN7M)

R88 / 89 MEDIA APPLICATIONS

- Oxidizers such as ferric and cupric chlorides
- Hot contaminated media (organic and inorganic)
- Chlorine
- Formic and acetic acids
- Acetic anhydride
- Seawater and brine solutions
- Wet chlorine gas
- Hypochlorite and chlorine dioxide
- See our corrosion guide for more info

NOTE: Seat materials will limit some applications.
 Consult SVF for specific applications

What do you need today?™



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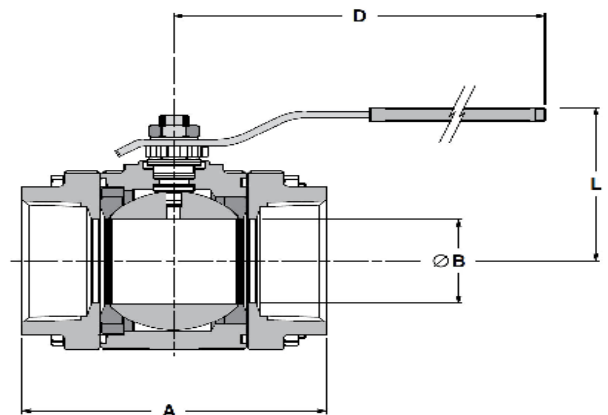
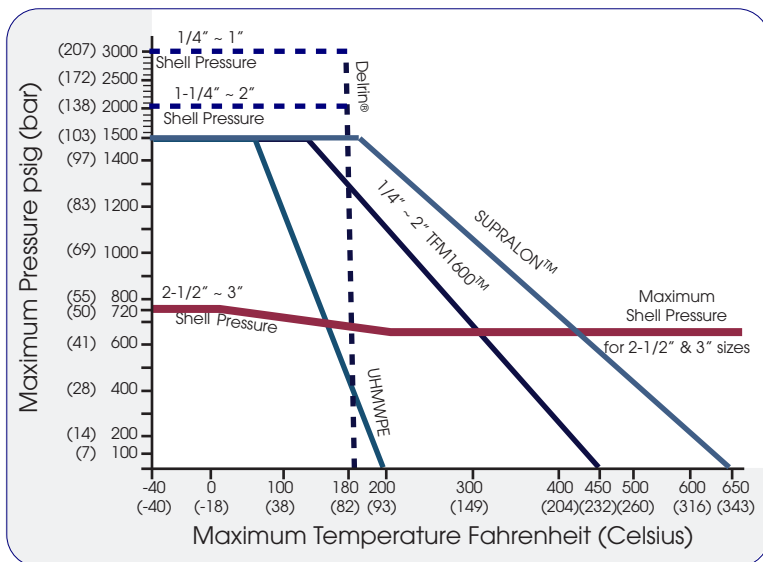
DIMENSIONS, WEIGHT, CV, TORQUE

Size	A		B		D		L		Weight		Cv	Torque** TFM1600™		Torque** SupraLon™		Torque** Delrin		Torque** UHMWPE		Torque** PEEK	
	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg		in-lbf	Nm	in-lbf	Nm	in-lbf	Nm	in-lbf	Nm	in-lbf	Nm
1/4" *	2.60	66	0.44	11	5	127	1.8	46	2	0.9	3	45	5	50	6	50	6	50	6	61	7
3/8" *	2.60	66	0.44	11	5	127	1.8	46	2	0.9	5	45	5	50	6	50	6	50	6	61	7
1/2"	2.60	66	0.44	11	5	127	1.8	46	2	0.9	8	45	5	50	6	50	6	50	6	61	7
3/4"	2.81	71	0.56	14	5	127	1.9	48	2	0.9	12	45	5	50	6	60	7	75	8	130	15
1"	3.70	94	0.81	21	6	152	2.4	61	4	1.8	32	100	11	150	17	90	10	100	11	250	28
1-1/4"	4.25	108	1.00	25	6	152	2.6	66	5	2.3	57	130	15	175	20	300	34	150	17	295	33
1-1/2"	4.57	116	1.25	32	7	178	3.2	81	7	3.2	80	280	32	450	51	375	42	175	20	450	51
2"	5.04	128	1.50	38	7	178	3.3	84	11	5.0	104	360	41	600	68	675	76	275	31	650	73
2-1/2"	5.95	151	2.00	51	11	279	3.4	86	17	7.7	240	560	63	925	105	-	-	-	-	-	-
3"	6.68	170	2.50	64	14	356	7.3	185	30	13.6	320	1000	113	1500	170	-	-	-	-	-	-

* 1/4" and 3/8" End Connections are Full Port

** At full differential pressure for clean fluids

R88/89 - PRESSURE/TEMPERATURE CHART



Class 1500 (Sizes: 1/4" to 1")

Class 900 (Sizes: 1" to 2")

Class 300 (Sizes: 2-1/2" to 3")

Note: Maximum pressure & temperature is limited to the seat material rating

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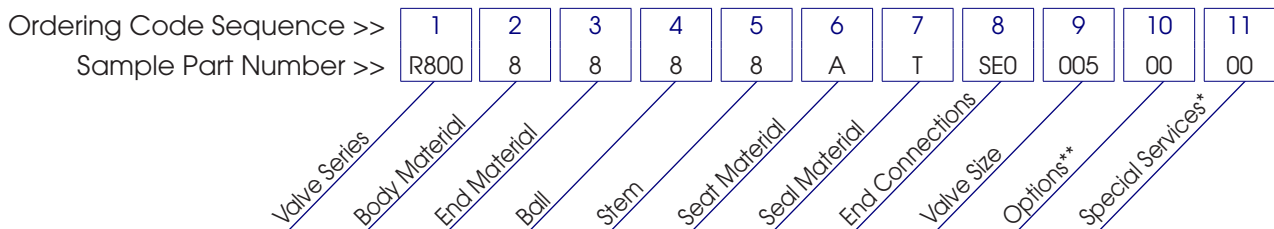


How To Order Guide (Columns 1 thru 11)

1 SERIES	2 BODY	3 ENDS	4 BALL	5 STEM	6 SEAT MATERIAL
R800*	8 = Alloy 20 ASTM A351-CN7M 9 = Hastelloy C276 ASTM A494 CW12MW	8 = Alloy 20 ASTM A351-CN7M 9 = Hastelloy C276 ASTM A494 CW12MW	8 = Alloy 20 ASTM A351-CN7M 9 = Hastelloy C276 ASTM A494 CW12MW	8 = Alloy 20 ASTM A351-CN7M 9 = Hastelloy C276 ASTM A494 CW12MW	A = TFM1600™ D = Delrin*** (1/4" - 2") S = SupraLon™ U = UHMWPE

7 BODY SEAL	8 END CONNECTIONS	9 VALVE SIZE	10 OPTIONS**	11 SPECIAL SERVICES**
T = PTFE B = Buna "N" G = GRAFOIL U = UHMWPE V = Viton E = EPDM S = SupraLon™	SEO = Threaded Ends (FNPT) SW0 = Socket Weld Ends BW0 = Butt Weld Ends Schedule 40 wall (Standard) AAA = Threaded End X Socket Weld End AAB = Threaded End X Butt Weld (Sch-40) End AAD = Threaded End X Butt Weld (Sch-10) End Butt Weld Ends: BWA = Schedule 5 BWB = Schedule 10 BWC = Schedule 80	002 = 1/4" (Full Port) 003 = 3/8" (Full Port) 005 = 1/2" 007 = 3/4" 010 = 1" 012 = 1-1/4" 015 = 1-1/2" 020 = 2" 025 = 2-1/2" 030 = 3"	00 = None OH = Oval Handle LK = Locking Device SX = ISO Cast Stem Extension AD = Anti-Static Device 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 JB = Oval Handle, ISO Cast Stem Extension & Anti-Static Device JE = Locking Device, ISO Cast Stem Extension & Anti-Static Device	00 = None XC = Oxygen Cleaned SF = Degreased (Silicone Free) UH = Vent/Relief Hole ¹ AS = Ammonia Service HC = High Cycle Stem Kit VV = Vacuum & Searching Gas Stem Kit

Order Example: (R8008888ATSE00050000) The Part Number will contain 20 digits.



¹ Vent Hole is on the Upstream Side

*Use Ordering Code R8A0 for TFM1600™ stem seals.

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

***Delrin Seats cannot be used for Oxygen Service