

# Series SMC9 Ball Valve

CleanFLOW™ Multi-Ported High Purity Ball Valve  
 Sizes 1/2" ~ 4"

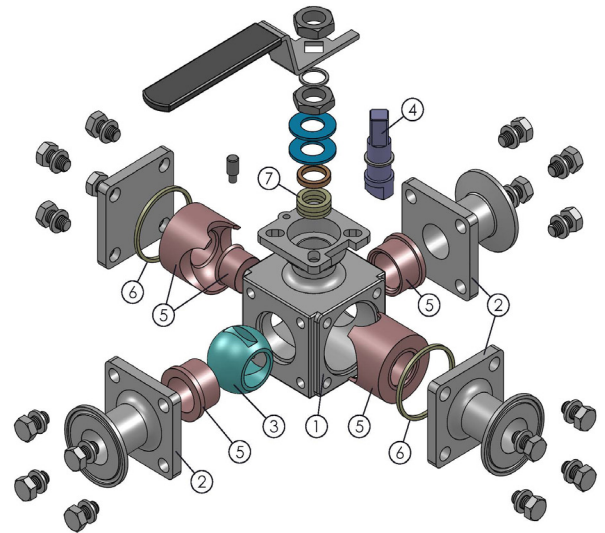


CleanFLOW™ SMC9 high purity ball valves are available in a multi-port design to satisfy a wide range of flow control applications. The SMC9 ball valve features a selection of flow patterns with "L" or "T" ball configuration as well as an ISO 5211 direct mounting pad for easy actuation. The "Tube-ID" 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 SMC9 DESIGN FEATURES

- ✓ ASME-BPE compliant
- ✓ Silicone Free
- ✓ Cavity filled TFM1600™ seat standard
- ✓ Complete 316 Stainless Steel construction
- ✓ Drainable design with "Tube-ID" dimensions
- ✓ ISO 5211 mounting pad for direct mounting
- ✓ Encapsulated body seals to facilitate welding without disassembly
- ✓ End connections include Tri-Clamp and Extended Tube O.D.
- ✓ Controlled delta ferrite chemistry
- ✓ Standard interior finish is 20Ra or better
- ✓ ETO ends are designed for Orbital Welding
- ✓ Four seat design provides isolation in all positions
- ✓ Standard Locking device



## MATERIALS OF CONSTRUCTION

ITEM	DESCRIPTION	MATERIALS SPECIFICATIONS
1	Body	316 Stainless Steel (ASTM A351 CF8M)
2	End Connector	ETO 316L Stainless Steel (ASTM A351 CF3M) TR0 316 Stainless Steel (ASTM A351 CF8M)
3	Ball	316L Stainless Steel (ASTM A351 CF3M)
4	Stem	316 Stainless Steel (AISI 316)
5	Seat	TFM1600™
6	Body Seal	PTFE
7	Stem Seal	PTFE

The Series SMC9 Ball Valve is available with additional options.

There are no elastomers used for any of the components on the SMC9 valves.  
 Only PTFE and TFM are used for seats and seals.



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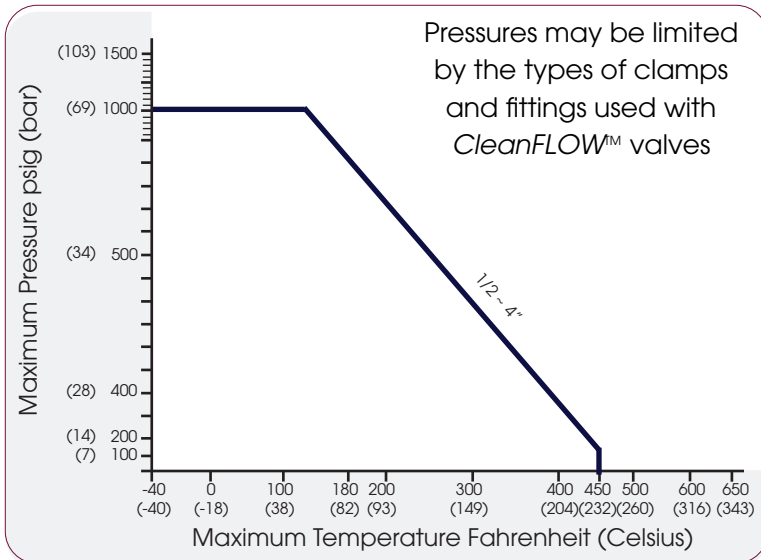
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## DIMENSIONS, WEIGHT, Cv, TORQUE

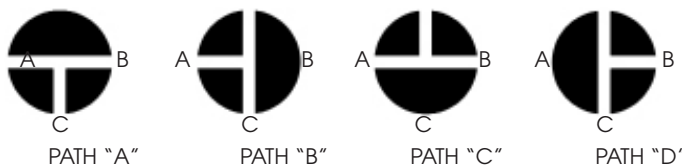
Size	A-1		A-2		B-1		B-2		ØB		D		L		W		Weight		Cv	Torque* Cavity	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg		in-lbf	Nm
1/2"	4.65	118	4.65	118	2.33	59	2.33	59	0.37	9	4.76	121	2.93	74	0.065	1.7	2	1.1	9	79	9
3/4"	5.00	127	5.00	127	2.50	63	2.50	63	0.62	15	4.76	121	3.21	81	0.065	1.7	3	1.3	26	85	10
1"	6.50	152	6.00	152	3.00	76	3.00	76	0.87	22	5.39	137	3.46	88	0.065	1.7	5	2.5	61	110	12
1-1/2"	6.89	175	6.89	175	3.45	87	3.45	87	1.38	35	7.17	182	4.07	103	0.065	1.7	10	4.7	193	290	33
2"	7.48	190	7.48	190	3.74	95	3.74	95	1.87	47	7.17	182	4.42	112	0.065	1.7	15	6.8	432	425	48
2-1/2"	8.98	228	8.89	228	4.49	114	4.49	114	2.37	60	14.57	370	4.42	112	0.065	1.7	27	12.1	728	1085	123
3"	10.26	260	10.26	260	5.13	130	5.13	130	2.87	73	15.75	400	5.08	129	0.065	1.7	36	16.1	1125	1597	180
4"***	11.50	290	11.50	290	5.75	145	5.75	145	3.83	97	15.75	400	5.28	134	0.083	2.1	54	24.4	1986	1780	201

## SMC9 - PRESSURE/TEMPERATURE CHART

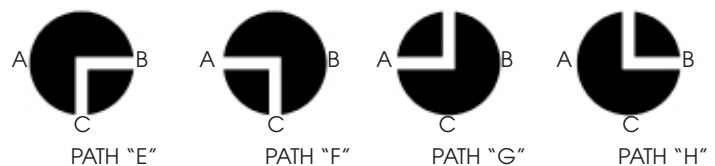


Class 300 (Sizes: 1/2" to 4")

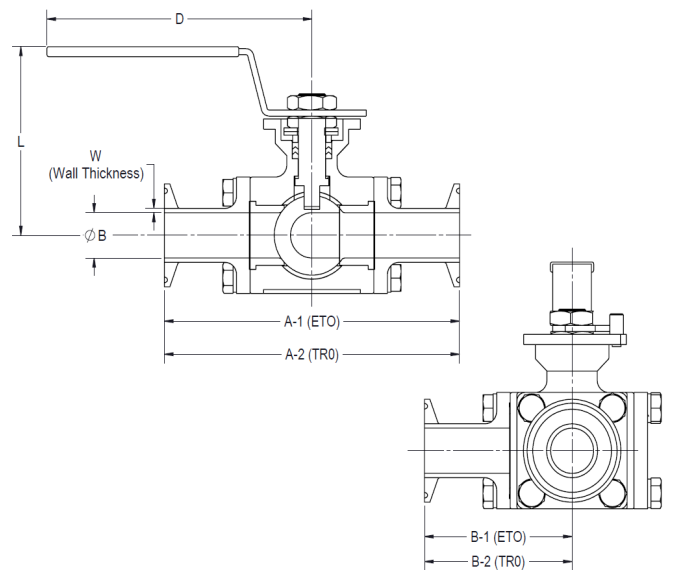
### T-PORT FLOW PATHS:



### L-PORT FLOW PATHS:



\* At full differential pressure for clean fluids  
 \*\* 4" is reduced port



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How To Order Guide (Columns 1 thru 11)

1	2	3	4	5	6
SERIES	BODY	ENDS	BALL	STEM	SEAT MATERIAL
SMC9	6 = 316L Stainless Steel ASTM A351 CF3M	6 = 316L Stainless Steel ASTM A351 CF3M	6 = 316L Stainless Steel ASTM A351 CF3M	6 = 316 Stainless Steel AISI 316	Q = TFM1600™ Cavity Filled

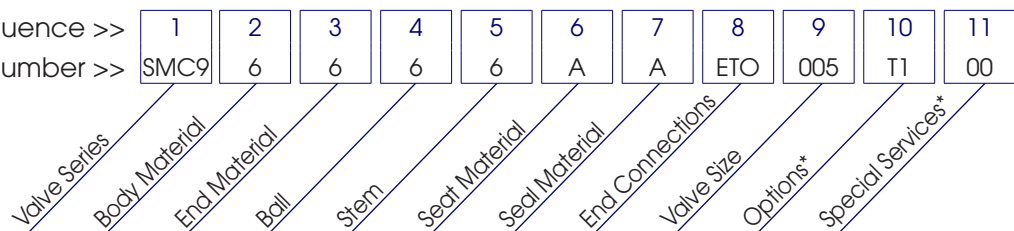
  

7	8	9	10	11
BODY SEAL	END CONNECTIONS	VALVE SIZE	OPTIONS*	SPECIAL SERVICES*
T = PTFE	TR0 = Tri-Clamp Ends  ETO = Extended Tube-OD Ends	005 = 1/2"  007 = 3/4"  010 = 1"  015 = 1-1/2"  020 = 2"  025 = 2-1/2"  030 = 3"  040 = 4"	T1 = T-Port Ball L1 = L-Port Ball	00 = None XC = Oxygen Cleaned EP = Electropolished SB = 10Ra ID Finish SC = 5 Ra ID Finish AA = Electropolished & 15Ra ID Finish AB = Electropolished & 10Ra ID Finish AD = Oxygen Cleaned & Electropolished JA = Electropolished, Oxygen Cleaned & 15Ra ID Finish JB = Electropolished, Oxygen Cleaned & 10Ra ID Finish

Order Example: (TSMC96666ATETO005T100) The Part Number will contain 21 digits.

Ordering Code Sequence >>

Sample Part Number >>



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