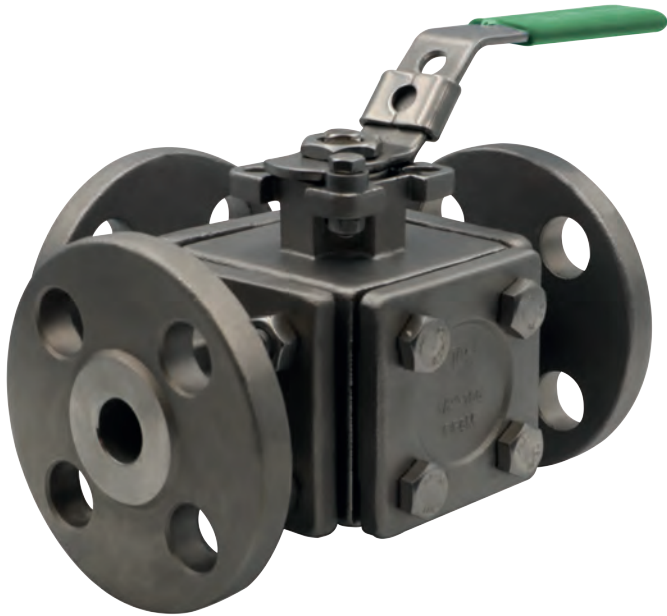


Features / Design



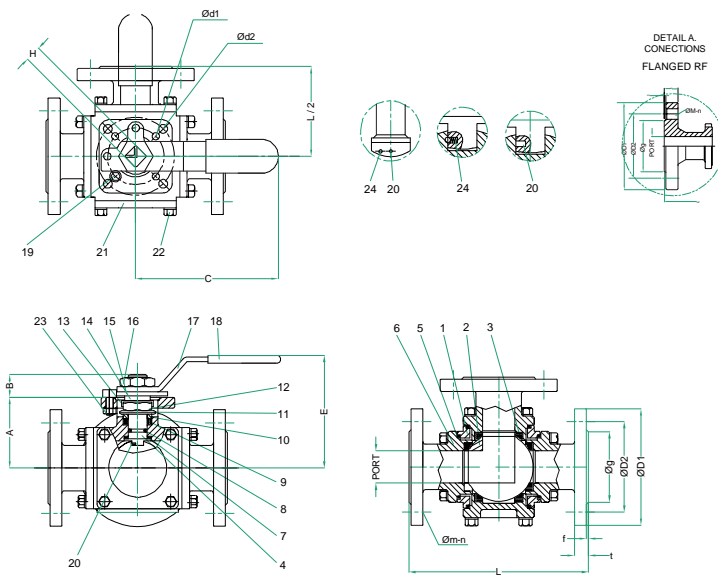
- 1.- **Direct Mount High Performance Multi Port 3-Way Flanged Ball Valve** – “L”Port / “T” Port.
- 2.- **Four Seats design.** Floating ball valve (1/4” to 2”), Trunnion design (2 1/2” to 12”).
- 3.- **Full port**, minimizes pressure drop and prolong life.
- 4.- Investment cast body construction (6” to 12” in sand casting).
- 5.- **ISO 5211 Mount Pad** allows direct mounting of pneumatic and electric actuators (no brackets and coupling are required). Easy and low cost for automated service.
- 6.- Live loaded and adjustable stem packing.
- 7.- **Anti-Static Device** (ball to stem) as standard & **Blow-Out proof stem**.
- 8.- Wide range of materials available.

For valve: ASTM A351 Gr. CF8M, WCB, CF3M, etc.

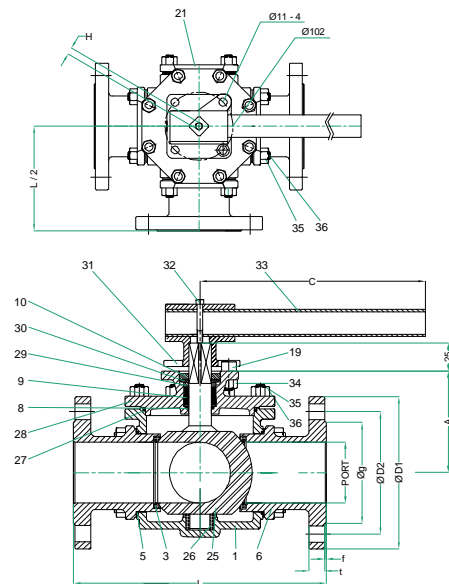
Seats: PTFE, RPTFE, TFM 1600, Carbon Filled PTFE, 50/50 SS Filled PTFE, UHMWPE... and others.

- 9.- Inspection and testing according to API 598.
- 10.- Ends Flanged RF according to ASME B16.5.
- 11.- Manufactured in ISO 9001 approved facility.

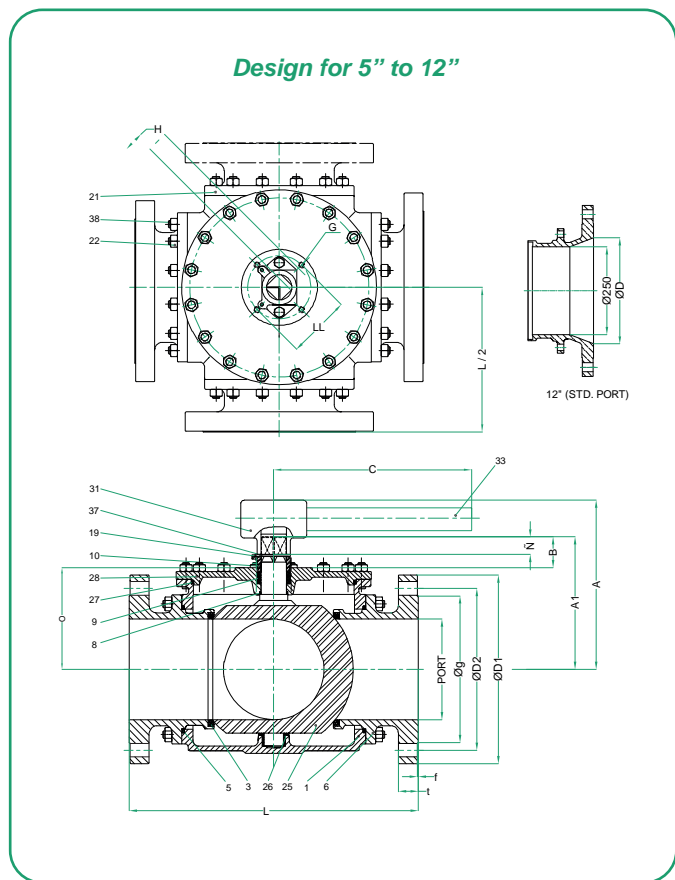
Design for 1/2” to 2”



Design for 2 1/2” to 4”



Material List



NO.	DESCRIPTION	MATERIAL
1	BODY	A216 WCB / A351 CF8M
2	BALL	A351 CF8M
3	SEAT	PTFE
4	STEM	SS316
5	GASKET	PTFE
6	FLANGE END	A216 WCB / A351 CF8M
7	STEM SEAL	R-PTFE
8	O-RING	VITON
9	STEM PACKING	GRAPHITE
10	GLAND	SS304
11	BELLEVILLE WASHER	SS301
12	STEM NUT	SS304
13	NUT STOP	SS304
14	SPACE WASHER	SS304
15	PLATER	SS304
16	HANDLE NUT	SS304
17	HANDLE	SS304
18	HANDLE SLEEVE	VINYL
19	STOP PIN	SS304
20	INSERT PIN	SS316
21	BLANK END	A216 WCB / A351 CF8M
22	BOLT	SS304
23	PIN NUT	SS304
24	ANTISTATIC DEVICE	SS316
25	BALL & STEM	A351 CF8M
26	HOUSING	PTFE + STAINLESS
27	BONNET GASKET	PTFE
28	BONNET	A351 CF8M
29	GLAND WASHER	SS304
30	DISC WASHER	SS301
31	HANDLE HEAD	A351 CF8M
32	BOLT	SS304
33	LEVER	CARBON STEEL
34	STOP PIN NUT	SS304
35	CONNECTION BOLTS	SS304
36	BOLTS NUTS	SS304
37	STOP RING	SS304
38	NUT	-

Dimensions (inches)

ANSI 150#

SIZE	A	A1	B	C	d1	d2	E	F	G	H	PORT	L	N	LL	G	O	ISO 5211	D1	D2	g	t	f	M	N	
	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)		(in)	(in)	(in)	(in)	(in)	(in)	(in)	
1/2"	1.614	/	0.433	5.118	0.236	0.236	2.441	1.417	1.654	0.354	0.591	5.984	/	/	/	/	/	3.504	2.382	1.378	0.441	0.063	0.630	4	
3/4"	1.929	/	0.551	6.496	0.236	0.280	3.228	1.654	1.969	0.433	0.787	6.575	/	/	/	/	/	3.858	2.756	1.693	0.441	0.063	0.630	4	
1"	2.165	/	0.709	6.496	0.236	0.280	3.504	1.654	1.969	0.433	0.984	7.480	/	/	/	/	/	4.252	3.130	2.008	0.441	0.063	0.630	4	
1 1/4"	2.480	/	0.709	8.071	0.280	0.362	3.858	1.969	2.756	0.551	1.260	8.189	/	/	/	/	/	4.606	3.504	2.520	0.500	0.063	0.630	4	
1 1/2"	2.913	/	0.906	8.071	0.280	0.362	4.252	2.756	2.756	0.551	1.496	8.661	/	/	/	/	/	5.000	3.878	2.874	0.563	0.063	0.630	4	
2"	3.661	/	0.906	12.795	0.362	0.449	5.512	2.756	4.016	0.669	1.969	9.961	/	/	/	/	/	5.984	4.744	3.622	0.622	0.063	0.630	4	
2 1/2"	4.665	/	/	15.748	/	/	/	/	/	/	0.866	2.441	11.811	/	/	/	/	F10	7.008	5.492	4.134	0.701	0.063	0.630	4
3"	5.374	/	/	19.685	/	/	/	/	/	/	0.866	2.992	12.008	/	/	/	/	F10	7.480	6.004	5.000	0.752	0.063	0.630	4
4"	6.161	/	/	25.591	/	/	/	/	/	/	0.866	3.780	14.508	/	/	/	/	F10	9.016	7.500	6.181	0.945	0.063	0.630	8
5"	10.039	7.815	2.441	39.370	/	/	0.000	0.000	0.000	1.063	4.921	/	1.417	4.921	M12	5.531	/	/	/	/	/	/	/	/	
6"	11.732	8.740	2.441	47.244	/	/	0.000	0.000	0.000	1.417	5.906	/	1.417	4.921	M12	6.280	/	/	/	/	/	/	/	/	
8"	13.346	10.354	1.402	59.055	/	/	0.000	0.000	0.000	1.417	7.874	/	1.417	4.921	M12	7.913	/	/	/	/	/	/	/	/	
10"	16.063	13.583	3.543	59.055	/	/	0.000	0.000	0.000	1.417	9.843	/	2.047	5.512	M16	9.921	/	/	/	/	/	/	/	/	
12"	16.063	13.583	3.543	59.055	/	/	0.000	0.000	0.000	1.417	11.811	/	2.047	5.512	M16	9.921	/	/	/	/	/	/	/	/	



Dimensions (inches) - Cont.

ANSI 300#

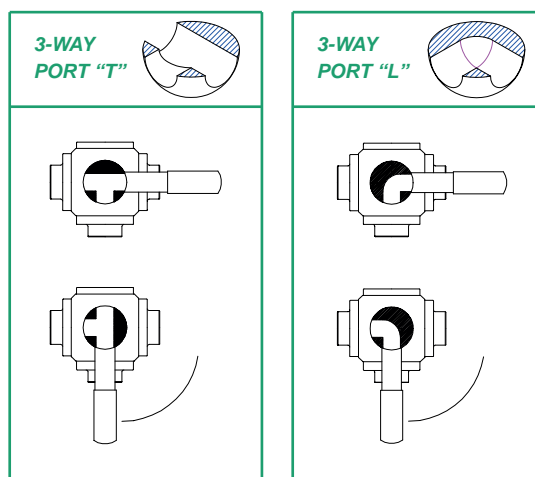
SIZE	A (in)	A1 (in)	B (in)	C (in)	d1 (in)	d2 (in)	E (in)	F (in)	G (in)	H (in)	PORT (in)	L (in)	N̄ (in)	LL (in)	G (in)	O (in)	ISO 5211	D1 (in)	D2 (in)	g (in)	t (in)	f (in)	M (in)	N (in)
1/2"	1.614	/	0.433	5.118	0.236	0.236	2.441	1.417	1.654	0.354	0.591	6.299	/	/	/	/	/	3.740	2.618	1.378	0.471	0.063	0.630	4
3/4"	1.929	/	0.551	6.496	0.236	0.280	3.228	1.654	1.969	0.433	0.787	6.969	/	/	/	/	/	4.606	3.248	1.693	0.630	0.063	0.748	4
1"	2.165	/	0.709	6.496	0.236	0.280	3.504	1.654	1.969	0.433	0.984	7.874	/	/	/	/	/	4.882	3.504	2.008	0.689	0.063	0.748	4
1 1/4"	2.480	/	0.709	8.071	0.280	0.362	3.858	1.969	2.756	0.551	1.260	8.583	/	/	/	/	/	5.276	3.878	2.520	0.807	0.063	0.748	4
1 1/2"	2.913	/	0.906	8.071	0.280	0.362	4.252	2.756	2.756	0.551	1.496	9.213	/	/	/	/	/	6.142	4.508	2.874	0.886	0.063	0.866	4
2"	3.661	/	0.906	12.795	0.362	0.449	5.512	2.756	4.016	0.669	1.969	10.748	/	/	/	/	/	6.496	5.000	3.622	1.000	0.063	0.748	4
2 1/2"	4.665	/	/	15.748	/	/	/	/	/	0.866	2.441	11.811	/	/	/	/	F10	7.480	5.866	4.134	1.000	0.063	0.866	4
3"	5.374	/	/	19.685	/	/	/	/	/	0.866	2.992	13.008	/	/	/	/	F10	8.268	6.614	5.000	1.126	0.063	0.866	4
4"	6.161	/	/	25.591	/	/	/	/	/	0.866	3.780	15.504	/	/	/	/	F10	10.000	7.874	6.181	1.260	0.063	0.866	8
5"	10.039	7.815	2.441	39.370	/	/	0.000	0.000	0.000	1.063	4.921	18.110	1.417	4.921	M12	5.531	/	11.004	9.252	7.323	1.378	0.063	0.866	8
6"	11.732	8.740	2.441	47.244	/	/	0.000	0.000	0.000	1.417	5.906	18.425	1.417	4.921	M12	6.280	/	12.520	10.630	8.504	1.437	0.063	0.866	12
8"	13.346	10.354	1.402	59.055	/	/	0.000	0.000	0.000	1.417	7.874	23.504	1.417	4.921	M12	7.913	/	15.000	12.992	10.630	1.630	0.063	1.024	12
10"	16.063	13.583	3.543	59.055	/	/	0.000	0.000	0.000	1.417	9.843	29.331	2.047	5.512	M16	9.921	/	17.520	15.236	12.756	1.882	0.063	1.142	16
12"	16.063	13.583	3.543	59.055	/	/	0.000	0.000	0.000	1.417	11.811	29.331	2.047	5.512	M16	9.921	/	20.500	17.752	15.000	2.000	0.063	1.260	16

Dimensions

Cv, Torque, Weight (USgpm, lb-in, lb)

SIZE	WEIGHT (lb)		TORQUE (lb*in)		CV (USgpm)			
	PORT L 150#	300#	PORT T 150#	300#	PTFE	R-PTFE	PORT T	PORT L
1/2"	7.628	9.546	7.584	9.502	159.200	176.900	25.300	13.000
3/4"	8.951	13.250	8.907	13.206	185.800	203.500	46.000	23.000
1"	13.228	18.453	13.095	18.320	389.300	424.700	70.150	35.000
1 1/4"	18.739	24.758	18.475	24.560	424.700	469.000	109.250	54.000
1 1/2"	27.514	36.773	27.293	36.553	663.700	734.500	162.150	81.000
2"	47.091	54.234	46.826	53.969	911.500	1000.000	309.350	153.000
2 1/2"	63.405	76.037	62.700	75.332	1601.700	1761.000	376.050	186.000
3"	78.396	95.460	75.398	92.462	1699.100	2053.000	588.800	290.000
4"	141.140	168.654	138.054	165.567	3000.000	3300.000	940.700	466.000
5"	*	*	*	*	*	*	*	*
6"	275.269	421.656	266.892	413.279	*	*	*	*
8"	527.787	*	507.725	*	*	*	*	*
10"	765.005	*	738.549	*	*	*	*	*
12"	837.757	*	804.688	*	*	*	*	*

FLOW STANDARD CONFIGURATION ⁽¹⁾



How to Order

VALVE BODY DESIGN (SERIES)	SPECIAL FEATURES	MATERIAL			ENDS	CLASS	SIZE	OPERATION
		BODY	TRIM	SEAT				
3WLM Full Port 3 Ways Ball Valve Port "L" ISO 5211 MK	NONE None	2 WCB	3 316 SS	P PTFE	F Flanged RF	0 ANSI 150# 3 ANSI 300#	0.5 2"	L Manual Lever Operator
	F Fire Safe	3 CF8M		R R-PTFE			0.75 3/4"	
3WTM Full Port 3 Ways Ball Valve Port "T" ISO 5211 MK	O Oxygen Service ⁽²⁾			U UHMWPE			01 1"	B Bare Shaft
				S 50/50 SS Filled PTFE		01.25 1 1/4"	G Gear Operator	
3WXM Full Port 3 Ways Ball Valve Port "X" ISO 5211 MK				C Carbon Filled PTFE			01.5 1 1/2"	S Spring Return Safety Handle
				M MG1241			02 2"	SR Spring Return Sliding Lock
				D DELRIN			02.5 2 1/2"	O Oval Handle
				K PEEK			03 3"	E Economical Stem Extension
							04 4"	P Peumatic Actuator
							05 5"	E Electric Actuator
							06 6"	
							08 8"	
						10 10"		
						12 12"		

Example:

3 Ways Full Port Ball Port "L" Valve, ISO 5211 MK, Body & Trim 316SS, Seats: PTFE, Ends: Flanged ANSI Class 150#, Size 2" with Lever.

3WML33PF002L

NOTES:

- (1) Other flow pattern configurations available upon request.
- (2) Available for stainless steel valves only.

