

SVF Flow Controls
I N C O R P O R A T E D

MB31 SERIES

**3-WAY FULL PORT
BALL VALVES**

Size Range:

1-1/2" to 6" Full Port

Pressure Ratings:

ANSI 150# Flanged

Body Material:

316 Stainless Steel

Carbon Steel

Seat Material:

Reinforced Teflon

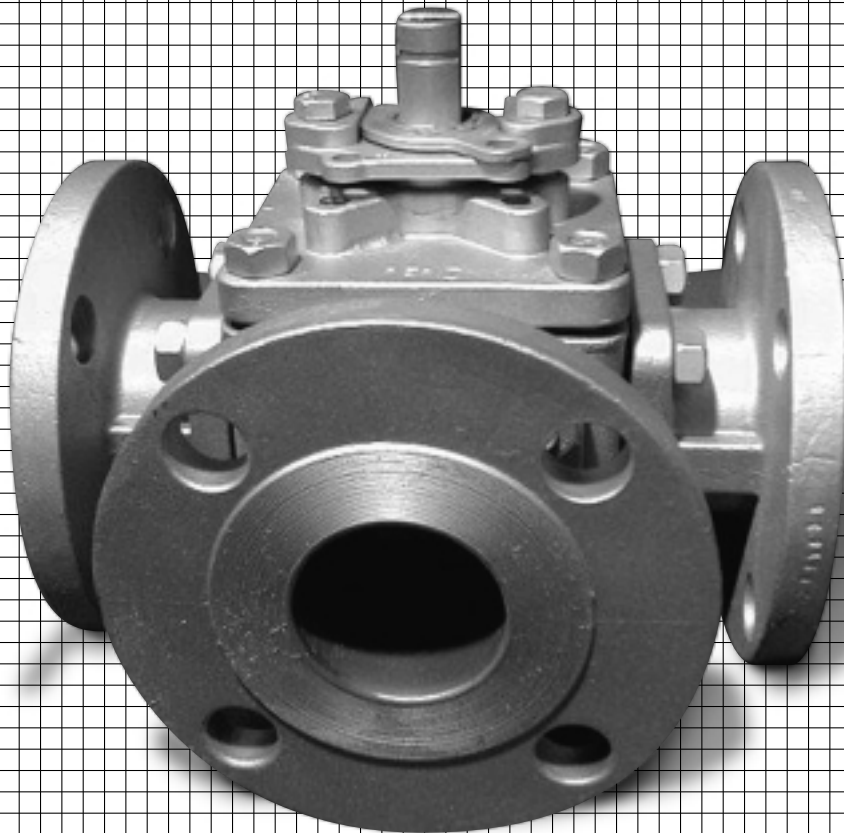
Ball & Stem Material:

316 Stainless Steel

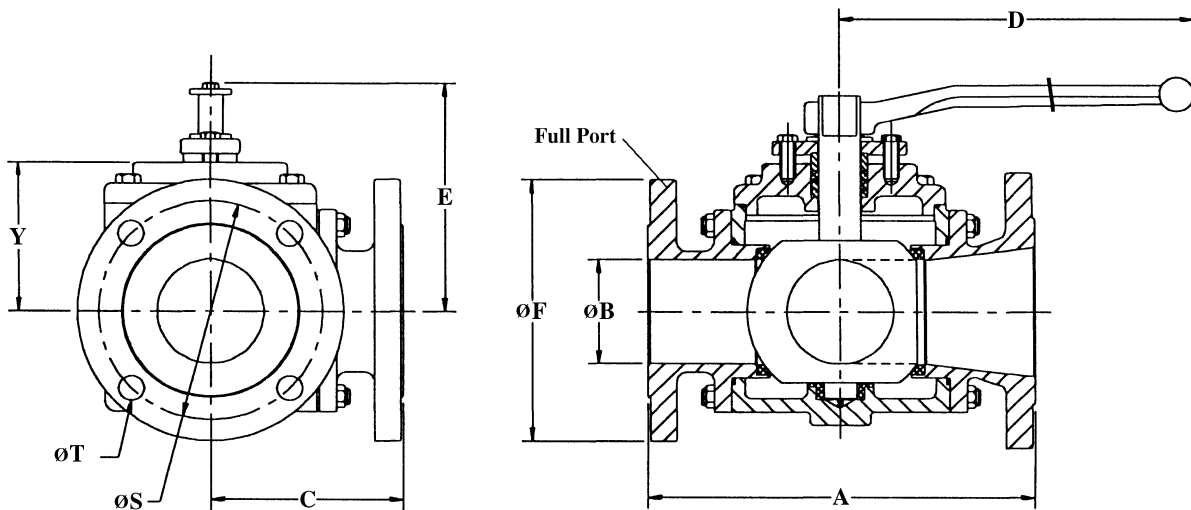
Features:

Anti-Static

Locking Device



MB FULL PORT DIMENSIONS

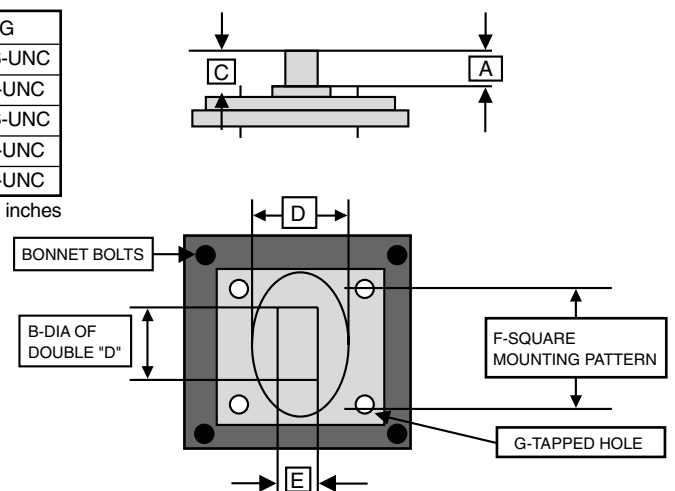


SIZE		1-1/2"	2"	3"	4"	6"
A	in.	7.13	8.66	11.22	13.66	16.93
	mm	181	220	285	347	430
øB	in.	1.5	2.0	3.0	4.0	6.0
	mm	39	51	76	102	152
C	in.	3.57	4.33	5.62	6.85	8.47
	mm	90.5	110	143	174	215
D	in.	15	15	15	20	
	mm	380	380	380	530	
E	in.	4.10	4.92	6.68	8.03	10.04
	mm	104	125	170	204	255
øF	in.	5.00	6.0	8.0	9.0	11.0
	mm	127	152	191	229	279
øS	in.	3.88	4.75	6.00	7.50	9.50
	mm	98.5	120.5	152.4	190.5	241.3
øT	in.	0.63	0.78	.078	.078	0.90
	mm	16	20	20	20	23
Y	in.	2.48	2.87	3.62	4.88	6.50
	mm	63	73	92	124	165
C _v	90°	50	100	240	400	970
	180°	230	430	430	2,050	5,000
Torque (in-lbf)		800	1,000	1,800	2,800	7,600
Weight (lbs)		19	36	72	128	250

VALVE TOP WORKS DIMENSIONS FOR ACTUATOR MOUNTING -MB31

SIZE	A	B	C	D	E	F	G
1-1/2"	0.98	0.866	1.92	2.45	0.669	1.39	5/16-UNC
2"	1.20	0.866	1.80	2.45	0.669	1.949	3/8-UNC
3"	1.22	1.16	2.36	2.66	0.669	2.84	7/16-UNC
4"	1.38	1.16	2.26	2.66	0.669	3.48	1/2-UNC
6"	1.75	1.77	2.84	4	1.375	3.48	1/2-UNC

All dimensions are in inches

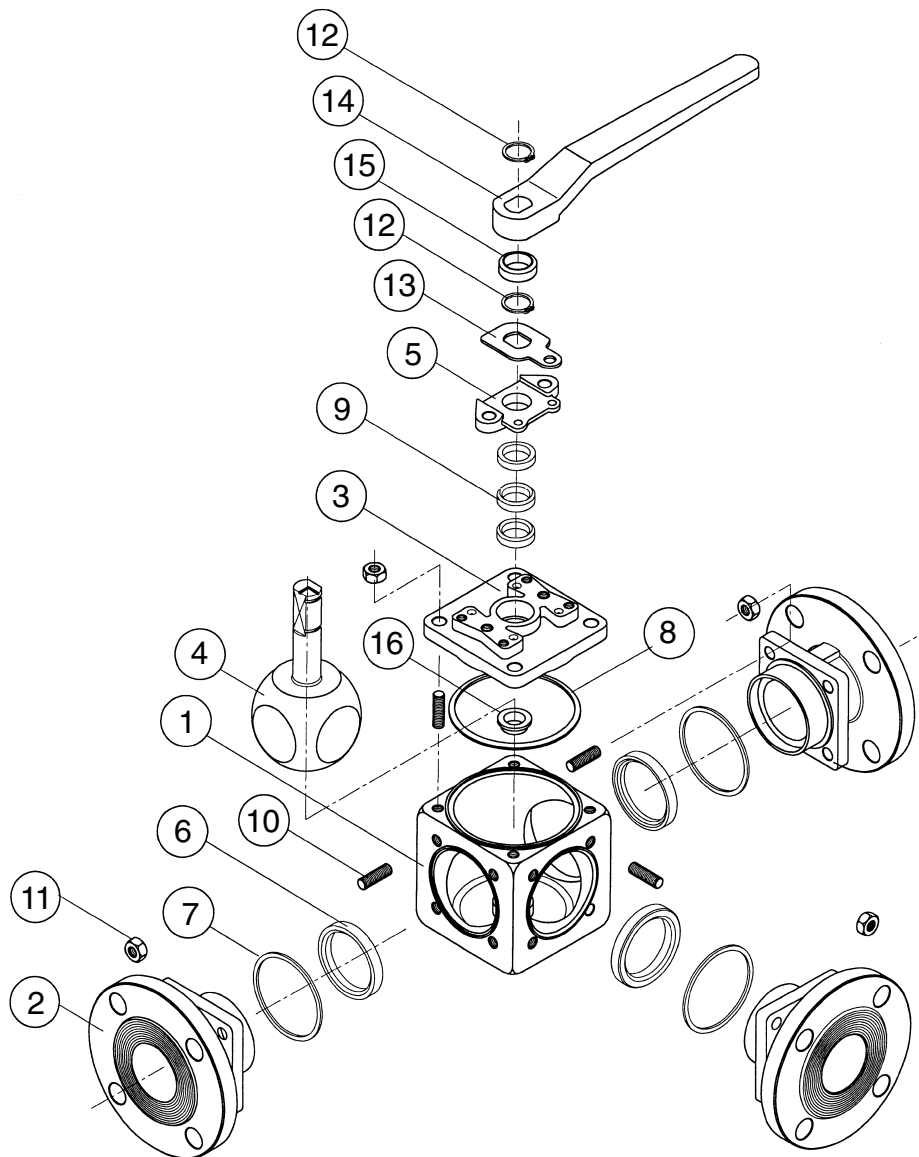
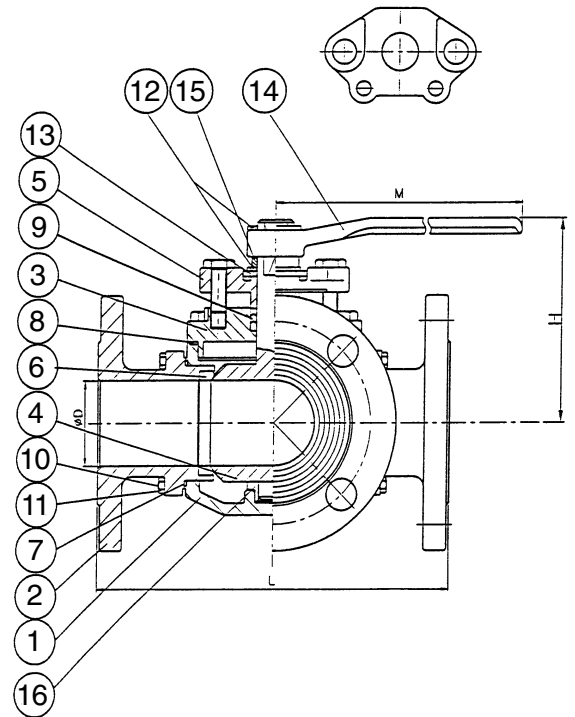


MB31 SERIES MATERIALS LIST

ITEM	PARTS	MATERIAL	MATERIAL
1	BODY	ASTM A351-CF8M	ASTM-A216
2	FLANGE CAP	ASTM A351-CF8M	ASTM-A216
3	COVER	ASTM A351-CF8M	ASTM-A216
4	BALL & STEM	ASTM A351-CF8M	ASTM-A216
5	GLAND	ASTM A351-CF8M	ASTM-A216
6	BALL SEAT	*R-PTFE	*R-PTFE
7	JOINT GASKET	PTFE	PTFE
8	GASKET	PTFE	PTFE
9	PACKING	PTFE	PTFE
10	STUD	AISI 304	AISI 304
11	NUT	AISI 304	AISI 304
12	C SNAP RING	ZINC STEEL	ZINC STEEL
13	STOPPER	AISI 304	AISI 304
14	HANDLE	DUCTILE IRON	DUCTILE IRON
15	BUSHING	AISI 304	AISI 304
16	BOTTOM BUSHING	PTFE	PTFE

NOTE

*R-PTFE = 15% Glassfiber Filled PTFE



TECHNICAL DATA

SPECIFICATION STANDARDS

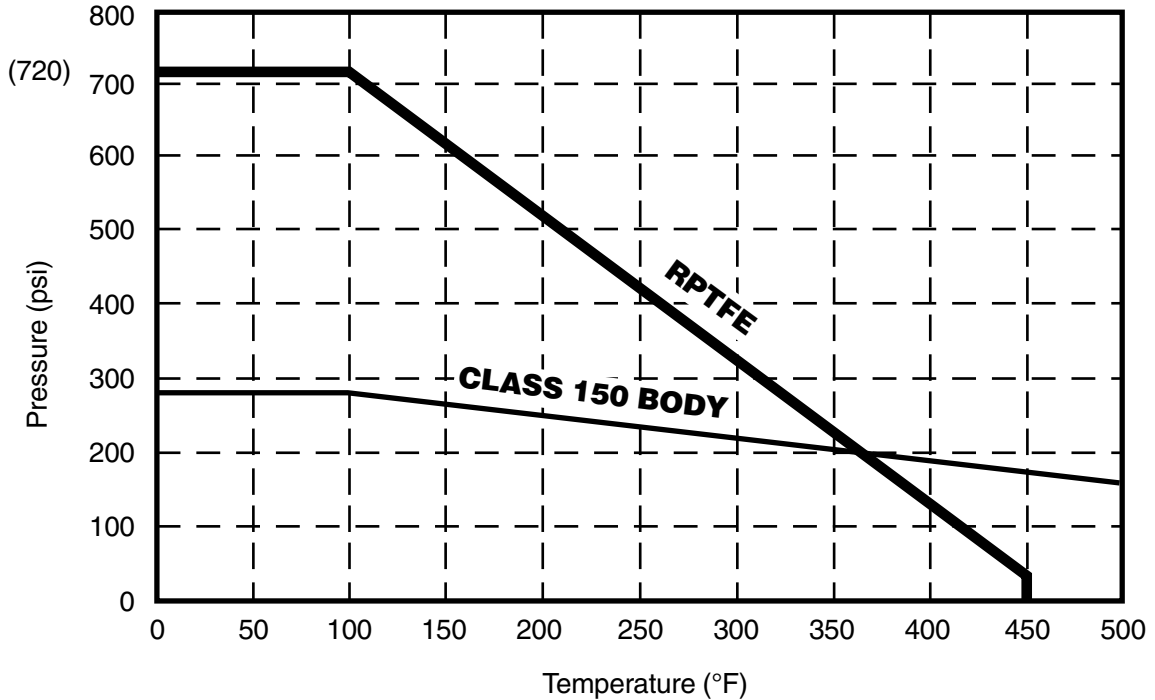
Flanges ANSI B16.5
 Shell/Wall ANSI B16.34
 Federal Specifications
 WW-V-35B Valve, Ball, Type 11
 Class C, Style 3, End Connection B

TESTING

Class 150 Shell 425 psi
 Seat (Air) 80 psi

Note: A variety of alloys as well as special seating materials are available. Consult Factory

PRESSURE AND TEMPERATURE DATA:



Rating Curve applies to both "L" and "T" port configurations

All valves conform to ANSI Class 150 pressure ratings. They are rated for a maximum differential pressure of 275 psi, and a maximum temperature of up to 450°F. See rating chart. WCB-285 psi Max. Complies with ANSI B16.5 and B16.34 standards.

FEATURES & BENEFITS

FEATURES	BENEFITS
1. Grounded Ball and Stem	1. Anti-static design for safety
2. Full Port Ball Orifice	2. High flow rates. Minimal pressure drop
3. Four-Bolt Actuator Mounting	3. Does not utilize pressure-containing body bolts
4. Multiple piece stem packing	4. Provides long-life pressure containment
5. Unique one piece ball and stem design	5. Zero backlash and precise port alignment

MB31 SERIES

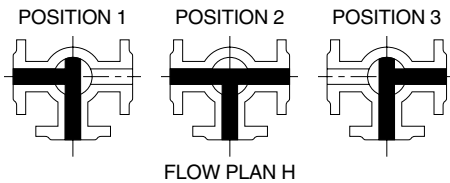
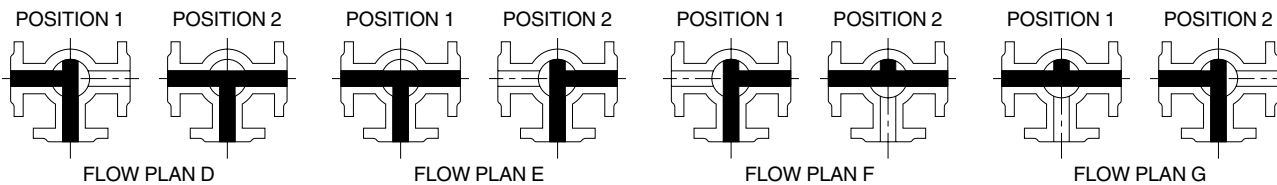


- ✓ Class 150 Flanged End
1-1/2"~6"
- Class 300 Flanged End
2"~4" (Price on availability)
- Consult factory for MB32 information

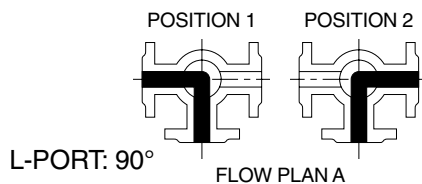
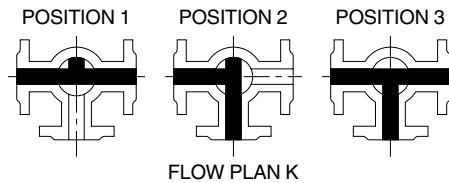
FLOW PATTERNS

All T-Port Flow Patterns can be changed in the field without disassembling valve

T-PORT: 90°

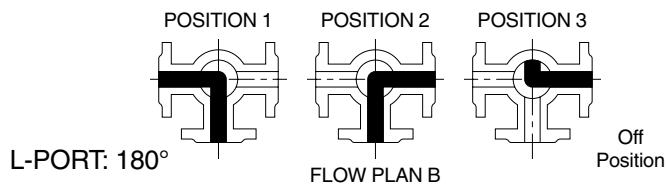


T-PORT: 180°



L-PORT: 90°

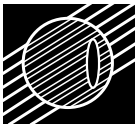
FLOW PLAN A



L-PORT: 180°

FLOW PLAN B

Off Position



HOW TO ORDER

SIZE	STYLE	BODY & END MATERIAL	BALL & STEM MATERIAL	SEAT	SEAL	FLANGE	PORT
1-1/2"	MB31	4 - Carbon Steel	6 - 316 Stainless Steel	R - Reinforced TFE	T - Virgin TFE	150#	L T
2"	(150#F/P Flanged)	6 - 316 Stainless Steel					
3"	3-Way Multi Port						
4"							
6"							

Caution: Ball valves can retain pressurized media in the body cavity when closed. Use care when disassembling. Always open valve to relieve pressure prior to disassembly.

Due to continuous development of our product range, we reserve the right to alter the dimensions and information contained in this leaflet as required.