



## Multi-Port Three-Way Flanged Ball Valves

### BOTTOM ENTRY SERIES

#### Diverter Design

STANDARD PORT - ONE PIECE BODY

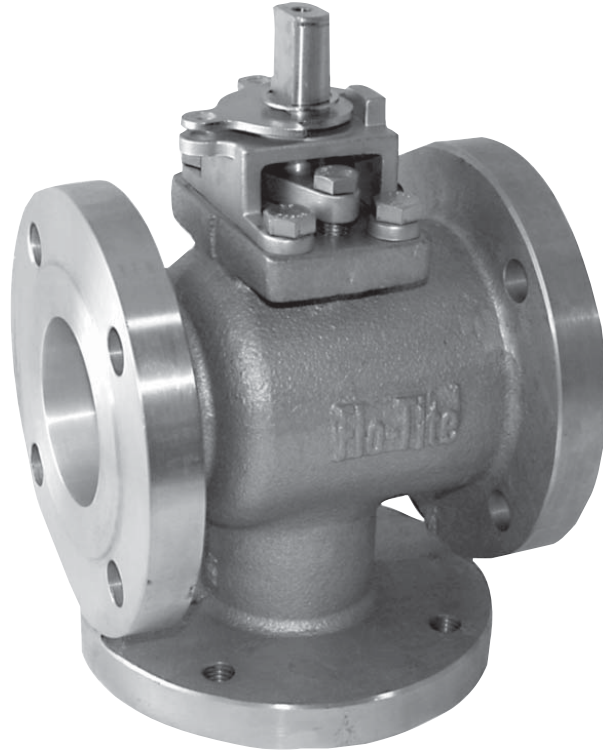
**Model No. MPF155**

**Pressure Rating:**  
ANSI Class 150

**Size Range:**  
2" - 6"

**Temp. Rating:**  
Consult Factory

**Materials:**  
Stainless or Carbon



Flo-Tite's Bottom Entry Series provides piping system engineers greater design flexibility. Making the flo-tite valve a valuable choice for a multitude of unique applications.

#### Bottom Entry Series STANDARD PRODUCT NUMBER

MPF155-SS-L-FFG-L-100-M13	(SS - Standard FFG 90° configuration)
MPF155-SS-L-FGG-L-100-M13	(SS - Fire safe to atmosphere FGG 90° configuration)
MPF155-SS-L-FFG-L-100-M14	(SS - Standard FFG 180° configuration)
MPF155-SS-L-FGG-L-100-M14	(SS - Fire safe to atmosphere FGG 180° configuration)

### DESIGN FEATURES

Flo-Tite's Bottom Entry Series 3-way ball valves feature a floating ball design with the valve stem on center between the flanged ends. **This valve is ideal to replace plug valves. The compact size, lower weight, ease of maintenance, and reduced cost of these ball valves offer an excellent alternative to the traditional plug valve.** The one piece bodies are constructed of high quality Carbon Steel or Stainless Steel as standard. Special body alloys are also available upon request.

Other features include replaceable seats and seals, and an optional Media Containment unit. Live-loaded, self-

adjusting stem seals automatically adjust to compensate for changes in temperature and wear.

**Available Fire Safe Design.** All Bottom Entry Series valves can meet fire safe standards for external leakage only. Additional safety features include internally loaded blow-out proof stems and locking devices to prevent accidental movement of ball position.

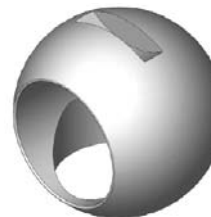
**Optional Metal Seated Valves are available. Consult Factory.**

### FLOW PATTERNS

L Port, Plan - O 90°



L Port, Plan - P 180°



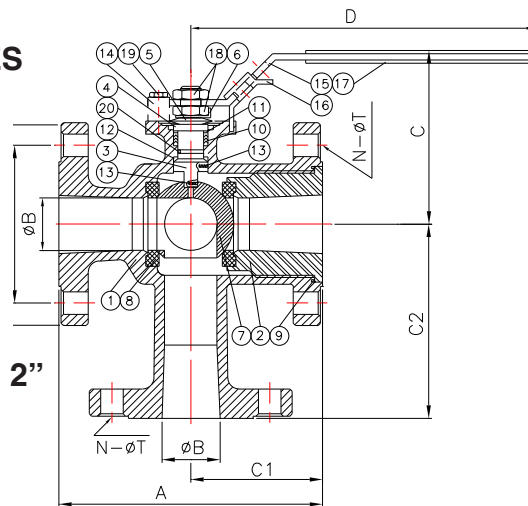
Other Special Flow Plans are available, Consult Factory.

**The MPF155 One Piece Body Adds Strength, Minimizing Potential Leakage.**

# DIMENSIONS AND TECHNICAL DATA

## BOTTOM ENTRY SERIES Model MPF 155

### 3 Way Diverter Ball Valve



### BILL OF MATERIALS, 2"

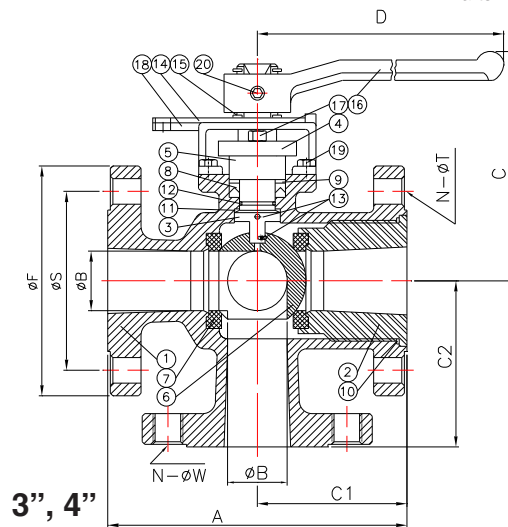
No.	Name	Carbon Steel	Stainless Steel	Qty
1	Body	ASTM A216 WCB	ASTM A351 CF8M	1
2	Insert	ASTM A216 WCB	ASTM A351 CF8M	1
3	Stem	SS316 / SS304	SS316	1
4	Packing Follower	SS304	SS304	1
5	Belleville Washers	SS301	SS301	2
6	Lock Washer	SS304	SS304	1
7	Ball	SS316 / SS304	SS316	1
8	Seats	# TFM	TFM	2
9	Gaskets	# RPTFE / Graphite	RPTFE / Graphite	1
10	Stem Packing	# TFM / Graphite	TFM / Graphite	1
11	Packing Protector #	50% PTFE + SS316	50% PTFE + SS316	1
12	Thrust Washer #	25% Carbon + TFM	25% Carbon + TFM	1
13	Anti-Static Devices	SS304	SS304	2
14	Valve Stop	SS304	SS304	1
15	Handle	SS304	SS304	1
16	Locking Device	SS304	SS304	1
17	Handle Sleeve	Plastic	Plastic	1
18	Thin Nut	SS304	SS304	1
19	Bolt	Carbon Steel	SS304	1
20	O-Ring	# Viton	Viton	1

# Parts included in repair kits

### BILL OF MATERIALS, 3" & 4"

No.	Name	Carbon Steel	Stainless Steel	Qty
1	Body	ASTM A216 WCB	ASTM A351 CF8M	1
2	Insert	ASTM A216 WCB	ASTM A351 CF8M	1
3	Stem	SS316 / SS304	SS316	1
4	Packing Gland	ASTM A351 CF8	ASTM A351 CF8	1
5	Packing Follower	SS304	SS304	1
6	Ball	SS316 / SS304	SS316	1
7	Seats	# TFM	TFM	2
8	Stem Packing	# TFM / Graphite	TFM / Graphite	1
9	Packing Protector #	50% PTFE + SS316	50% PTFE + SS316	1
10	Gasket	# RPTFE / Graphite	RPTFE / Graphite	1
11	Thrust Washer #	25% Carbon + TFM	25% Carbon + TFM	1
12	O-Ring	# Viton	Viton	1
13	Anti-Static Devices	SS304	SS304	2
14	Travel Stopper	Steel	SS304	1
15	Snap Rings	Plated Steel	Plated Steel	2
16	Handle	Ductile Iron	Ductile Iron	1
17	Gland Bolts	Steel	SS304	2
18	Stop Housing	ASTM A351 CF8	ASTM A351 CF8	1
19	Housing Bolts	SS304	SS304	4
20	Handle Set Screw	Steel	Steel	1

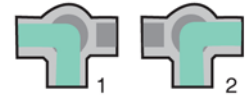
# Parts included in repair kits



3", 4"

### FLOW - PATTERNS

L Port, Plan - O 90°



L Port, Plan - P 180°



Other Special Flow Plans are available, Consult Factory.

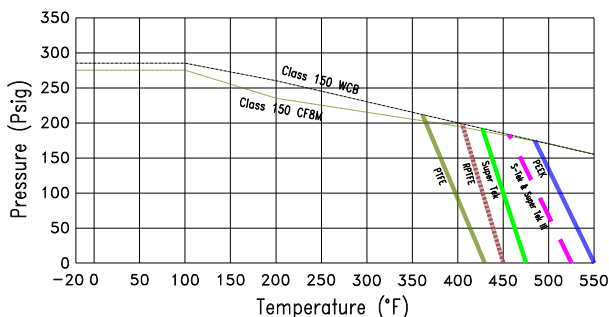
Consult Factory for Class 300 & Larger Sizes

### Dimensions and Weights

Bottom flange bolt holes are dilled and tapped

SIZE	A	B	C	C1	C2	C3	D	F	N	S	T	W	Cv	Torque In-Lb	Weight Lbs
2"	7.03	1.54	4.20	3.52	4.39	2.44	6.89	6.00	4	4.75	0.75	5/8-11unc	48	284	24
3"	8.07	2.56	5.71	4.04	5.16	3.11	9.57	7.50	4	6.00	0.75	5/8-11unc	170	651	51
4"	9.09	2.99	6.59	4.55	6.28	3.66	11.22	9.00	8	7.50	0.75	5/8-11unc	270	840	70
6"	10.59	3.94	C/F	5.30	7.89	C/F	18.11	11.0	8	9.50	0.87	3/4-10unc	440	1785	C/F

### Pressure/Temperature Chart



### NOTE:

- Other valve sizes on application.
- Other seat materials are available.
- Valves can accept line media through bottom inlet only.
- Valves with "L port 90° ball turn" can be actuated with a standard 90° actuator.
- Smaller sizes available in bottom flow series.
- Valves with "L port 180° ball turn" require a special 180° actuator.
- The 3-way ball/seat closure is effective only at the two end ports. Line media should enter through the bottom port.
- Transflow problems can be eliminated with this bottom entry diverter design, 180° turn.



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