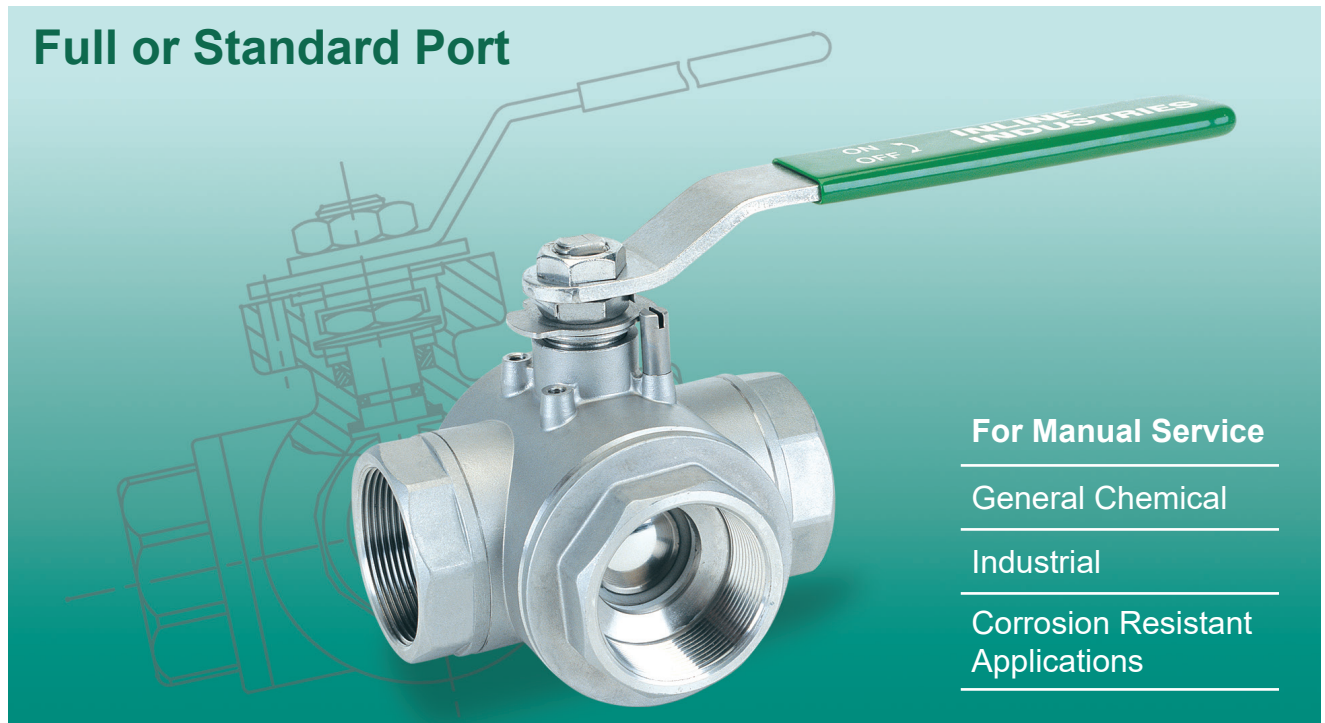


# 503F/S 3-Way Ball Valve

Full or Standard Port



For Manual Service

General Chemical

Industrial

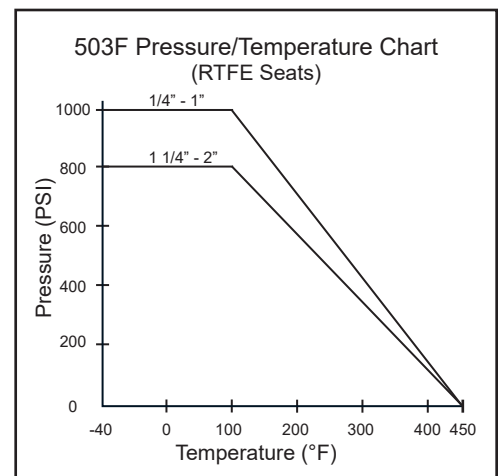
Corrosion Resistant Applications

## Standard Features and Benefits

- **Available in “T” or “L” Port Configuration**
- **High-Cycle, Live-Loaded Stem Packing**  
Dynamic loading of stem packing ensures a tight seal through varying pressure and temperature conditions, reducing maintenance costs and extending service life
- **Blow-Out-Proof Stem**  
Stem is bottom loaded to prevent removal when valve is in service
- **Balanced 4-Seat Construction**  
Unlike two seated diverter valves, the 503 series has four seats for positive shut-off and balancing the ball
- **Reduces Number of Valves Required in Piping System**
- **Investment Cast**  
High quality investment castings improve dimensional control and reduce porosity

## Options

- **Material Test Reports Available Upon Request**

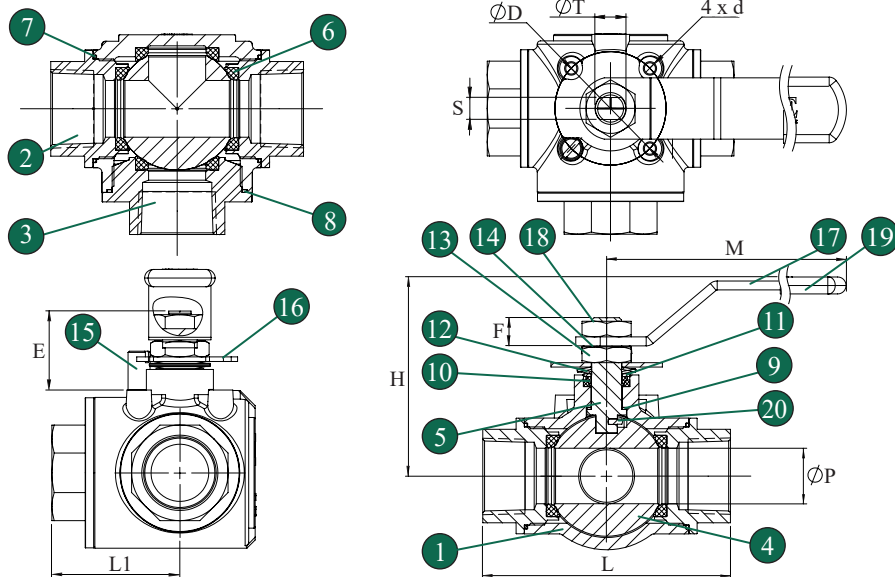


## Operating Conditions

- Temperature Range (RTFE):  
-40°F ~ 450°F
- Maximum Pressure (RTFE):  
1000 PSI WOG (1/4" - 1")  
800 PSI WOG (1 1/4" - 2")

## Specifications

- All valves shell and seat tested to ANSI/ASME B16.34 and API 598



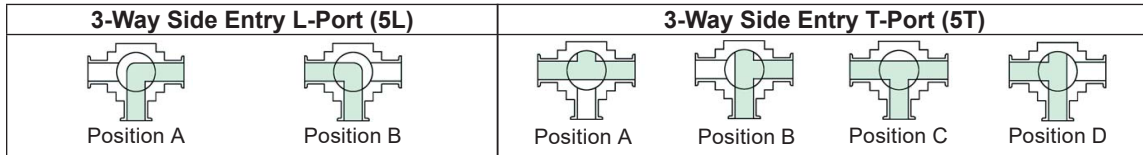
Valve Components			
No.	Part Name	Material	Qty
1	Body	CF8M	1
2	End Cap (Small)	CF8M	2
3	End Cap (Large)	CF8M	1
4	Ball	316 SS	1
5	Stem	316 SS	1
6	Seat	RTFE (15% C.F.)	4
7	Body Seal (Small)	PTFE	2
8	Body Seal (Large)	PTFE	1
9	Thrust Washer	PEEK	1
10	Stem Packing Set	PTFE	1
11	Packing Gland	304 SS	1
12	Belleville Washer	301 SS	2
13	Gland Nut	304 SS	1
14	Gland Nut Lock Washer	304 SS	1
15	Stop Pin	304 SS	1
16	Stop Plate	304 SS	1
17	Handle	304 SS	1
18	Handle Nut	304 SS	1
19	Handle Cover	Vinyl	1
20	Stem Set Pin	316 SS	1

Dimensions (Inches)														
503F	503S	L	L1	P	M	H	E	F	D	d (mm)	S	T	C <sub>v</sub> * (503F/503S)	Weight (lbs)**
1/4", 3/8"	1/2"	2.71	1.35	0.43	5.8	2.3	0.87	0.37	1.42	M5 x 0.80 J5.5	0.26	0.38	4.2 / 3.8	1.3
1/2"	3/4"	3.14	1.57	0.59	5.8	2.4	1.00	0.35	1.42	M5 x 0.80 J6.0	0.26	0.38	7.4 / 7.4	1.7
3/4"	1"	3.77	1.89	0.79	5.8	2.7	1.15	0.44	1.65	M5 x 0.80 J6.0	0.31	0.46	13.8 / 12.6	2.8
1"	1-1/4"	4.37	2.18	0.98	7.7	3.5	1.36	0.50	1.97	M6 x 1.00 J6.5	0.38	0.54	21.5 / 20.6	4.9
1-1/4"	1-1/2"	4.80	2.40	1.26	9.9	3.7	1.63	0.65	1.97	M6 x 1.00 J7.0	0.38	0.70	35.1 / 34.8	7.2
1-1/2"	2"	5.67	2.84	1.57	9.9	4.1	1.65	0.68	1.97	M6 x 1.00 J7.0	0.38	0.70	51.0 / 45.9	11.2
2"	-	6.69	3.34	1.97	12.3	5.2	1.95	0.81	2.76	M8 x 1.25 J9.0	0.47	0.78	89.4	20.6

\*C<sub>v</sub> is based on L-Port configuration and represents flow data to ISA 75.01.01 - 2007

\*\*Weights are based on 503F Full Port L-Port

## Flow Pattern Options



## 503F Ordering Information

Example: 2" Full Port Diverter Ball Valve with Lever Handle and Locking Device, 316 SS Body and Trim, RTFE (15% C.F.) Seats and PTFE Seal, NPT Ends, 3-Way Side Entry L-Port

503F	D	6	6	6	6	C	T	TT	5	L	01
Valve Series	Valve Size	Body Material	End Material	Ball Material	Stem Material	Seat	Seal	End Connection	Port Configuration	Ball Configuration	Flow Pattern
503F - Full Port	2 1/4"	6 - A351 Gr. CF8M (316)	6 - A351 Gr. CF8M (316)	6 - 316 SS	6 - 316 SS	C - RTFE (15% C.F.)	T - PTFE	T - NPT	5 - 3 Way Side Entry	L - Side Entry L-Port	01 - A & B (Standard)
503S - Standard Port	3 3/8"									T - Side Entry T-Port	00 - All
	5 1/2"										02 - B & C
	7 3/4"										03 - C & D
	A 1"										04 - D & A
	B 1 1/4"										12 - A & B & C
	C 1 1/2"										23 - B & C & D
	D 2"										34 - C & D & A
											41 - D & A & B

\*1/4" & 3/8" Available in Full Port Only.

Due to continuous product development, information may change without notice.

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