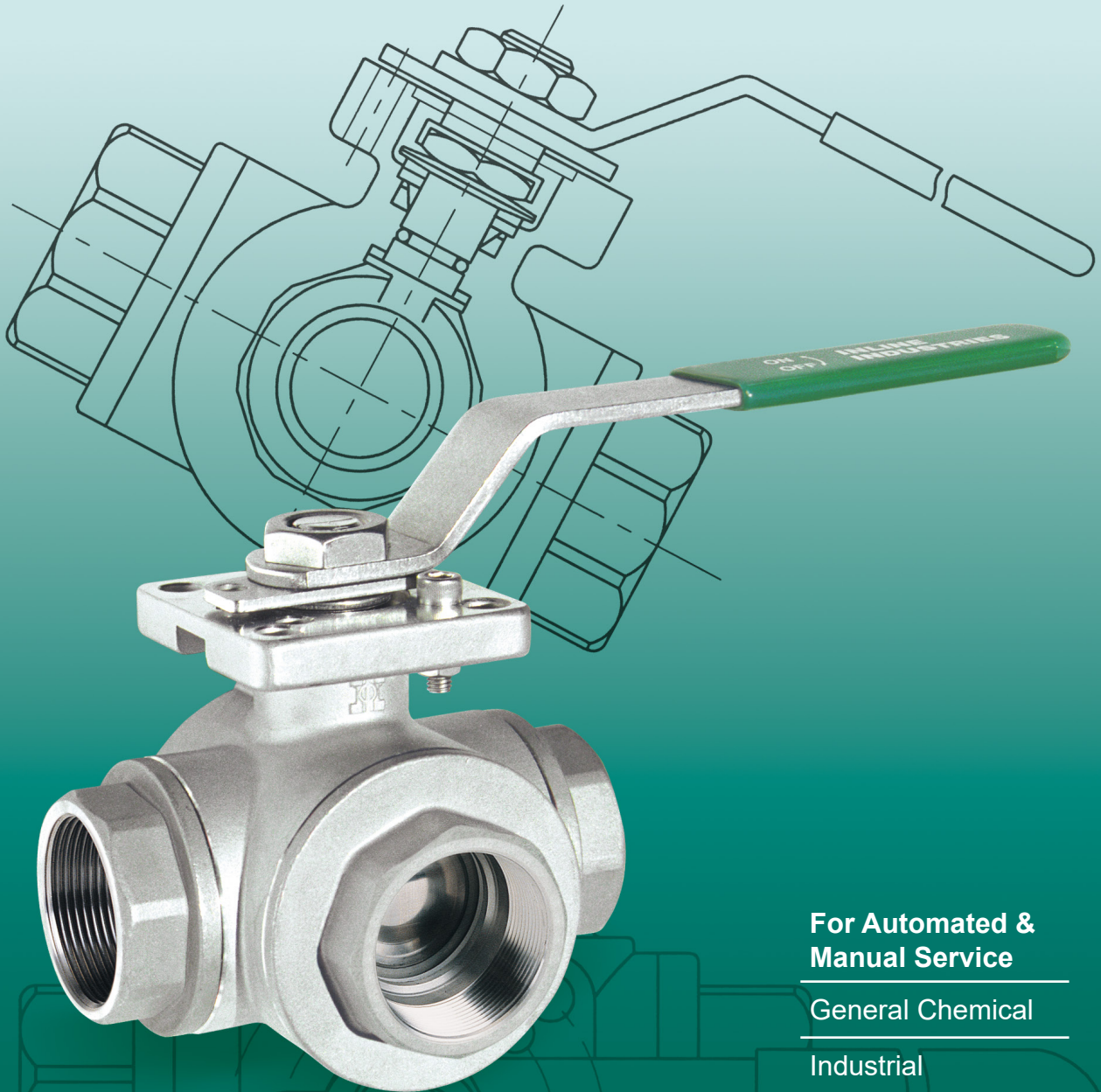


514F/S 3-Way Ball Valve

Full and Standard Port
ISO 5211 Direct Mount Pad



For Automated &
Manual Service

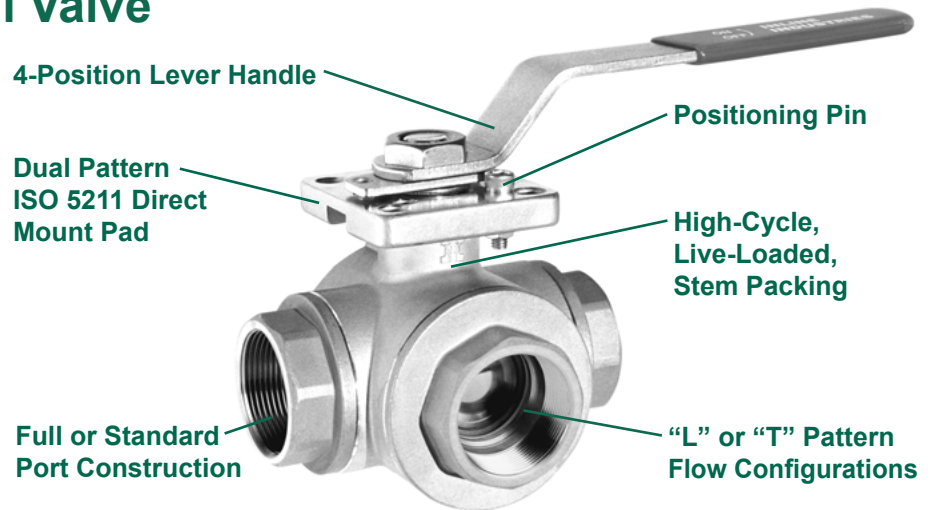
General Chemical

Industrial

Corrosion Resistant
Applications

The 514F/S 3-Way Ball Valve

The 514F/S series ball valve is a true 3-way valve, designed with balanced 4-seat construction. It is available in both full and standard port with 3-Way “L” and “T” flow configurations. Our unique dual pattern ISO 5211 mounting pad facilitates direct mounting of most pneumatic and electric actuators.

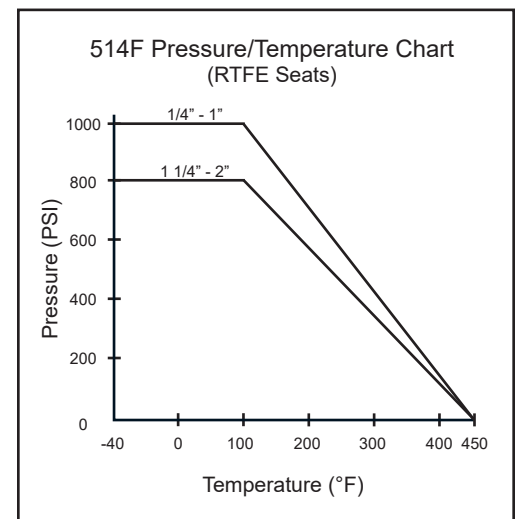


Standard Features and Benefits

- **Balanced 4-Seat Construction**
Unlike two seated diverter valves, the 514 series has four seats for positive shut-off and balancing the ball
- **Dual Pattern ISO 5211 Direct Mount Pad**
No bracket or drive coupling needed for automation
Dual pattern pad fits a wide range of actuator sizes
Eliminates exposed moving parts for safer work environment
Direct drive eliminates play and improves actuator positioning
- **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
- **O-Ring Stem Bearing**
Maintains stem alignment
Reduces stem packing wear
Enhances stem seal
- **Blow-Out-Proof Stem**
Stem is bottom loaded to prevent removal when valve is in service
- **4-Position Lever Handle**
The lever handle can be positioned in any of four orientations for maximum piping flexibility
- **Locking Device**
Enables plant personnel to secure valve in open or closed position when manually operated
- **Investment Cast**
Improves dimensional control and reduces porosity

Options

- **Extended Mounting Pad for High Temperature Service**
- **Material Test Reports Available Upon Request**

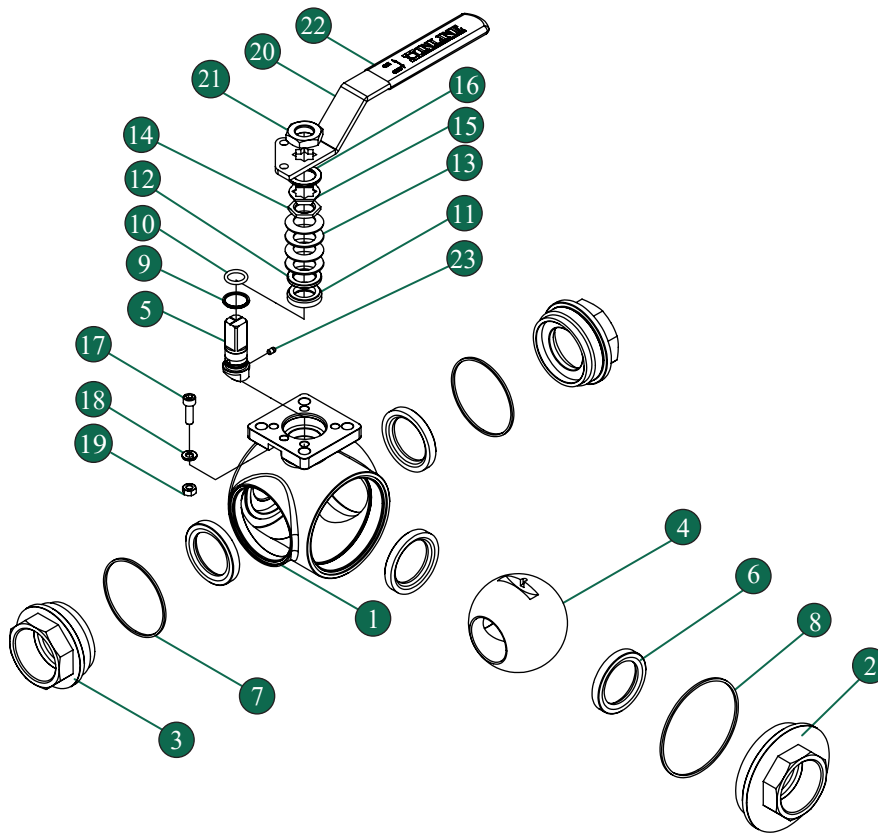


Operating Conditions

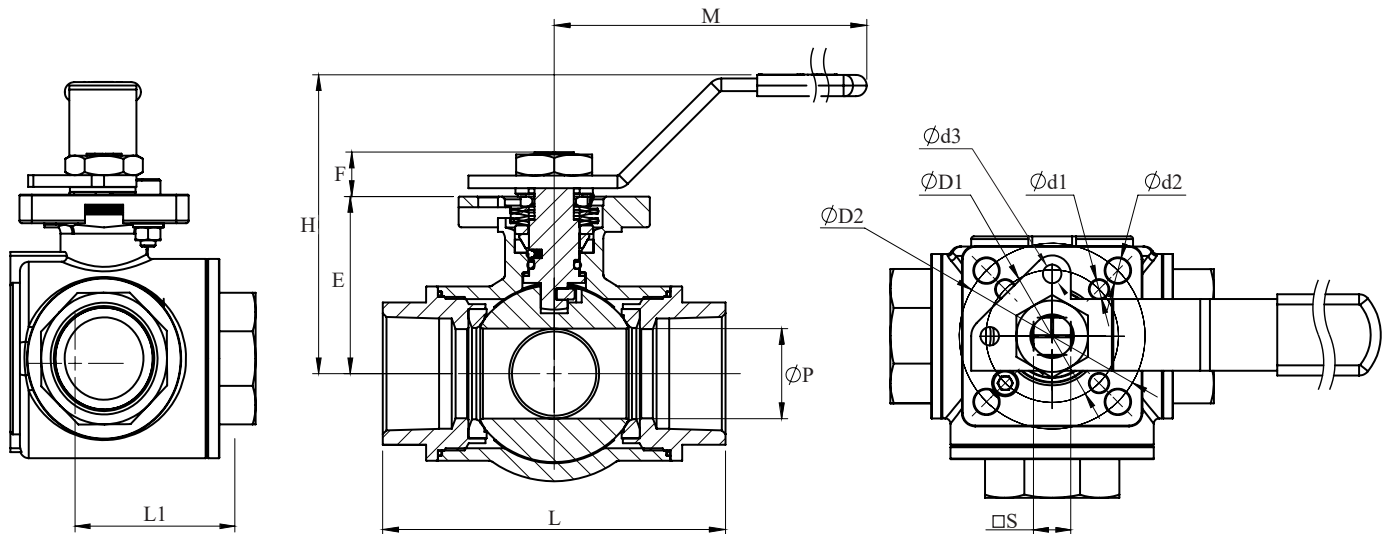
- Temperature Range (RTFE):
-40°F ~ 450°F
- Maximum Pressure (RTFE):
1000 PSI WOG (1/4" - 1")
800 PSI WOG (1 1/4" - 2")

Specifications

- All valves shell and seat tested to ANSI/ASME B16.34 and API 598
- All materials comply with applicable ASTM material specifications
- NPT to ASME B1.20.1



Valve Components			
No.	Part Name	Material	Qty
1	Body	CF8M	1
2	End Cap (Large)	CF8M	1
3	End Cap (Small)	CF8M	2
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 O-Ring	VITON 75	1
11	Stem Packing Set	PTFE	1
12	Packing Gland	304 SS	1
13	Belleville Washer	301 SS	4
14	Gland Nut	304 SS	1
15	Gland Nut Lock Washer	304 SS	1
16	Stem Spacer	304 SS	1
17	Stop Pin	304 SS	1
18	Split Lock Washer	304 SS	1
19	Stop Pin Nut	304 SS	1
20	Handle	304 SS	1
21	Handle Nut	304 SS	1
22	Handle Cover	Vinyl	1
23	Stem Set Pin	316 SS	1



Dimensions (Inches)																	
514F	514S	L	L1	P	M	H	E	F	D1	D2	d1	d2	d3	S	ISO 5211* Pattern	C _v ** 514F/514S	Weight (lbs)
1/4"	-	2.71	1.35	0.43	5.4	2.8	1.50	0.34	1.42	1.97	0.24	0.26	0.31	0.35	F03/F05	4.3	1.6
3/8"	1/2"	2.71	1.35	0.43	5.4	2.8	1.50	0.34	1.42	1.97	0.24	0.26	0.31	0.35	F03/F05	4.1 / 4.0	1.6
1/2"	3/4"	3.14	1.57	0.59	6.4	2.9	1.60	0.37	1.42	1.97	0.24	0.26	0.31	0.35	F03/F05	7.4 / 7.0	2.2
3/4"	1"	3.77	1.89	0.79	6.4	3.2	1.91	0.46	1.65	1.97	0.24	0.28	0.31	0.43	F04/F05	13.7 / 12.6	3.2
1"	1 1/4"	4.37	2.18	0.98	6.4	3.4	2.14	0.46	1.65	1.97	0.24	0.28	0.31	0.43	F04/F05	21.5 / 20.1	4.9
1 1/4"	1 1/2"	4.80	2.40	1.26	8.0	4.2	2.48	0.62	1.97	2.76	0.28	0.37	0.31	0.55	F05/F07	35.0 / 31.7	7.3
1 1/2"	2"	5.67	2.84	1.57	8.0	4.6	2.89	0.59	1.97	2.76	0.28	0.37	0.31	0.55	F05/F07	50.9 / 46.7	11.5
2"	-	6.69	3.34	1.97	12.7	5.3	3.63	0.81	2.76	4.02	0.37	0.45	0.39	0.67	F07/F10	89.7	22.2

*Direct mount may require stem adapter bushings

**C_v is based on L-Port Flow Configuration value and represents flow data to ISA 75.01.01 - 2007

Flow Pattern Options

3 Way - Side Entry T-Port (5T)			3 Way - Side Entry L-Port (5L)						
No.	Turn	Positions	Diagram		No.	Turn	Positions	Diagram	
01	90°	A & B			01	90°	A & B		
02	90°	B & C							
03	90°	C & D							
04	90°	D & A							
12	180°	A & B & C							
23	180°	B & C & D							
34	180°	C & D & A							
41	180°	D & A & B							
00	360°	All							

514F Ordering Information

Example: 2" Full Port Diverter Valve with ISO 5211 Direct Mount Pad, Lever Handle and Locking Device, 316 SS Body and Trim, RTFE (15% C.F.) Seats and PTFE Seals, NPT Ends, 3-Way Side Entry L-Port, Flow Pattern 01*

Valve Series	Valve Size	Body Material	End Material	Ball Material	Stem Material	Seat	Seal	End Connection	Port Configuration	Ball Config.	Flow Pattern
514F - Full Port 514S - Standard Port	2 3 5 7 A B C D	6 - A351 Gr. CF8M (316)	6 - A351 Gr. CF8M (316)	6 - 316SS	6 - 316SS	C - RTFE (15% C.F.) M - TFM	T - PTFE M - TFM	T - NPT	5 - 3 Way Side Entry	L - Side Entry L-Port T - Side Entry T-Port	01 - A & B (Standard) 00 - All 02 - B & C 03 - C & D 04 - D & A 12 - A & B & C 23 - B & C & D 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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