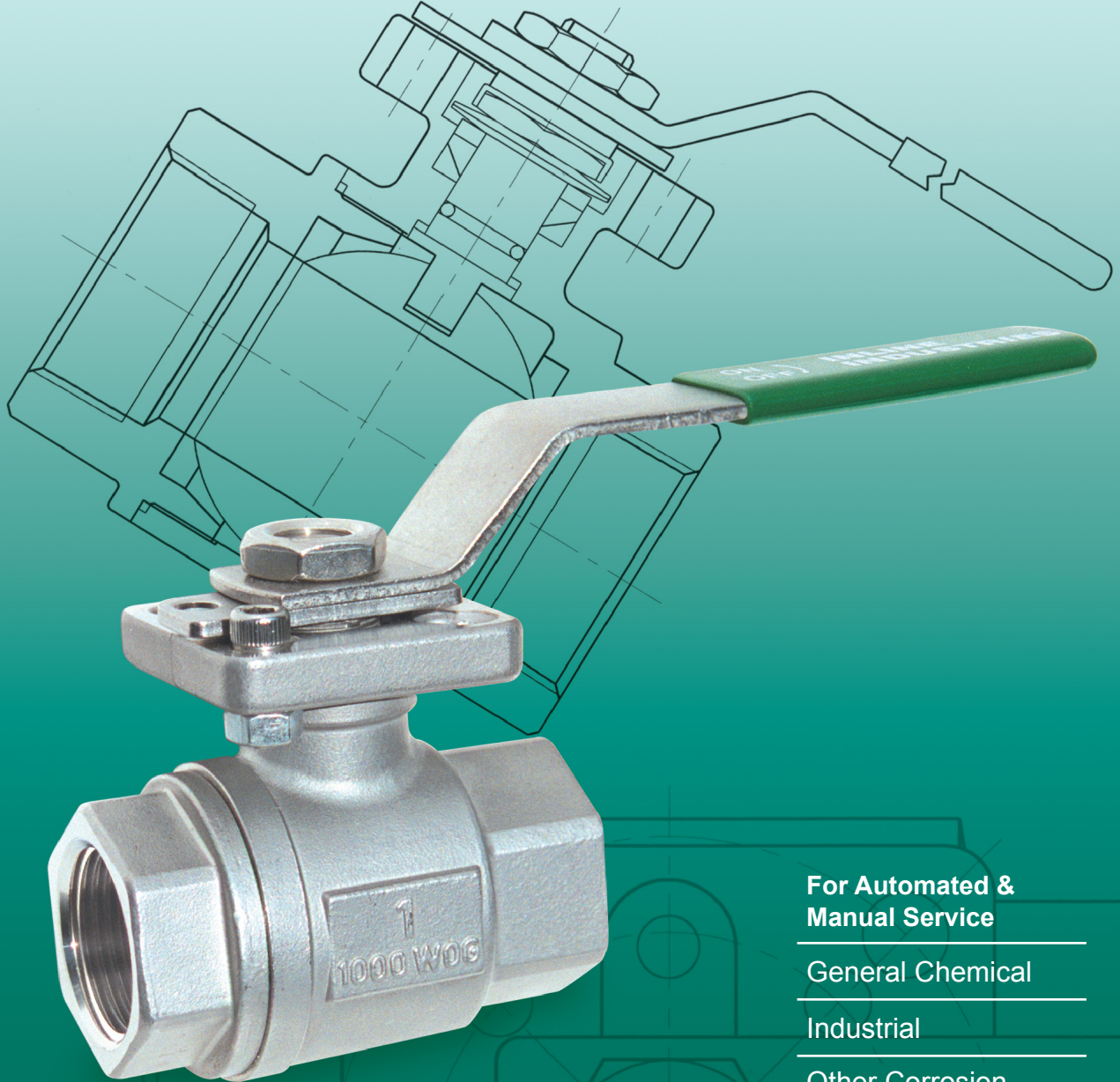


# 204F Ball Valve

2-Piece Full Port  
ISO 5211 Direct Mount Pad



For Automated &  
Manual Service

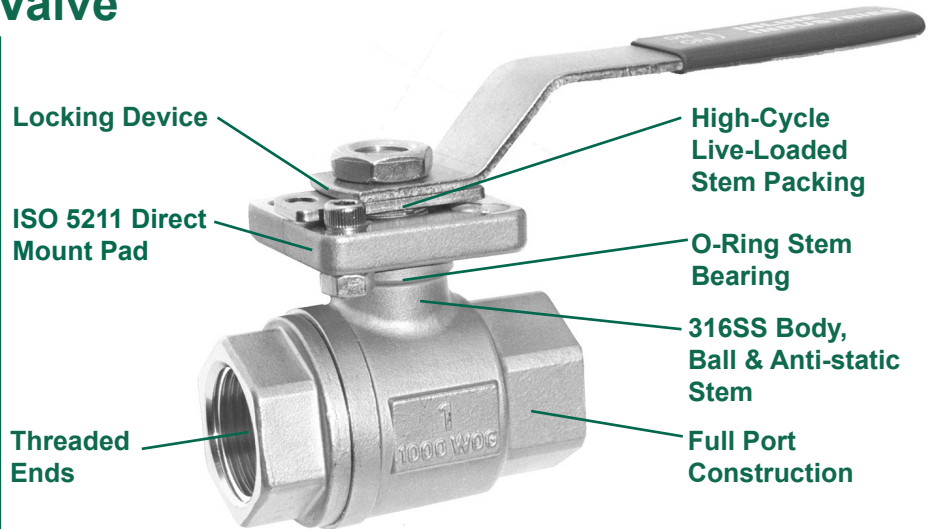
General Chemical

Industrial

Other Corrosion  
Resistant Applications

# The 204F Series Ball Valve

The 204F series ball valve incorporates several innovative design features for improved process performance. The uniform bore diameter improves flow rates and minimizes pressure drop through the valve. The dual pattern ISO 5211 mount pad facilitates direct mounting of pneumatic and electric actuators. In combination with our high-cycle stem packing system, the 204F series ball valve provides an ideal choice for all your automation requirements.

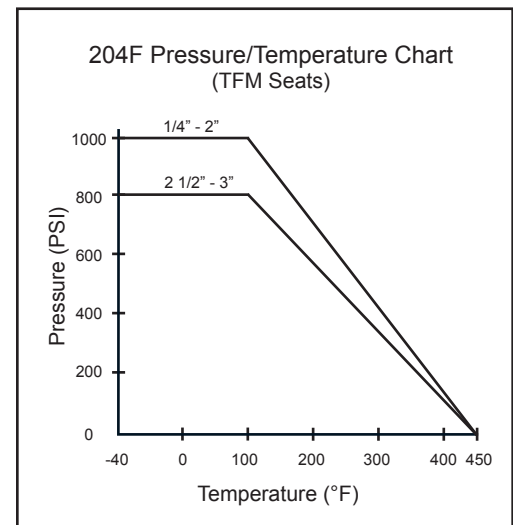


## Standard Features and Benefits

- **Dual Pattern ISO 5211 Direct Mount Pad**  
No bracket or drive coupling needed for automation  
Eliminates exposed moving parts for safer work environment  
Direct drive eliminates play and improves actuator positioning  
Dual pattern pad fits a wide range of actuator sizes
- **High-Cycle, Live-Loaded Stem Packing**  
Ensures tight stem seal and extends service life
- **O-ring Stem Bearing**  
Maintains stem alignment  
Reduces packing side-loading and wear  
Enhances stem seal
- **Blow-Out-Proof Stem**  
Bottom loaded stem prevents removal when valve is in service
- **Full Port Design**  
Improves flow resulting in increased process efficiencies  
Reduces pressure drop through the valve
- **2-Piece Construction**  
Our most economical direct mount design
- **Pressure Balancing Ball**
- **Locking Device**  
Enables plant personnel to secure valve in open or closed position when manually operated
- **Investment Cast**  
Improves dimensional control and reduces porosity
- **Anti-Static Stem**
- **Standard Valve Suitable for 150 psi Saturated Steam**
- **Castings Meet NACE MR0175/ISO 15156**

## Options

- **Oval Handle (1/2" - 1 1/2")**
- **Stem Extensions**
- **Spring Return Handle**
- **Air Safety Exhaust Valve (ASEV)**
- **Material Test Reports Available Upon Request**

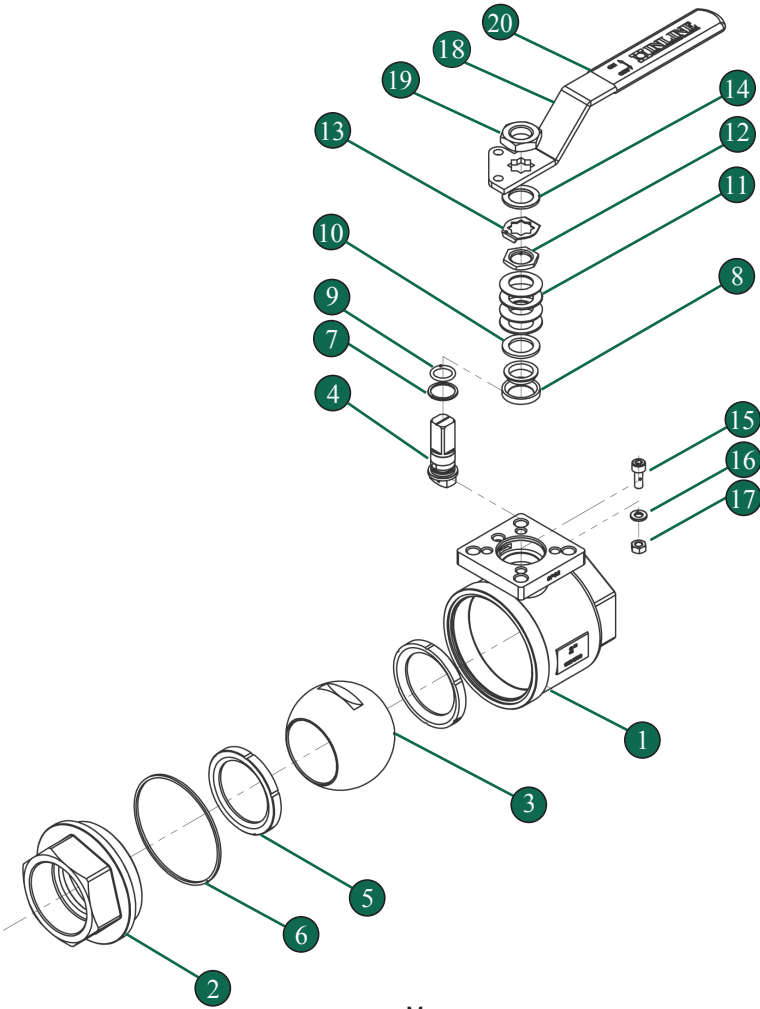


## Operating Conditions

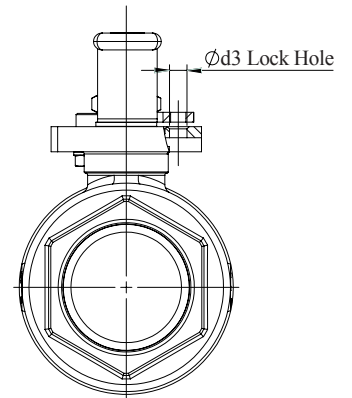
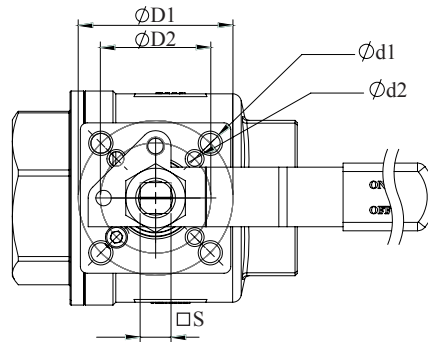
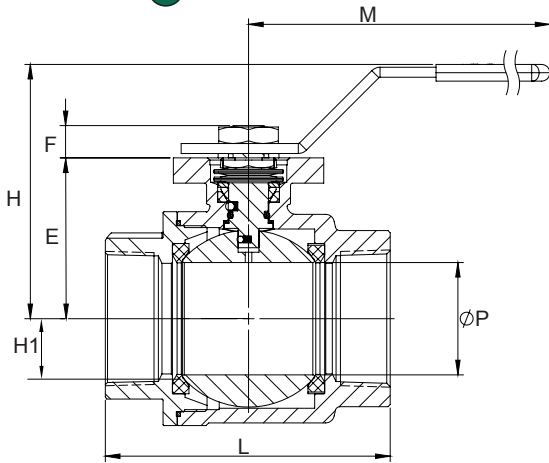
- **Temperature Range (TFM):**  
-40°F ~ 450°F
- **Maximum Pressure (TFM):**  
1000 PSI CWP (1/4" - 2")  
800 PSI CWP (2 1/2" - 3")

## Specifications

- All valves shell and seat tested to ASME B16.34 and API 598
- All materials comply with applicable ASTM material specifications
- NSF/ANSI/CAN 61 & 372 Certified
- NPT to ASME B1.20.1



Valve Components			
No.	Part Name	Material	Qty
1	Body	A351 CF8M	1
2	End Cap	A351 CF8M	1
3	Ball	316 SS	1
4	Stem (Anti-Static)	316 SS	1
5	Seat	TFM	2
6	Body Seal	TFM	1
7	Thrust Washer	PEEK	1
8	Stem Packing Set	TFM	1
9	Stem O-Ring	VITON	1
10	Packing Gland	304 SS	1
11	Belleville Washer	301 SS	4
12	Gland Nut	304 SS	1
13	Gland Nut Lock Washer	304 SS	1
14	Stem Spacer	304 SS	1
15	Stop Pin	304 SS	1
16	Split Lock Washer	304 SS	1
17	Stop Pin Nut	304 SS	1
18	Handle	304 SS	1
19	Handle Nut	304 SS	1
20	Handle Cover	Vinyl	1



Size	Dimensions (Inches)													ISO 5211 Pattern <sup>1</sup>	C <sub>v</sub>	Weight (lbs)
	L	P	M	H	H1	E	F	D1	D2	d1	d2	d3	S			
1/4"	2.23	0.59	5.4	2.7	0.7	1.46	0.33	1.65	1.42	0.22	0.22	0.31	0.35	F03/F04	5.1	1.1
3/8"	2.23	0.59	5.4	2.7	0.7	1.46	0.33	1.65	1.42	0.22	0.22	0.31	0.35	F03/F04	10.3	1.1
1/2"	2.35	0.59	5.4	2.7	0.7	1.46	0.33	1.65	1.42	0.22	0.22	0.31	0.35	F03/F04	17.1	1.2
3/4"	2.92	0.79	5.4	2.9	0.9	1.65	0.35	1.65	1.42	0.22	0.22	0.31	0.35	F03/F04	28.9	1.7
1"	3.27	0.98	6.4	3.1	1.1	1.91	0.42	1.97	1.65	0.26	0.22	0.31	0.43	F04/F05	48.2	2.6
1 1/4"	3.83	1.25	6.4	3.3	1.3	2.11	0.42	1.97	1.65	0.26	0.22	0.31	0.43	F04/F05	74.0	3.7
1 1/2"	4.28	1.50	8.0	4.2	1.6	2.51	0.57	2.76	1.97	0.35	0.26	0.31	0.55	F05/F07	114	6.1
2"	5.07	2.00	8.0	4.5	1.9	2.86	0.57	2.76	1.97	0.35	0.26	0.31	0.55	F05/F07	192	9.0
2 1/2"	6.65	2.56	11.8	5.3	2.4	3.62	0.74	4.02	2.76	0.43	0.35	0.39	0.67	F07/F10	337	18.2
3"	7.62	3.15	11.8	5.7	2.8	4.02	0.74	4.02	2.76	0.43	0.35	0.39	0.67	F07/F10	542	26.0

<sup>1</sup>Direct mount may require stem adapter bushings

C<sub>v</sub> value represents flow data to ISA 75.01.01 - 2007



Automation Systems



Direct Mount Products

## 204F Ordering Information

Example: 2" 2-Piece Full Port Ball Valve with ISO 5211 Direct Mount Pad, Lever Handle and Locking Device, 316 SS Body and Trim, TFM Seats and Seals, NPT Ends

204F	D	6	6	6	6	M	M	TT	2	S
Valve Series	Valve Size	Body Material	End Material	Ball Material	Stem Material	Seat	Seal	End Connection	Port	Ball Configuration
204F - Full Port	2 3 5 7 A B C D E F	6 - A351 Gr. CF8M (316)	6 - A351 Gr. CF8M (316)	6 - 316 SS	6 - 316 SS	M - TFM C - RTFE (15% C.F.)	M - TFM T - PTFE	T - NPT	2 - 2 Way	S - Straight Port 7 - ASEV Ball*

All valves supplied with a PEEK Thrust Washer and Viton Stem Seal O-Ring.  
Due to continuous product development, information may change without notice.

Other materials available upon request.  
\*Air Safety Exhaust Valve



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