

Non- Direct Mount  
Two Piece Flanged Ball Valve

CLASS 150 & 300 6" -12"

2F00  
Series



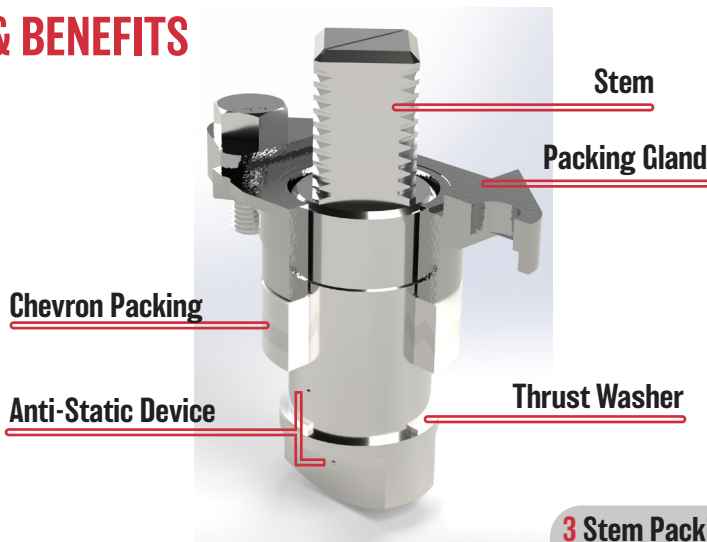
## STANDARDS

Design	ASME B16.34
Flange Design	ASME B16.5
Face-to-Face	ASME B16.10
Testing	API 598
Inspection	MSS SP-55
Marking	MSS SP-25
Mounting	ISO 5211
Quality Assurance	ISO 9001:2015

## APPROVALS & CERTIFICATIONS

Canadian Registration Number	CRN Registered
Gas/Flammable Liquid Shutoff	UL Certified
Fire Safe	API 607-7th Edition
Sulfide Stress Cracking	NACE MR0175
Reliability	SIL Rated IEC 61508:2010
Fugitive Emissions	TA LUFT
Hazardous Areas	ATEX 2014/34/EU
Design/Manufacture	CE/PED 2014/68/EU

## FEATURES & BENEFITS



### 4 Seat

Utilizing precision manufacturing techniques and advanced materials such as TFM1600 and PTFE, the seat provides a bubble tight sealing surface between the ball and body. Self-relieving grooves in the seat provide a pressure balancing effect when the upstream line pressure is too high, preserving the seat's lifespan.

### 3 Stem Packing

The stem packing features a chevron design with an adjustable gland to ensure a leakproof seal around the stem. Anti-static devices are integrated within the stem with touch points on the ball and body of the valve.

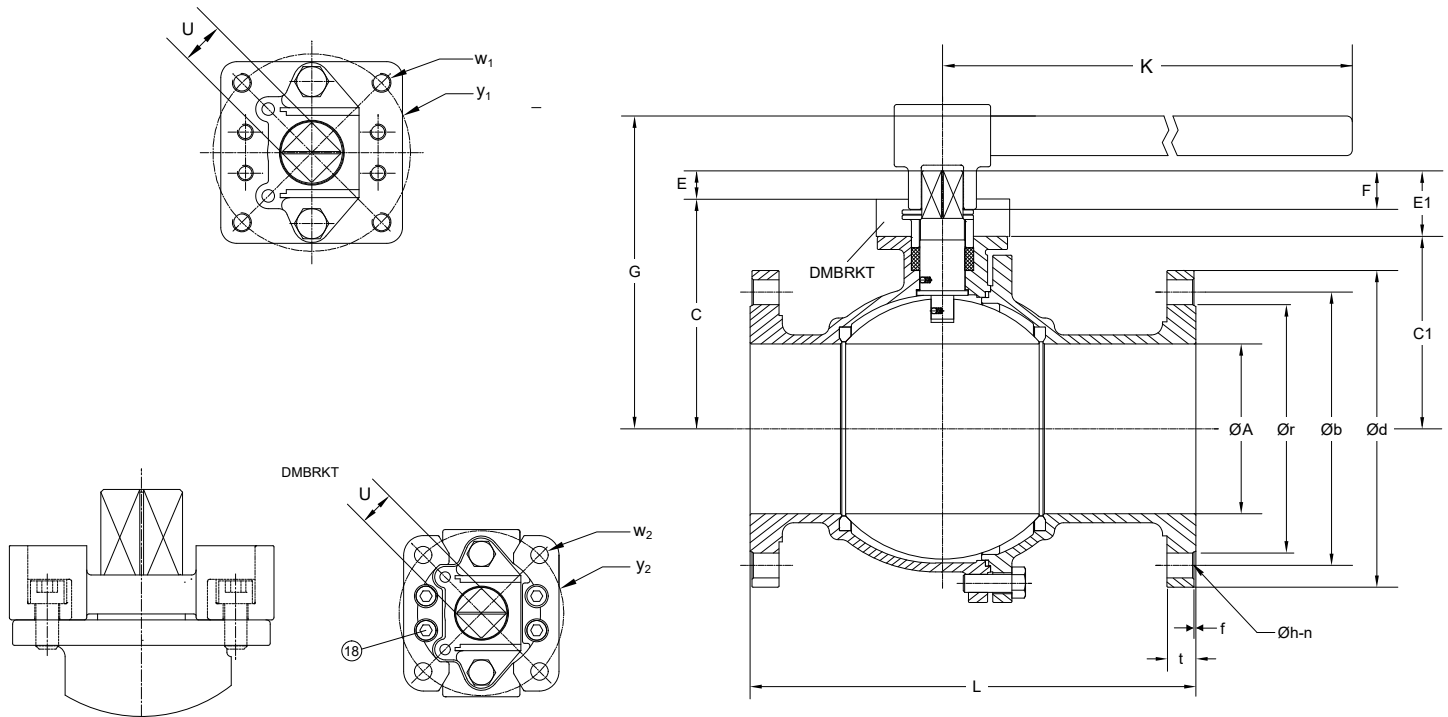
### 2 Body/Endcap

The body and endcap are designed to ASME B16.34 standards, which house all internal components. Sizes 5" and 6" are investment cast, and sizes greater than 6 inches are sand cast. All castings are inspected to MSS SP-55. JFlow's 2F00 series features integrated class 150 and 300 flanges, ensuring standard face-to-face dimensions in compliance with ASME B16.10.

### 1 Ball

Balls are crafted from high-quality metal that is forged, precision machined, heat treated, lapped and polished using advanced manufacturing techniques. This process guarantees a bubble tight shutoff and low operating torque.

# DIMENSIONS



## CLASS 150 MOUNTING

NPS	U	w1	w2	y1	y2	K	DMBRKT ISO
5	1.062 (27MM)	M12	0.51	4.921	4.921	27.5	F12
6	1.062 (27MM)	M12	0.51	4.921	4.921	33.4	F12
8	1.417 (36MM)	M12	0.68	4.921	5.511	43.3	F14
10	1.417 (36MM)	M12	0.68	4.921	5.511	47.2	F14
12	1.417 (36MM)	M16	0.68	5.511	5.511	59.0	F14

## CLASS 150 GENERAL

### FLANGE

NPS	$\varnothing A$	C1	C	E1	E	F	G	L	$\varnothing r$	$\varnothing b$	$\varnothing d$	t	f	$\varnothing h-n$	Weight(lbs)	Cv*
6	5.90	6.69	7.99	2.28	0.98	1.33	11.3	15.5	8.5	9.5	10.9	1.00	0.063	0.87-8	149	5400
8	7.87	8.62	10.0	2.51	1.14	1.49	14.1	17.9	10.6	11.7	13.5	1.12	0.063	0.87-8	276	10000
10	9.84	10.0	11.4	2.51	1.14	1.49	15.5	20.9	12.8	14.2	15.9	1.18	0.063	0.98-12	348	16100
12	11.8	12.0	13.9	3.11	1.25	1.81	17.5	24.0	15.0	17.0	19.0	1.25	0.063	0.98-12	597	23500

## CLASS 300 GENERAL

### FLANGE

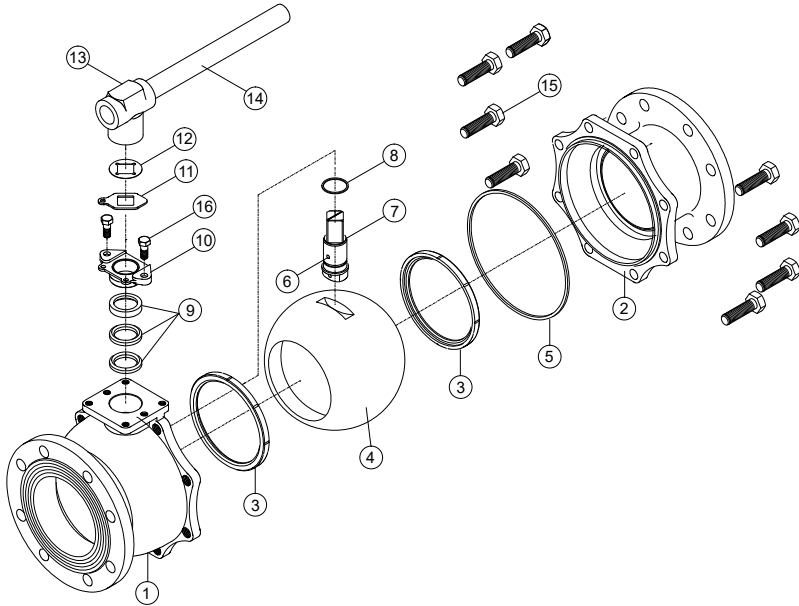
NPS	$\varnothing A$	C1	C	E1	E	F	G	L	$\varnothing r$	$\varnothing b$	$\varnothing d$	t	f	$\varnothing h-n$	Weight(lbs)	Cv*
6	5.90	6.69	7.99	2.28	0.98	1.33	11.3	15.5	8.5	10.6	12.5	1.46	0.063	0.87-12	162	5400

\*Cv is defined as the number of US gallons of water at 60F that will flow through a valve, per minute, with a pressure drop of 1psi across the valve

## STANDARD MATERIAL LIST - 2500 SERIES

Part	Name	Stainless Steel	Carbon Steel
1	Body	ASTM A351 Gr CF8M	ASTM A216 Gr WCB
2	Flanged End	ASTM A351 Gr CF8M	ASTM A216 Gr WCB
3	Seat		TFM1600
4	Ball		SS316
5	Gasket		TFM 1600
6	Anti-Static Device		SS316
7	Stem		SS316
8	Thrust Washer		TFM1600
9	Stem Packing		TFM1600
10	Packing Gland		SS304
11	Stopper		SS304
12	Stopper Plate		SS304
13	Lever Head		FCD45
14	Pipe Handle		STEEL PIPE
15	Body Bolt		ASTM A193 Grade B8M
16	Gland Bolt		SS304

\*JFlow Controls offers a standard repair kit that includes all recommended spare parts: seats, body seal, stem packing, and O-ring.

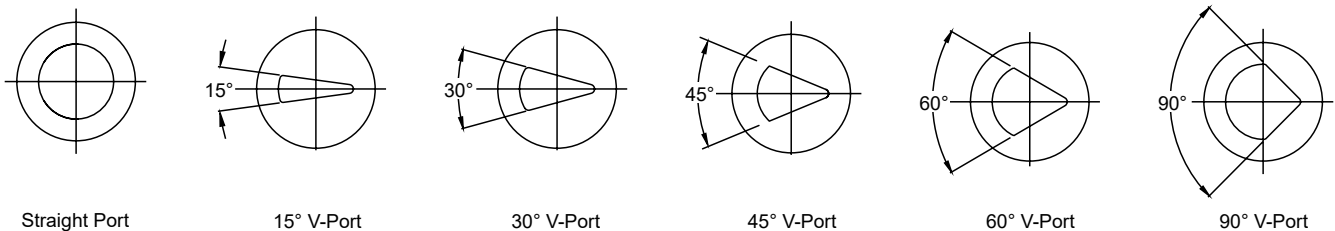


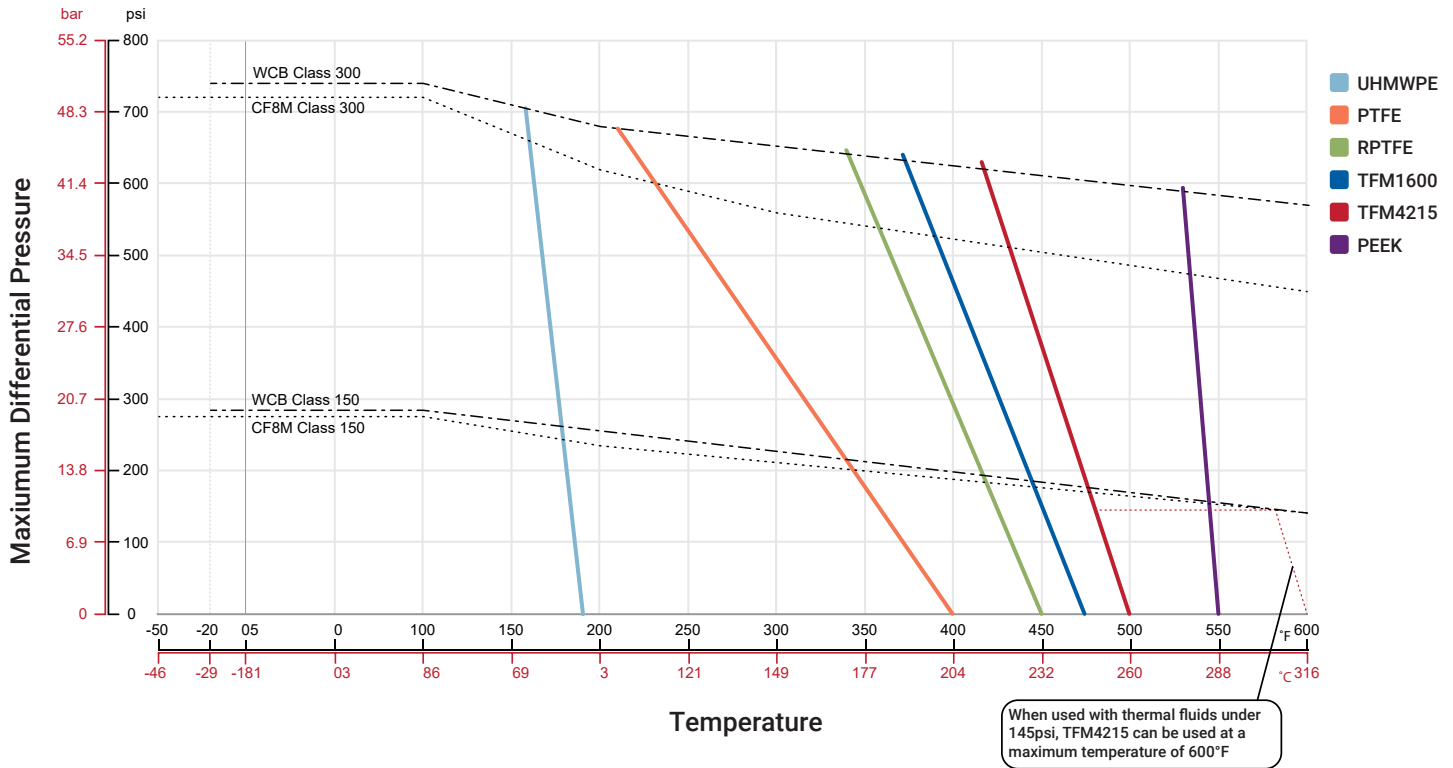
## TORQUE (in-lb) - CLASS 150 & 300

NPS\PSI	0	100	200	300	400	500	600	700
5	1682	1682	1938	2018	2319	2992	3248	3461
6	1974	1974	1974	2186	2576	2965	3620	4266
8	2425	2425	2930	3186	5727	8276	9550	10179
10	3815	4585	5293	6762	7444	-	-	-
12	5098	6904	10409	11896	-	-	-	-

\*20% safety factor included

## V-Ball Options





### BODY & END CAP ASME B16.34 RATINGS

Temperature (°F)	Class 150 (psi)		Class 300 (psi)	
	CF8M	WCB	CF8M	WCB
-20 to 100	275	285	720	740
200	235	260	620	680
300	215	230	560	655
400	195	200	515	635
500	170	170	480	605
600	140	140	450	570

### SOFT GOODS TEMPERATURE RATINGS

Component	Material	Temperature (°F)
Stem Packing	TFM-1600	-75 to 475
Body Seal	TFM-1600	-75 to 475
O-Ring	FKM (Standard)	-15 to 400
	Kalrez	-2 to 600
O-Ring	BUNA-N	-31 to 248
	Silicone	-60 to 450
O-Ring	EPDM	-60 to 300

JFlow Controls 2F00 Series 2 piece flanged ball valve is offered in several different body and trim materials in order to accommodate a variety of different industrial applications.

\* CF8M can reach temperatures as low as -50°F

\*Contact JFlow Controls for specific Cv values on V-Port balls

# HOW TO ORDER - 2F00



Size	Prefix	Series	Body Ball Stem	Port	Packing	Seat	Body Seal	End Connection	Operator/ Bracket
B - 5"									
C - 6"									
E - 8"									
F - 10"									
G - 12"									
F - API 607 FIRESAFE CERTIFIED									
2F - 2F00 2PC FLANGED									
	<b>BODY</b>	<b>BALL</b>	<b>STEM</b>						
	23 - WCB	316SS	316SS						
	33 - CF8M	316SS	316SS						
F -	FULL PORT								
R -	REDUCED PORT								
1 -	15 DEGREE V-BALL								
3 -	30 DEGREE V-BALL								
4 -	45 DEGREE V-BALL								
6 -	60 DEGREE V-BALL								
9 -	90 DEGREE V-BALL								
S -	1/16" SLOT								
8 -	1/8" SLOT								
T -	TFM1600								
C -	TFM4215								
G -	GRAPHITE								
U -	UHMWPE								
T -	TFM1600								
C -	TFM4215								
P -	PEEK								
U -	UHMWPE								
T -	TFM1600								
C -	TFM4215								
G -	GRAPHITE								
U -	UHMWPE								
F1 -	ANSI CLASS 150 RF FLANGE								
F3 -	ANSI CLASS 300 RF FLANGE								
LD -	LOCKING LEVER HANDLE			SE - STEM EXTENSION (CONTACT JFLOW SALES FOR DIFFERENT HEIGHTS)					
OH -	OVAL HANDLE			LB - LOCKOUT BRACKET					
SH -	SPRING RETURN HANDLE			BS - BARE STEM					
GO -	MANUAL GEAR OPERATOR			*					

\*Contact JFlow Controls for additional material options and automation capabilities



**The Right Valve - The Right Application - Right Now!**

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