

Figure 221A CARBON STEEL BALL VALVES



2 PC FULL PORT 2000 CWP

Features:

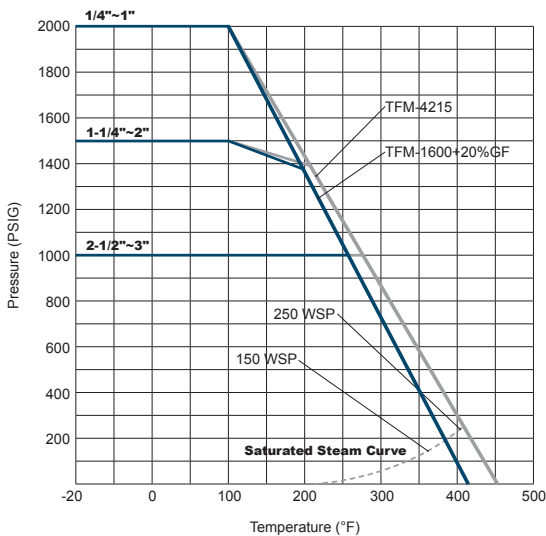
- 2000 PSI CWP* Non-Shock
- Working Steam Pressure (WSP)
 - 150 PSI - Fig. 221A
 - 250 PSI - Fig. 221AC
- Full Port
- Blow-out Proof Stem
- Adjustable Packing
- Anti-Static Design
- Investment Cast Body
- TFM (Super TFE) Seats
- Threaded NPT Ends
- Stainless Steel Handle
- Locking Lever
- Tapped Hole Mounting Pad
- Vented Ball
- Manufactured Silicone Free



Standards:

- Design: ASME B16.34, MSS SP-110
- End Connections: ASME B1.20.1
- Seat/Shell Test: MSS SP-110

* 1/4" to 1" - 2000 PSI CWP
 1-1/4" to 2" - 1500 PSI CWP
 2-1/2" to 3" - 1000 PSI CWP



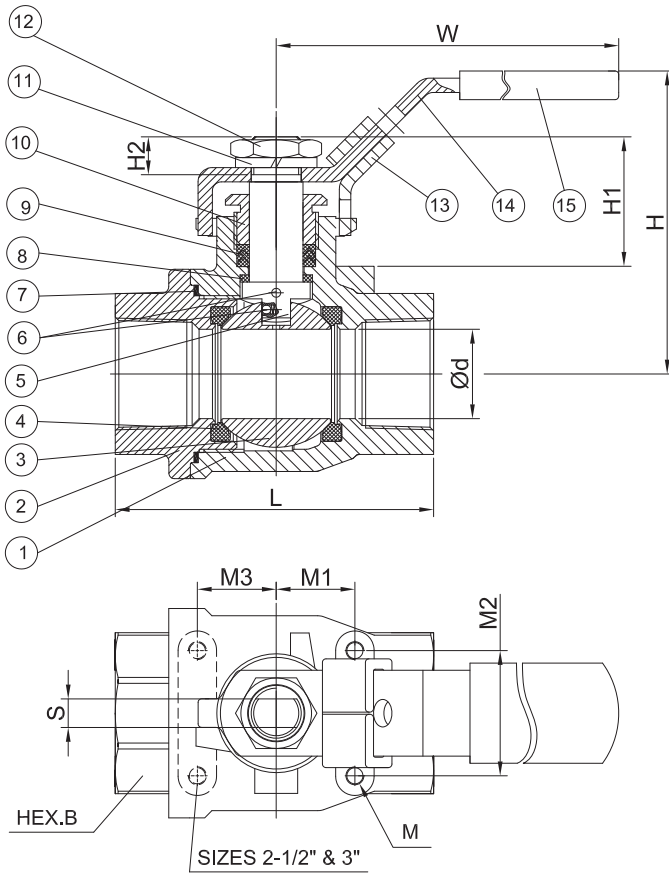
Cv, Torque & Weight

Size	Cv	Torque (in-lbs)	Wt (lbs)
1/4	15	69	1.15
3/8	15	69	1.15
1/2	18	77	1.15
3/4	36	98	1.72
1	48	166	1.90
1-1/4	58	277	3.53
1-1/2	120	388	6.00
2	190	582	9.17
2-1/2	450	816	15.43
3	600	1395	19.18

Figure Number Matrix

FNW 221A		Seat/Seals	Size
SEAT/SEAL CODE		SIZE CODE	
Blank	= Standard Temp (150 WSP)	1/4 = B	1-1/4 = H
C	= High Temp (250 WSP)	3/8 = C	1-1/2 = J
		1/2 = D	2 = K
		3/4 = F	2-1/2 = L
		1 = G	3 = M

2 PC FULL PORT 2000 CWP



Standard Materials

Ref. No.	Description	Material		Qty
		Figure 221A	Figure 221AC	
1	Body	ASTM A216 Gr. WCB Carbon Steel		1
2	End Cap	ASTM A216 Gr. WCB Carbon Steel		1
3	Ball	316SS Stainless		1
4	Seat	TFM1600+20%GF	TFM4215	2
5	Stem	316SS Stainless		1
6	Anti-Static Device	316SS Stainless		2
7	Body Gasket	PTFE	PTFE + 20% CF	1
8	Thrust Washer	TFM4215		1
9	V-Ring Packing	PTFE	TFM1600	1 Set
10	Gland Nut	304SS Stainless		1
11	Handle Washer	304SS Stainless		1
12	Handle Nut	304SS Stainless		1
13	Locking Pad	304SS Stainless		1
14	Handle	304SS Stainless		1
15	Handle Cover	Vinyl Plastic		1

Dimensions (inches)

SIZE	Ød	L	H1	H2	H	W	S	M1	M3	M2	M (UNC)	B
1/4	0.42	2.17	1.34	0.40	2.52	3.74	0.314	0.50		1.12	10-24	1.06
3/8	0.50	2.17	1.34	0.40	2.52	3.74	0.314	0.50		1.12	10-24	1.06
1/2	0.59	2.55	1.34	0.40	2.52	4.92	0.314	0.50		1.12	10-24	1.06
3/4	0.79	3.03	1.52	0.43	2.64	4.92	0.314	0.88		1.38	10-24	1.26
1	0.98	3.46	1.46	0.42	3.27	5.51	0.314	0.88		1.38	10-24	1.61
1-1/4	1.26	4.01	2.09	0.83	3.50	5.51	0.314	1.00		1.50	1/4-20	1.97
1-1/2	1.50	4.33	2.44	1.12	3.93	7.87	0.472	1.00		1.50	1/4-20	2.20
2	1.97	4.92	2.36	1.09	4.25	7.87	0.472	1.00		1.50	1/4-20	2.76
2-1/2	2.50	6.45	2.24	0.93	5.91	9.84	0.472	1.18	1.38	2.76	1/4-20	3.27
3	2.99	7.12	2.12	0.93	6.34	9.84	0.472	1.28	1.28	2.76	1/4-20	4.02