

FIGURE 330A STAINLESS STEEL BALL VALVES

FNW®

3 PC SANITARY 400 CWP W/CLAMP ENDS

FEATURES

- 400 PSI CWP non-shock
- 150 PSI WSP
- Clamp ends
- Blowout-proof stem
- Live-loaded packing
- Anti-static design
- Investment cast body
- Internal polished body and ball surface (Ra 32µin / 0.8µm)
- Double stem seal
- Cavity filled TFM (super TFE) seat design
- Stainless steel handle
- Locking lever
- Direct mounting pad
- Vacuum rated to 26.967" Hg (75 Torr)*
- Manufactured silicone free
- Replacement locking handle kits available

STANDARDS

- Design: MSS SP-110
- End connections: ASME BPE
- Seat/shell test: MSS SP-110
- Mounting pad: ISO 5211
- Corrosion Resistance: NACE MRO103 and MRO175
- Fugitive Emissions: ISO 15848-1

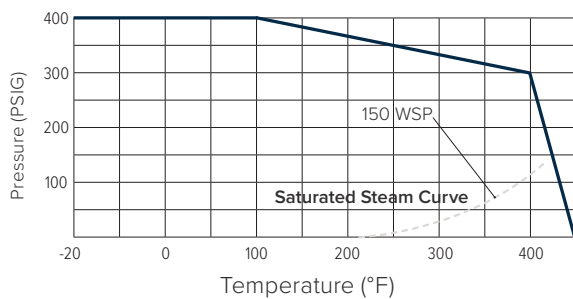
* Vacuum measurements are often made in inches of mercury below atmospheric pressure. The values calculated here assume standard atmospheric pressure of 29.92 inches of mercury.



ACCESSORIES



Replacement Locking Handle Kits



TORQUE (IN-LBS)

Size / ΔP	75 psig	150 psig	300 psig
	5 Bar	10 Bar	20 Bar
1/2	44	44	44
3/4	53	53	53
1	88	88	97
1-1/2	168	168	195
2	221	257	283
2-1/2	354	398	434
3	575	637	717
4	885	973	1,080

For actuator sizing, a safety factor of minimum 30% is recommended.

CV & WEIGHT

Size	Cv	Wt (lbs)
1/2	13	1.28
3/4	18	2.27
1	48	3.17
1-1/2	165	6.56
2	207	9.92
2-1/2	450	18.47
3	780	26.12
4	1100	51.37

FIGURE NUMBER MATRIX

FNW 330A		Size
SIZE CODE		
1/2" = D	2" = K	
3/4" = F	2-1/2" = L	
1" = G	3" = M	
1-1/2" = J	4" = P	

HANDLE KIT CODES (ORDER SEPARATELY)

FNW 310AM		Kit	Size
KIT TYPE		SIZE CODE	
Locking Handle = LHK		1/2"-3/4" = BF	
		1"-1-1/4" = GH	
		1-1/2"-2" = JK	
		2-1/2"-3" = LM	
		4" = P	

The figure 330A uses the same handle kit as the 310AM

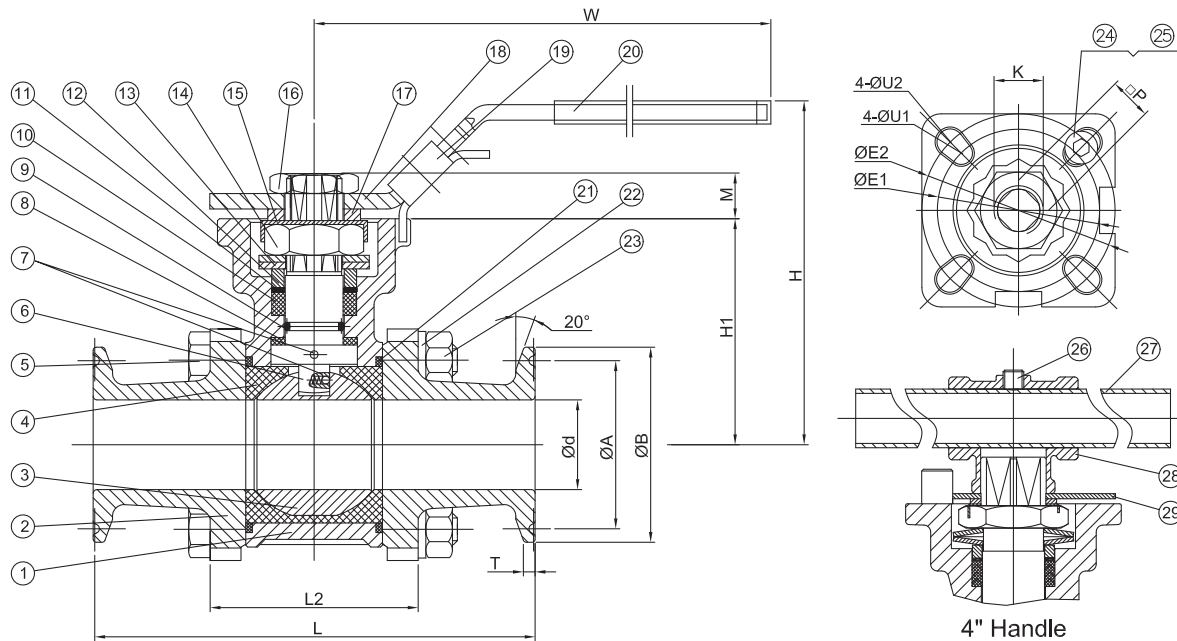
REPAIR KITS (ORDER SEPARATELY)

FNW 330ARK		Size
SIZE CODE		
1/2" = D	2" = K	
3/4" = F	2-1/2" = L	
1" = G	3" = M	
1-1/2" = J	4" = P	

FIGURE 330A

STAINLESS STEEL BALL VALVES

3 PC SANITARY 400 CWP W/CLAMP ENDS



DIMENSIONS (INCHES)

SIZE	Ød	L	H1	H	W	A	B	T	M	ØE1	ØE2	P	U1	U2	L2	K (UNF)
1/2	0.37	3.54	1.65	2.83	5.71	0.80	1.00	0.15	0.35	1.42	1.65	0.35	0.24	0.24	1.71	7/16-20
3/4	0.62	3.54	1.93	3.15	5.71	0.80	1.00	0.15	0.35	1.42	1.97	0.35	0.24	0.28	1.82	7/16-20
1	0.87	3.94	2.28	3.54	6.30	1.71	1.99	0.11	0.43	1.65	1.97	0.43	0.24	0.28	2.10	9/16-18
1-1/2	1.37	4.92	2.80	4.17	7.48	1.71	1.99	0.11	0.55	1.97	2.76	0.55	0.28	0.35	3.05	3/4-16
2	1.87	5.91	3.07	4.45	7.48	2.22	2.52	0.11	0.55	1.97	2.76	0.55	0.28	0.35	3.59	3/4-16
2-1/2	2.37	7.48	3.94	5.91	10.24	2.78	3.05	0.11	0.67	2.76	4.02	0.67	0.35	0.43	4.32	7/8-14
3	2.87	8.66	4.29	6.26	10.24	3.29	3.58	0.11	0.67	2.76	4.02	0.67	0.35	0.43	4.91	7/8-14
4	3.84	10.63	5.51	7.80	13.78	4.33	4.69	0.11	0.67		4.02	0.67		0.43	6.22	1-1/8-12

STANDARD MATERIALS

Ref. No.	Description	Material	Qty
1	Body	ASTM A351 Gr. CF8M Stainless	1
2	End Cap	ASTM A351 Gr. CF8M Stainless	2
3	Ball	316SS Stainless	1
4	Seat	TFM1600	2
5	Body Bolt	ASTM A193-B8 Stainless	4
6	Stem	316SS Stainless	1
7	Anti-Static Device	316SS Stainless	2
8	Thrust Washer	PTFE	1
9	O-Ring	FKM	1
10	V-Ring Packing	PTFE	1 Set
11	Bushing	50% Stainless + 50% PTFE	1
12	Gland	316SS Stainless	1
13	Belleville Washer	301SS Stainless	2
14	Stem Nut	304SS Stainless	1

Ref. No.	Description	Material	Qty
15	Stop-Lock-Cap	304SS Stainless	1
16	Handle Nut	304SS Stainless	1
17	Square Washer	304SS Stainless	1
18	Handle	304SS Stainless	1
19	Lock Device	304SS Stainless	1
20	Handle Sleeve	Vinyl Plastic	1
21	Body Gasket	PTFE	2
22	Bolt Washer	304SS Stainless	4
23	Bolt Nut	304SS Stainless	4
24	Stop Bolt	304SS Stainless	1
25	Nut	304SS Stainless	1
26	Set Screw (4" only)	304SS Stainless	1
27	Handle (4" only)	ASTM A53 Steel + Zinc Plating	1
28	Adapter (4" only)	304SS Stainless	1
29	Stopper (4" only)	420SS Stainless	1