

SPECIFICATIONS

FIGURE 310AM STAINLESS STEEL BALL VALVES



3-PC FULL PORT 1000 CWP W/ ISO MOUNTING PAD

FEATURES

- 1000 PSI CWP non-shock
- 150 PSI WSP
- End connections
 - Threaded
 - Socket weld
- Full port
- Blowout-proof stem
- Live-loaded packing
- Anti-static design
- Investment cast body
- RTFE seats
- 4" with handle standard (lock-out style)
- Direct mounting pad
- Vacuum rated to 26.967"Hg (75 Torr)*
- Vented ball
- Manufactured silicone-free
- Optional locking handle kit (1/4"-4")



PRODUCT SPECIFICATIONS

Standards

- Design: MSS SP-110
- End connections:
 - NPT - ASME B1.20.1
 - SW - ASME B16.11
- Mounting pad: ISO 5211
- Seat/Shell test: MSS SP-110
- Corrosion resistance: NACE MR0103 and MR0175
- Fugitive emissions: ISO 15848-1 and TA-Luft

* 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.

FIGURE NUMBER MATRIX

FNW 310AM		
END CONFIGURATION	SIZE CODE (IN.)	
Threaded NPT = Blank	1/4 = B	1-1/2 = J
Socket Weld = SW	3/8 = C	2 = K
	1/2 = D	2-1/2 = L
	3/4 = F	3 = M
	1 = G	4 = P
	1-1/4 = H	

ACCESSORIES/OPTIONS



Replacement Locking Handle Kits (1/4"-4")

4" Includes Locking Handle

CV & WEIGHTS

Size (in.)	CV	Wt (lbs)
1/4	16	1.01
3/8	23	1.03
1/2	30	1.05
3/4	55	1.73
1	96	2.33
1-1/4	170	4.30
1-1/2	270	5.21
2	470	9.09
2-1/2	780	17.31
3	1150	24.36
4	2100	51.00

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FIGURE 310AM

STAINLESS STEEL BALL VALVES



3-PC FULL PORT 1000 CWP W/ ISO MOUNTING PAD

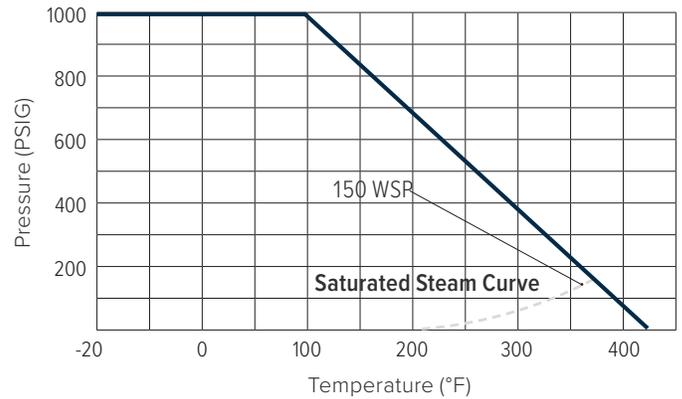
TORQUE (IN-LBS)

Size /ΔP	150 psig	300 psig	1000 psig
	10 Bar	20 Bar	63 Bar
1/4, 3/8	57	57	57
1/2	57	57	57
3/4	69	69	69
1	114	126	126
1-1/4	150	173	218
1-1/2	218	254	299
2	334	368	437
2-1/2	517	564	679
3	828	932	1162
4	1265	1404	1703

Note: 30% safety factor is recommended when sizing actuator.

KIT CODES

FNW 310AM		
KIT TYPE	SIZE CODE (IN.)	
Locking Handle = LHK	1/4-3/4 = BF	1-1/2-2 = LM
	1-1/4 = GH	4 = P
	1-1/2-2 = F	



REFERENCE CHART

Size (in.)	Dimensions (in.)																
	ØD	L	Lm	H	P	A	ØE1	ØE2	U1	U2	K (UNF)	Ls	L2	M (UNC)	B	L1	ØB1
1/4	0.42	2.95	1.30	1.65	0.35	0.35	1.42	1.65	0.24	0.24	7/16-20	2.23	1.71	1/4-20	1.10	0.39	0.56
3/8	0.50	2.95	1.30	1.65	0.35	0.35	1.42	1.65	0.24	0.24	7/16-20	2.23	1.71	1/4-20	1.10	0.39	0.70
1/2	0.59	2.95	1.30	1.65	0.35	0.35	1.42	1.65	0.24	0.24	7/16-20	2.23	1.71	1/4-20	1.10	0.39	0.86
3/4	0.79	3.15	1.52	1.91	0.35	0.35	1.42	1.97	0.24	0.28	7/16-20	2.44	1.82	5/16-18	1.36	0.51	1.07
1	0.98	3.54	1.76	2.30	0.43	0.43	1.65	1.97	0.24	0.28	9/16-18	2.79	2.10	5/16-18	1.65	0.51	1.34
1-1/4	1.26	4.33	2.13	2.48	0.43	0.43	1.65	2.76	0.24	0.35	9/16-18	3.37	2.68	3/8-16	2.05	0.63	1.69
1-1/2	1.50	4.72	2.42	2.81	0.55	0.55	1.97	2.76	0.28	0.35	3/4-16	3.81	3.05	3/8-16	2.30	0.63	1.93
2	1.97	5.51	2.95	3.08	0.55	0.55	1.97	2.76	0.28	0.35	3/4-16	4.36	3.59	3/8-16	2.81	0.67	2.42
2-1/2	2.50	7.28	3.62	3.94	0.67	0.67	2.76	4.02	0.35	0.43	7/8-14	5.75	4.36	9/16-12	3.41	0.67	2.91
3	2.99	8.07	2.93	4.27	0.67	0.67	2.76	4.02	0.35	0.43	7/8-14	6.34	4.93	9/16-12	3.98	0.67	3.54
4	3.95	9.45	3.76	5.51	0.87	0.87	-	4.02	-	0.43	1-1/8-12	7.87	6.26	5/8-11	5.20	0.79	4.53

PARTS BREAKDOWN

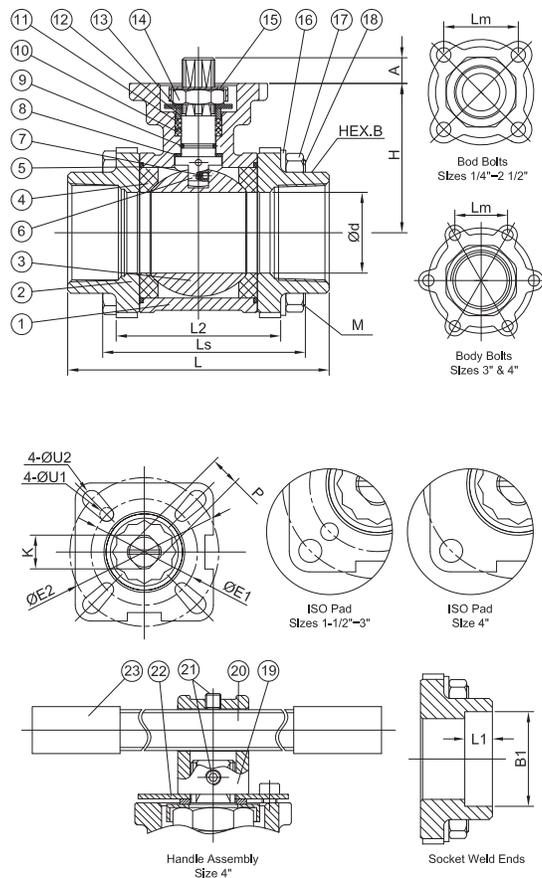
FIGURE 310AM

STAINLESS STEEL BALL VALVES



3-PC FULL PORT 1000 CWP W/ ISO MOUNTING PAD

PARTS DIAGRAM



PART MATERIALS & QUANTITY

Ref #	Description (in.)	Material	Qty
1	Body	ASTM A351 Gr. CF8M Stainless	1
2	End Cap	NPT SW ASTM A351 Gr. CF8M Stainless ASTM A351 Gr. CF3M Stainless	2
3	Ball	316SS Stainless	1
4	Seat	RTFE	2
5	Body Gasket	PTFE	2
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	Bellville Washer	301SS Stainless	2
14	Stem Nut	ASTM A194-8 Stainless	1
15	Stop-Lock-Cap	304SS Stainless	1
16	Bolt Washer	1/4-2 2-1/2 3-4 304SS Stainless	4 8 12
17	Bolt Washer	1/4-2 2-1/2 3-4 ASTM A194-8 Stainless	4 8 12
18	Body Nut	1/4-3 4 ASTM A193-B8 Stainless	4 6
19	Handle Adapter	4 ASTM A351 Gr. CF8 Stainless	1
20	Pipe Handle	4 ASTM A53 Steel+Zinc Plating	1
21	Set Screw	4 ASTM A193-B8 Stainless	1
22	Triangle Stopper	4 420SS Stainless	1
23	Handle Sleeve	4 Vinyl Plastic	1

REPAIR KITS

FNW 310ARK

SIZE CODE (IN.)

1/4-3/8 = BC	1-1/2 = J
1/2 = D	2 = K
3/4 = F	2-1/2 = L
1 = G	3 = M
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