

# Apollo® 77-100 Series

## Bronze Full Port Ball Valve

Threaded, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam. (See referenced P/T chart)  
 Vacuum Service to 29 inches Hg.

Federal Specification: WW-V-35C, Type: II, Composition: BZ, Style: 3.

MSS SP-110; Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends.

### FEATURES

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Mounting pad for easy actuator mounting
- Blow-out-proof stem design
- Adjustable packing gland
- Full port for full flow & min. pressure drop

### STANDARD MATERIAL LIST

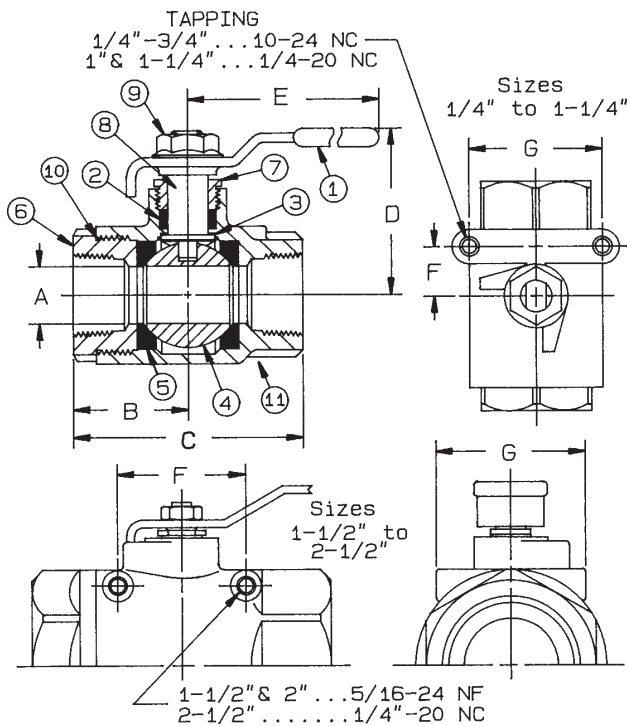
1. Lever and grip	Steel, zinc plated w/vinyl	10. Body seal	PTFE (1-1/4" to 2-1/2")
2. Stem packing	RPTFE	11. Body	B584-C84400
3. Stem bearing	RPTFE		
4. Ball	B16, chrome plated		
5. Seat (2)	RPTFE		
6. Retainer	B16 (1/4" to 1")		
	B584-C84400 (1-1/4" to 2-1/2")		
7. Gland nut	B16		
8. Stem	B16		
9. Lever nut	Steel, zinc plated		

### VARIATIONS AVAILABLE:

- 77-140 Series (316 SS Ball & Stem)
- 77-150 Series (Original Balancing Stop)
- 77-190 Series (Locked Retainer)

### OPTIONS AVAILABLE:

(SUFFIX)	OPTION	SIZES
-02-	Stem Grounded	1/4" to 2-1/2"
-03-	1-1/4" CS Stem Extension	1/4" to 2-1/2"
-04-	2-1/4" CS Stem Extension	1/4" to 2-1/2"
-05-	Plain Ball	1/4" to 2-1/2"
-07-	Steel Tee Handle	1/4" to 1-1/4"
-08-	90° Reversed Stem	1/4" to 2-1/2"
-10-	SS Lever & Nut	1/4" to 2-1/2"
-14-	Side Vented Ball (Uni-Directional)	1/4" to 2-1/2"
-15-	Wheel Handle, Steel	1/4" to 1-1/4"
-16-	Chain Lever - Vertical	3/4" to 2-1/2"
-17-	Rough Chrome Plated - Bronze Valves	1/4" to 2-1/2"
-18-	Plain Yellow Grip	1/4" to 2-1/2"
-20-	Slot Vented Ball	1/4" to 2-1/2"
-21-	UHMWPE Trim (Non-PTFE)	1/4" to 2-1/2"
-24-	Graphite Packing	1/4" to 2-1/2"
-27-	SS Latch-Lock Lever & Nut	1/4" to 2-1/2"
-28-	Mounting Pad Not Drilled & Tapped	1/4" to 2-1/2"
-30-	Cam-Lock and Grounded	1/4" to 1-1/4"
-32-	SS Tee Handle & Nut	1/4" to 1-1/4"
-35-	VTFE Trim	1/4" to 2-1/2"
-36-	SS High-Rise Round Handle & Nut	1/4" to 1-1/4"
-40-	Cyl-Loc and Grounded	1/4" to 1-1/4"
-45-	Less Lever & Nut	1/4" to 2-1/2"
-46-	Latch Lock Lever - Lock in Closed Position Only	1/4" to 2-1/2"
-47-	SS Oval Latch-Lock Handle & Nut	1/4" to 3/4"
-48-	SS Oval Handle (No Latch) & Nut	1/4" to 2"
-49-	Assembled Dry	1/4" to 2-1/2"
-50-	2-1/4" CS Locking Stem Extension	1/4" to 2-1/2"
-56-	Multifill Seats & Packing	1/4" to 2-1/2"
-57-	Oxygen Cleaned	1/4" to 2-1/2"
-58-	Chain Lever - Horizontal	3/4" to 2-1/2"
-60-	Static Grounded Ball & Stem	1/4" to 2-1/2"
-63-	NPT x Solder/Socket Weld	1/4" to 2-1/2"
-64-	250# Steam Trim	1/4" to 2-1/2"
-P01-	BSPP (Parallel) Thread Connection	1/4" to 2-1/2"
-T01-	BSPT (Tapered) Thread Connection	1/4" to 2-1/2"



BRONZE FULL PORT BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
77-101-01	1/4"	.43	1.12	2.25	1.81	3.87	.50	1.12	.79
77-102-01	3/8"	.50	1.12	2.25	1.81	3.87	.50	1.12	.75
77-103-01	1/2"	.50	1.12	2.25	1.81	3.87	.50	1.12	.69
77-104-01	3/4"	.81	1.56	3.12	2.12	4.87	.87	1.37	1.83
77-105-01	1"	1.00	1.81	3.62	2.62	5.50	.93	1.50	3.32
77-106-01	1-1/4"	1.25	2.12	4.25	2.87	5.50	.93	1.50	5.05
77-107-01	1-1/2"	1.50	2.37	4.75	3.34	8.00	2.08	3.06	6.71
77-108-01	2"	2.00	2.65	5.37	3.71	8.00	2.41	3.52	11.75
77-109-01	2-1/2"	2.50	3.25	6.50	4.12	8.00	2.75	3.37	17.25

**For Pressure/Temperature Ratings,  
 Refer to Page M-8, Graph No. 4**