



# 91-100 Series

## Bronze Uni-Body Ball Valve



Threaded, 400 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.  
 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

- Compact
- Reinforced seats and seals
- One piece bronze body
- Blow-out-proof stem design
- Adjustable packing gland

### STANDARD MATERIAL LIST

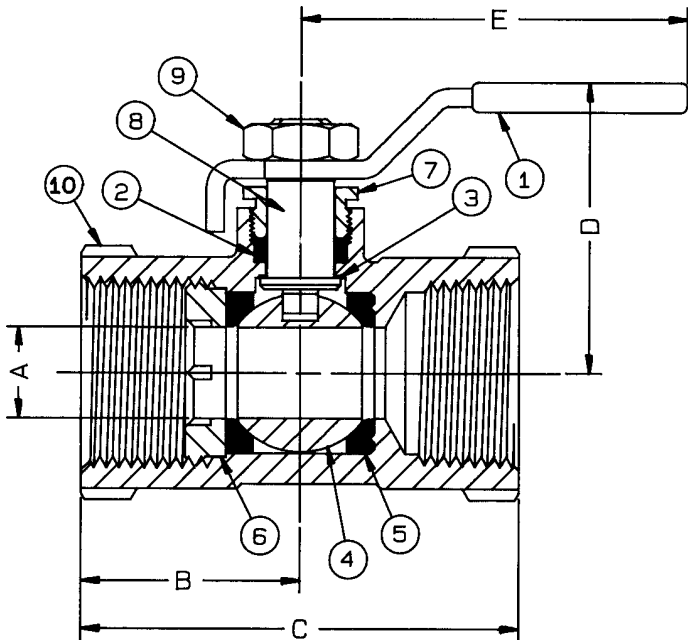
1. Lever and grip	Steel, zinc plated w/vinyl	6. Retainer	B16
2. Stem packing	MPTFE	7. Gland nut	B16
3. Stem bearing	RPTFE	8. Stem	B16
4. Ball	B16, chrome plated	9. Lever nut (Screw 1/4" to 1/2")	Steel, zinc plated
5. Seat (2)	RPTFE	10. Body	B584-C84400

### VARIATIONS AVAILABLE:

91-140 Series (316 SS Ball & Stem)

### OPTIONS AVAILABLE:

(SUFFIX)	OPTION	SIZES
-02-	Static Grounded	1/4" to 2"
-03-	1-1/4" CS Stem Extension	1/4" to 2"
-04-	2-1/4" CS Stem Extension	1/4" to 2"
-05-	Plain Ball	1/4" to 2"
-07-	Steel Tee Handle	1/4" to 2"
-08-	90° Reversed Stem	3/4" to 2"
-10-	SS Lever & Nut	1/4" to 2"
-14-	Side Vented Ball (Uni-Directional)	1/4" to 2"
-15-	Wheel Handle, Steel	1/4" to 2"
-16-	Chain Lever - Vertical	1" to 2"
-17-	Rough Chrome Plated - Bronze Valves	1/4" to 2"
-20-	Slot Vented Ball (Bi-Directional) - Bronze Valves	1/4" to 2"
-24-	Graphite Packing	1/4" to 2"
-27-	SS Latch-Lock Lever & Nut	1/4" to 2"
-30-	Cam-Lock Handle & Grounded	1/4" to 2"
-32-	SS Tee Handle & Nut	1/4" to 2"
-40-	Cyl-Loc & Grounded	3/4" to 2"
-45-	Less Lever & Nut	1/4" to 2"
-46-	Latch Lock Lever - Lock in Closed Position Only	1/2" to 2"
-47-	SS Oval Latch-Lock Handle & Nut	1/4" to 1-1/4"
-48-	SS Oval Handle	1/4" to 2"
-49-	Assembled Dry	1/4" to 2"
-50-	2-1/4" CS Locking Stem Extension	3/4" to 2"
-57-	Oxygen Cleaned	1/4" to 2"
-58-	Chain Lever - Horizontal	1" to 2"
-60-	Grounded Ball & Stem	3/4" to 2"
-92-	Balancing Stop	1/4" to 2"
-P01-	BSP (Parallel) Thread Connection	1/4" to 2"
-T01-	BSPT (Tapered) Thread Connection	1/4" to 2"



BRONZE UNI-BODY SATURN® BALL VALVE

NUMBER	SIZE	A	B	C	D	E	Wt.
91-101-01	1/4"	.38	1.14	2.15	1.71	3.87	.53
91-102-01	3/8"	.38	1.14	2.15	1.71	3.87	.53
91-103-01	1/2"	.38	1.14	2.15	1.71	3.87	.53
91-104-01	3/4"	.50	1.36	2.61	1.78	3.87	.82
91-105-01	1"	.63	1.50	2.90	2.02	4.78	1.25
91-106-01	1-1/4"	.81	1.79	3.50	2.18	4.78	1.98
91-107-01	1-1/2"	1.00	1.96	3.79	2.70	5.43	2.99
91-108-01	2"	1.25	2.29	4.42	2.92	5.43	4.64

**For Pressure/Temperature Ratings,  
Refer to Page M-8, Graph No. 3**

**C<sub>v</sub> FACTORS**  
**87A-100 & 88A-100 SERIES**

SIZE	1-1/2"	2"	2-1/2"	3"	4"	6"	8"	10" <sup>(1)</sup>
FULL OPEN	86	104	234	375	673	1099	1902	3890

**C<sub>v</sub> FACTORS**  
**87A-200 & 88A-200 SERIES**

SIZE	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"	10" <sup>(1)</sup>
FULL OPEN	15	19	75	195	410	545	1021	2016	4837	9250	15170

(1) Calculated Data

**C<sub>v</sub> FACTORS**  
**9A-100, 90-100, 91-100,**  
**92-100, 93-100 & 96-100 SERIES**

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
OPEN   90°	8.3	6.7	5.7	10	16	25	40	62

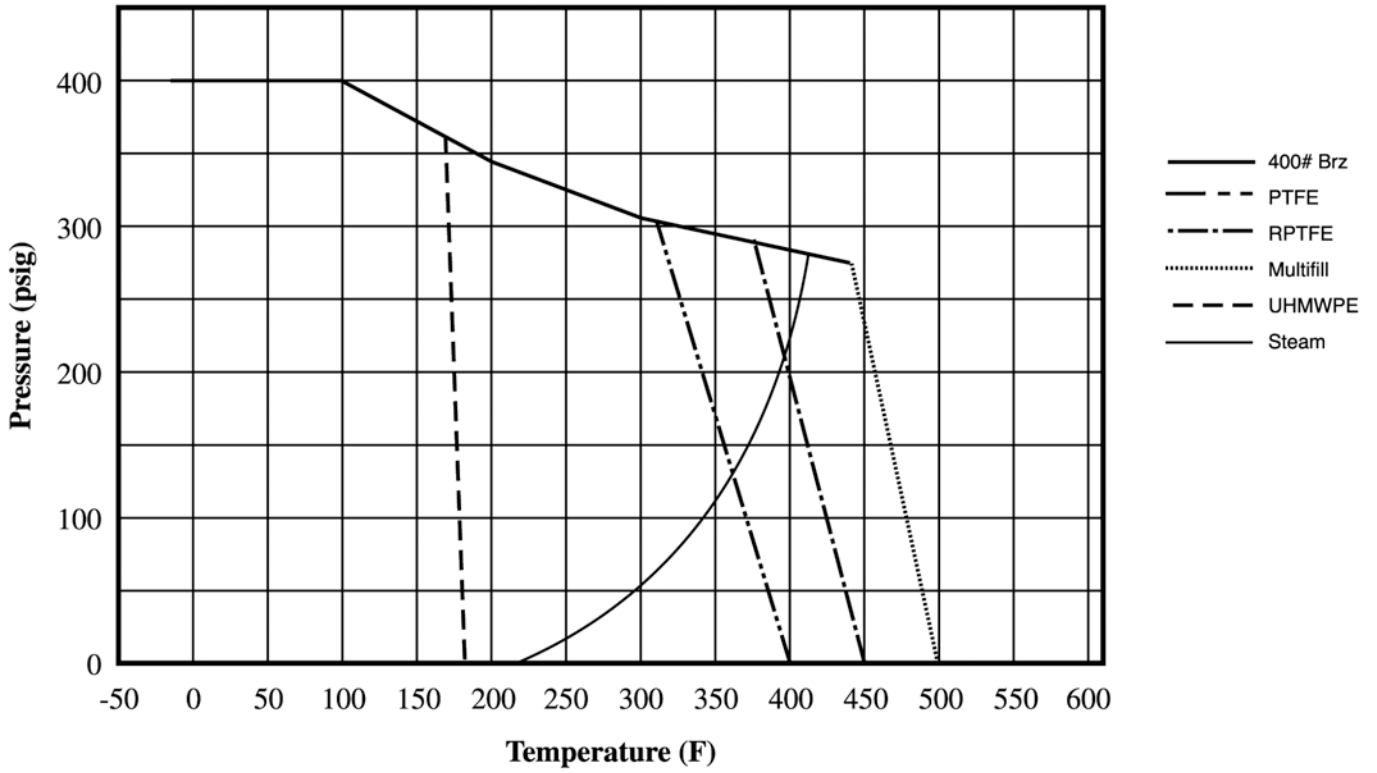
**C<sub>v</sub> FACTORS**  
**70-600 & 76-600 SERIES**

SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
FULL OPEN	5.4	12	14	21	34	47

**C<sub>v</sub> FACTORS**  
**"72" SERIES**

SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
FULL OPEN	26	48	65	125	170	216

### 400# Bronze P-T Rating (Graph 3)



### 600# Bronze P-T Rating (Graph 4)

