

# BRONZE VALVES

## BODY MATERIALS

Bronze valves manufactured by Pima Valve may be specified on the purchase order as either ASTM B61 or B62:

**ASTM B61** - (Copper Alloy UNS No. C92200) Cast valve bronze, commonly called "M" Metal.

Copper	86.0	-	90.0%
Tin	5.5	-	6.5%
Lead	1.0	-	2.0%
Zinc	3.0	-	5.0%
Nickel			1.0%
Residual			Balance

**ASTM B62** - (Copper Alloy UNS No C83600 Cast composition bronze, commonly called "Red Brass".

Copper	84.0	-	86.0%
Tin	4.0	-	6.0%
Lead	4.0	-	6.0%
Zinc	4.0	-	6.0%
Nickel			1.0%
Residual			Balance

## PRESSURE-TEMPERATURE RATINGS

PRESS. CLASS	PRESSURE (psi)							
	125	150		200	300		350	
END CONN.	THD	THD	FLG	THD	THD	THD	FLG	THD
TEMP. deg. F	MATERIAL							
	ASTM B-62			ASTM B-61				
-20 to 150	200	300	275	400	1000	600	500	1000
200	185	270	210	375	920	560	475	920
250	170	240	195	350	830	525	450	830
300	155	210	180	325	740	490	425	750
350	140	180	165	300	650	450	400	670
400	-	-	-	275	560	410	375	590
406	125	150	150	-	-	-	-	-
450	120	145	-	250	480	375	350	510
500	-	-	-	225	390	340	325	430
550	-	-	-	200	300	300	300	350



## TRIM MATERIALS

Bronze valves may be furnished with any of the following trims or combinations:

### TRIM DESIGNATION "A"

Stem - Manganese Bronze ASTM B138, Alloy C675  
 Seat - Bronze ASTM B61 or B62  
 Disc - Bronze ASTM B61 or B62

### TRIM DESIGNATION "E"

Stem - Ni-Ci Alloy Fed Spec QQ-N-281  
 Seat - Ni-Cu Alloy ASTM A494, GR. M30H  
 Disc - Ni-Cu Alloy ASTM A494, GR. M30C

### TRIM DESIGNATION "C"

Stem - Type 316SS AISI Type 316  
 Seat - Type 316SS AISI Type 316/ASTM A296, CLASS CF-8M  
 Disc - Type 316SS AISI Type 316/ASTM A296, CLASS CF-8M

## PACKING MATERIALS and BONNET GASKETS

Stem packing and bonnet gaskets are furnished in accordance with requirements for service intended as follows:

<u>Service</u>	<u>Stem Packing</u>	<u>Bonnet Gasket</u>
Fresh or Saltwater	Teflon/Synthetic	Synthetic Rubber Sheet
Steam	Plastic, Metallic, or Non-Metallic	Non-Asbestos w/Nitrile Binder
JP-5	Teflon/Synthetic	Buna-N & Cork

Pima Packing Sizes			
Valve Size	Gate	Globe	Angle
1	1/8	3/16	3/16
1-1/4	3/16	3/16	3/16
1-1/2	3/16	3/16	3/16
2	3/16	3/16	3/16
2-1/2	3/16	3/16	3/16
3	3/16	3/16	3/16
3-1/2	3/16	1/4	1/4
4	3/16	1/4	1/4
5	1/4	5/16	5/16
6	1/4	5/16	5/16
8	5/16	3/8	3/8
10	3/8	5/16	5/16
12	3/8	3/8	3/8
14	5/16	3/8	3/8
16 - 24	1/2	-	-



## TAGGING

In addition to body markings, bronze valves can be tagged as follows:

○	PIMA VALVE INC.	FIG NO.		PRESS		○
		BODY		TRIM		
		C.I.D.				

## FLANGED END

End flanges and drilling of flanges conform to ANSI 150 Lb., and 300 LB., Bronze, Flanged Standard B-16.24. If undrilled flanges or special drilling is required, inquiries should specify. All bolt holes are spotfaced on backside of flanges for bolt heads and nuts.

## BONNET BOLTING

Bonnet bolting is regularly furnished in Silicon Bronze (ASTM B98). The bolting may be either machine bolts with one nut each, or allthread studs with two nuts each. Other materials and special requirements should be specified on inquiries.

