

Plumbing & Heating Index

Model	Description	Page
38	Frost Proof	PV-10
58	Frost Proof	PV-10
100-25	Steam Angle	PV-15
102	Union Gate	PV-16
108	Convactor Steam Angle	PV-16
200	Hot Water Angle	PV-15
201	Angle Circulator	PV-16
300	Union Elbow	PV-17
302	Union Elbow	PV-17
445	Stop	PV-7
446	Stop	PV-7
545	Stop & Waste	PV-7
546	Stop & Waste	PV-7
547	Angle Globe	PV-11
548	Angle Globe	PV-11
567	Gate (150 WOG)	PV-4
568	Gate (150 WOG)	PV-4
606	Gate (125 WOG)	PV-1
607	Gate (125 WOG)	PV-1
667	Gate (200 WOG)	PV-2
667-20	Drainable Gate	PV-3

Model	Description	Page
668	Gate (200 WOG)	PV-2
668-20	Drainable Gate	PV-3
710	Boiler Drain	PV-8
712	Boiler Drain	PV-8
87501	Gas Ball Valve	PV-12
87601	Gas Ball Valve	PV-12
87801	Gas Ball Valve	PV-13
87901	Gas Ball Valve	PV-13
880	Gas Ball Valve	PV-14
943	Check-Spring	PV-6
947	Check-Spring	PV-6
967	Check-Spring	PV-5
968	Check-Spring	PV-5
1032	Sill Faucet	PV-8
1034	Sill Faucet	PV-8
2002	Hose Bibb	PV-9
2004	No-Kink Hose Bibb	PV-9
2005	No-Kink Hose Bibb	PV-9
8201-15	Circulator Ball Valve	PV-17
8211-15	Circulator Ball Valve	PV-17
Plumbing Engineering Data		ED-1

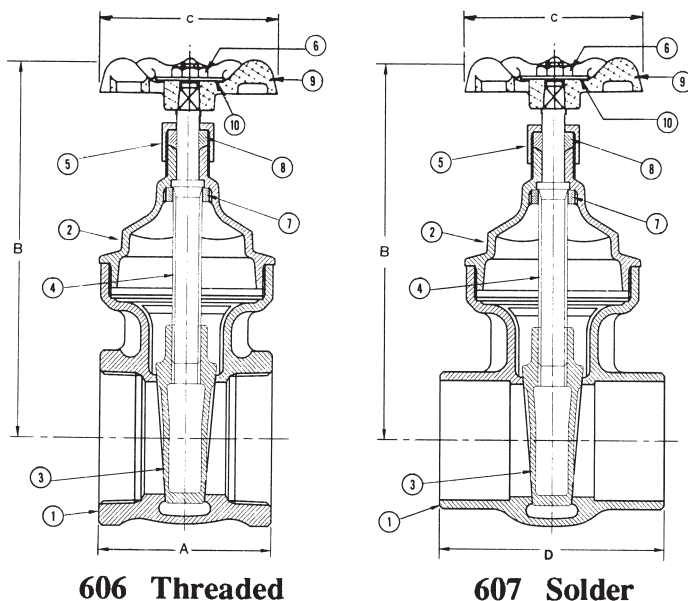
Rev 09/18

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



HAMMONDVALVE



606 Threaded

607 Solder

DIMENSIONS (INCHES)				Approx. Weight 606	Approx. Weight 607
SIZE	A	B	D		
1/4	1.75	3.06	-	0.6	-
3/8	1.81	3.06	1.63	0.7	0.6
1/2	2.00	3.06	1.88	0.7	0.6
3/4	2.13	3.94	2.50	1.3	1.1
1	2.56	4.25	3.00	1.9	1.6
1 1/4	2.78	5.19	3.25	2.9	2.3
1 1/2	2.81	5.63	3.63	3.8	3.0
2	3.31	6.75	4.31	6.3	5.0
2 1/2 *	4.81	9.13	4.81	9.6	8.0
3 *	4.63	10.38	5.44	13.7	12.2

* These sizes with gland followers

MATERIAL SPECIFICATION			
1	Body	Cast Bronze	ASTM B584, C84400
2	Bonnet	Cast Bronze	ASTM B584, C84400
3	Disc	Cast Bronze	ASTM B584, C84400
4	Stem	Brass Rod	ASTM B16
5	Stuffing Nut	Brass Rod	ASTM B16
6	Handwheel Nut	Brass Rod	ASTM B16
7	Stem Retainer	Brass Rod	ASTM B16
8	Packing Ring	Non-Asbestos	
9	Handwheel	Malleable Iron	ASTM A-47
10	Nameplate	Aluminum Sheet	COMMERCIAL

RATING

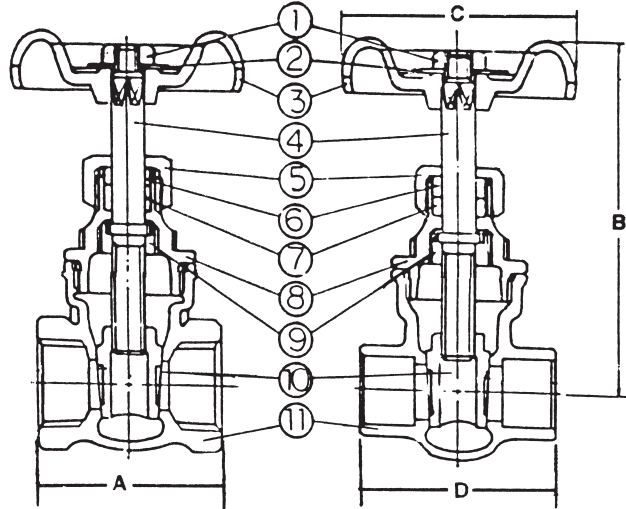
- 125 PSI STEAM TO 353° F
- 200 PSI NON-SHOCK

FEATURES

- BRONZE BODY
- THREADED OR SOLDER ENDS
- THREADED BONNET
- ADJUSTABLE PACKING NUT
- INTEGRAL SEAT
- NON-RISING STEM
- SOLID WEDGE DISC
- MALLEABLE IRON HANDWHEEL
- 100% FACTORY TESTED

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



667 Threaded

668 Solder

DIMENSIONS (INCHES)				Approx. Weight	Approx. Weight	C _v
SIZE	A	B	C	667	668	
1/4	1.63	2.84	2.13	-	0.60	5.6
3/8	1.63	2.84	2.13	1.63	0.60	10.7
1/2	1.69	2.91	2.13	1.78	0.63	17.6
3/4	1.84	3.31	2.13	2.31	0.88	32
1	2.19	3.94	2.41	2.84	1.25	54
1 1/4	2.42	4.34	2.94	3.00	1.75	97
1 1/2	2.44	4.94	2.94	3.22	2.12	135
2	2.84	6.03	3.19	3.97	3.20	230
2 1/2	3.50	7.44	3.94	4.66	6.25	337
3	3.97	8.63	5.13	5.28	9.62	536
4	4.56	10.00	6.78	-	15.50	960

RATING

- 200 PSI NON-SHOCK

FEATURES

- FORGED BRASS BODY
- THREADED OR SOLDER ENDS
- THREADED BONNET
- INTEGRAL SEAT
- ADJUSTABLE PACKING NUT
- NON-RISING STEM
- FORGED SOLID WEDGE DISC
- IRON HANDWHEEL
- 100% FACTORY TESTED
- INTERNATIONAL

MATERIAL SPECIFICATION			
1	Handwheel Nut	Brass	ASTM B16
2	Nameplate	Aluminum Sheet	Commercial
3	Handwheel	Cast Iron	ASTM A48, Class 35
4	Stem	Brass	ASTM B124, C37700
5	Packing Nut	Forged Brass	ASTM B283, C37700
6	Gland	Brass Rod	ASTM B124, C37700
7	Packing Ring	Non-Asbestos Synthetic Fibers	
8	Bonnet	Forged Brass	ASTM B283, C37700
9	Locknut	Brass Rod	ASTM B16, C36000
10	Wedge	Forged Brass	ASTM B283, C37700
11	Body	Forged Brass	ASTM B283, C37700

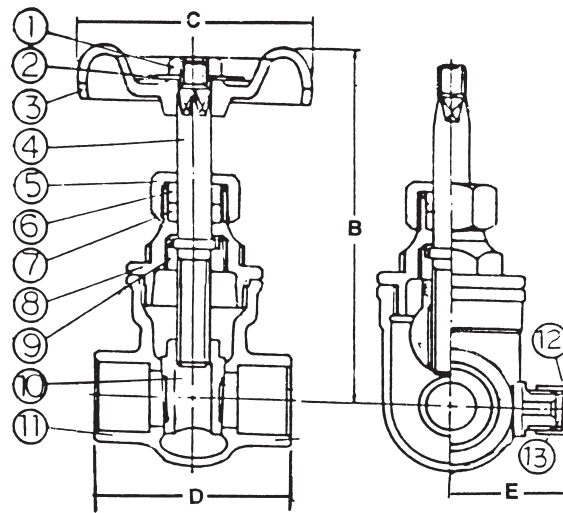
The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

BRASS GATE VALVE

667-20 & 668-20

200 WOG



667-20 Threaded

668-20 Solder

DIMENSIONS (INCHES)					Approx. Weight 668-20
SIZE	B	C	D	E	
1/2	2.91	2.13	1.78	1.00	0.55
3/4	3.31	2.13	2.31	1.13	0.70
1	3.94	2.41	2.84	1.25	1.17

RATING

- 200 PSI NON-SHOCK

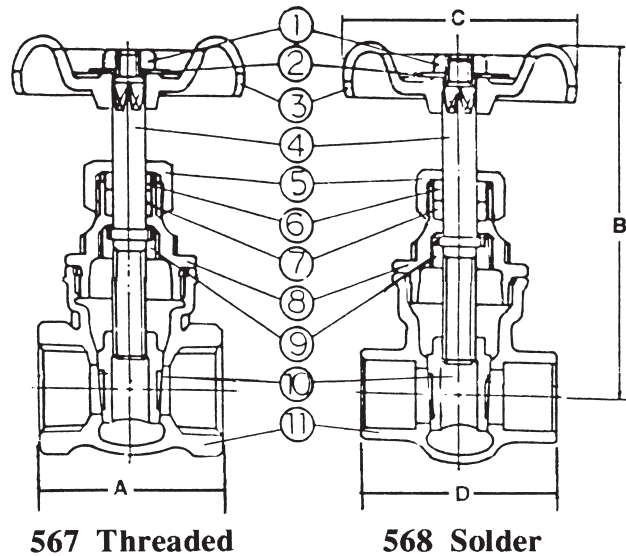
FEATURES

- DRAINABLE BRASS BODY
- SOLDER ENDS
- THREADED BONNET
- ADJUSTABLE PACKING NUT
- INTEGRAL SEAT
- NON-RISING STEM
- SOLID WEDGE DISC
- IRON HANDWHEEL
- 100% FACTORY TESTED
- INTERNATIONAL

MATERIAL SPECIFICATION			
1	Handwheel Nut	Steel	Commercial
2	Nameplate	Aluminum Sheet	Commercial
3	Handwheel	Cast Iron	ASTM A48, Class 35
4	Stem	Brass Rod	ASTM B16, C36000
5	Packing Nut	Brass Rod	ASTM B16, C36000
		Cast Brass	ASTM B584, C85700
6	Gland	Brass Rod	ASTM B16, C36000
7	Packing Ring	Non-Asbestos	
		Synthetic Fibers	
8	Bonnet	Forged Brass	ASTM B283, C37700
9	Locknut	Brass Rod	ASTM B16, C36000
10	Wedge	Forged Brass	ASTM B283, C37700
11	Body	Forged Brass	ASTM B283, C37700
12	Drain Cap	Brass Rod	ASTM B16, C36000
13	Drain Cap Seat	TFE	TFE

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



DIMENSIONS (INCHES)					Approx. Weight	Approx. Weight
SIZE	A	B	C	D	567	568
1/4	1.63	2.84	2.13	-	0.59	-
3/8	1.63	2.84	2.13	1.63	0.59	0.54
1/2	1.69	2.91	2.13	1.78	0.60	0.56
3/4	1.84	3.31	2.13	2.31	0.86	0.82
1	2.19	3.94	2.41	2.84	1.22	1.16
1 1/4	2.41	4.34	2.94	3.00	1.77	1.59
1 1/2	2.44	4.94	2.94	3.22	2.19	2.24
2	2.84	6.03	3.19	4.66	3.55	3.23
2 1/2	3.50	7.44	3.94	4.66	6.12	5.24
3	3.97	8.63	5.13	5.28	8.39	7.12
4	4.56	10.00	6.78	-	12.93	-

RATING

- 150 PSI NON-SHOCK

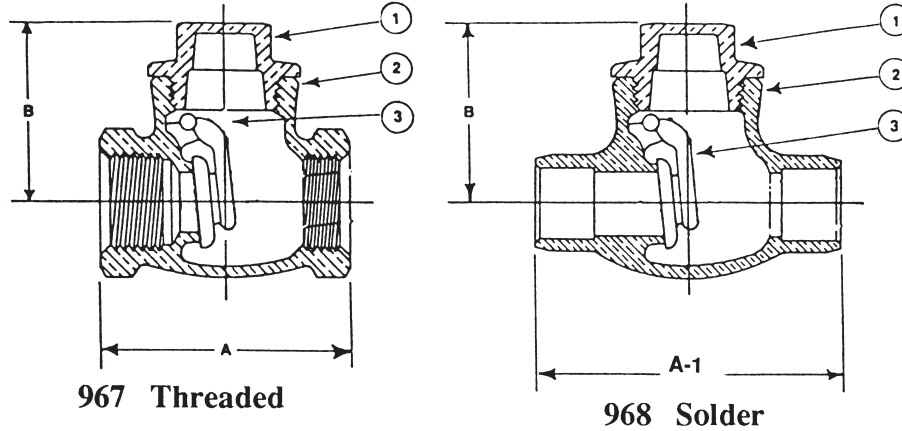
FEATURES

- FORGED BRASS BODY
- THREADED (567) OR SOLDER ENDS (568)
- THREADED BONNET
- INTEGRAL SEAT
- ADJUSTABLE PACKING NUT
- NON-RISING STEM
- FORGED SOLID WEDGE DISC
- IRON HANDWHEEL
- 100% FACTORY TESTED
- INTERNATIONAL

MATERIAL SPECIFICATION			
1	Handwheel Nut	Brass	ASTM B16
2	Nameplate	Aluminum Sheet	Commercial
3	Handwheel	Cast Iron	ASTM A48, Class 35
4	Stem	Brass	ASTM B124, C37700
5	Packing Nut	Forged Brass	ASTM B283, C37700
6	Gland	Brass Rod	ASTM B124, C37700
7	Packing Ring	Non-Asbestos Synthetic Fibers	
8	Bonnet	Forged Brass	ASTM B283, C37700
9	Locknut	Brass Rod	ASTM B16, C36000
10	Wedge	Forged Brass	ASTM B283, C37700
11	Body	Forged Brass	ASTM B283, C37700

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



Dimensions				
Units	Size	A	A-1	B
Inches	1/2	1.86	2.18	1.35
mm		47	55	34
Inches	3/4	2.11	2.85	1.53
mm		54	72	39
Inches	1	2.52	3.46	1.74
mm		64	88	44
Inches	1 1/4	2.72	3.70	1.99
mm		69	94	51
Inches	1 1/2	3.23	4.33	2.28
mm		82	110	58
Inches	2	3.70	5.12	2.48
mm		94	130	63
Inches	2 1/2	5.20		3.11
mm		132		79
Inches	3	5.83		3.81
mm		148		97
Inches	4	6.89		4.21
mm		175		107

MATERIAL SPECIFICATION			
1	CAP	FORGED BRASS	ASTM B283, C37700
		CAST BRASS	ASTM B584, C85700
2	BODY	FORGED BRASS	ASTM B283, C37700
		CAST BRASS	ASTM B584, C85700
3	DISC	FORGED BRASS	ASTM B283, C37700
		CAST BRASS	ASTM B584, C85700

RATING

- 200 PSI NON-SHOCK

Warning: DO NOT USE
for reciprocating air compressor
service.

FEATURES

- BRASS BODY
- THREADED OR SOLDER ENDS
- THREADED BONNET
- INTEGRAL SEAT
- BRASS DISC
- 100% FACTORY TESTED
- INTERNATIONAL

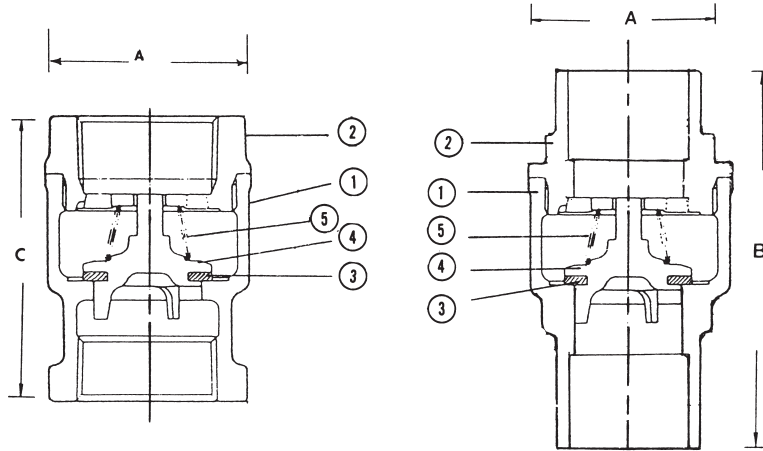
The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

BRONZE SPRING CHECK VALVE

943 & 947

250 WOG



943 Threaded

947 Solder

DIMENSIONS (INCHES)				Approx. Weight 943	Approx. Weight 947	C _v
SIZE	A	B	C			
3/8	1.25	2.06	1.97	0.43	0.43	2.5
1/2	1.25	2.41	2.09	0.43	0.43	4.1
3/4	1.50	2.81	2.31	0.66	0.66	7.6
1	1.91	3.53	2.66	1.02	1.02	13
1 1/4	2.16	3.88	3.09	1.47	1.47	23
1 1/2	2.59	4.22	3.31	2.20	2.20	31
2	3.13	5.09	3.78	3.30	3.30	54

MATERIAL SPECIFICATION			
1	Body	Cast Bronze	ASTM B584, C84400
2	Tail Piece	Cast Bronze	ASTM B584, C84400
3	Disc	Buna	
4	Disc Holder	Cast Bronze	ASTM B584, C84400
5	Spring	Bronze	ASTM B103, C52100

RATING

- 250 PSI NON-SHOCK COLD WATER, OIL OR GAS

FEATURES

- BRONZE BODY
- THREADED OR SOLDER ENDS
- BRONZE SPRING
- BUNA DISC RING
- BRONZE DISC HOLDER
- 100% FACTORY TESTED
- SILENT CLOSING (minimizes water hammer)
- INTERNATIONAL

Do not use for reciprocating air compressor service.

Note: Check Valves may be installed in both the horizontal and vertical lines with upward flow or in any intermediate position.

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



445
STOP (threaded ends)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.13	2.75	2.13	0.50
3/4	2.16	2.75	2.13	0.54

RATING

- 150 PSI WWP
TO 200° F NON-SHOCK



446
STOP (solder ends)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	1.22	2.75	2.13	0.42
3/4	1.22	2.75	2.13	0.53

FEATURES

- BRASS BODY
- HEAVY DUTY PATTERN
- LARGE WATER WAYS
- ADJUSTABLE PACKING NUT & STUFFING BOX
- BUNA-N- SEATS
- IRON HANDWHEEL
- 100% FACTORY TESTED
- INTERNATIONAL



545
STOP & WASTE
(threaded ends)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.13	2.75	2.13	0.51
3/4	2.16	2.75	2.13	0.55



546
STOP & WASTE
(solder ends)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	1.22	2.75	2.13	0.45
3/4	1.22	2.75	2.13	0.54

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



710*
BOILER DRAIN
 (male IPS to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	1.56	3.50	2.13	0.45
3/4	1.56	3.63	2.13	0.46



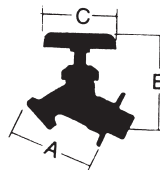
712*
BOILER DRAIN
 (female IPS to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	3.00	2.22	2.09	0.38
3/4	3.00	2.22	2.09	0.46



1032
SILL FAUCET
 (female IPS to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.44	2.75	2.00	0.42
3/4	2.44	2.75	2.00	0.43



1034
SILL FAUCET
 (solder to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.44	2.75	2.00	0.47
3/4	2.44	2.75	2.00	0.48

RATING

- 150 PSI WWP TO 200° F NON-SHOCK

FEATURES

- BRASS BODY
- HEAVY DUTY PATTERN
- LARGE WATER WAY
- ADJUSTABLE PACKING NUT & STUFFING BOX
- BUNA-N- SEATS
- IRON HANDWHEEL
- HAMMOND NAME ON BODY
- 100% FACTORY TESTED
- INTERNATIONAL

*User's are advised that some boiler applications require ASME code compliant and/or higher rated product, it is the user's responsibility to ensure all regulatory requirements are met for their installation.

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



2002
HOSE BIB
 (male IPS to hose)

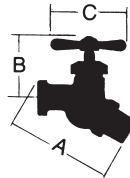
DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.00	1.22	2.94	0.38
3/4	2.00	1.22	2.94	0.46

RATING

- 150 PSI WWP TO 200° F NON-SHOCK

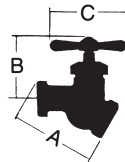
FEATURES

- BRASS BODY
- HEAVY DUTY PATTERN
- LARGE WATER WAY
- ADJUSTABLE PACKING
- BUNA-N- SEATS
- IRON T-HANDLE
- 100% FACTORY TESTED
- INTERNATIONAL



2004
NO-KINK HOSE
 (male IPS to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	3.00	2.22	2.16	0.38
3/4	3.00	2.22	2.16	0.46



2005
NO-KINK HOSE
BIBB
 (female IPS to hose)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.38	2.22	2.16	0.38
3/4	2.38	2.22	2.16	0.46

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



58

ANTI-SIPHON SILL COCK
(1/2" male IPS to hose)

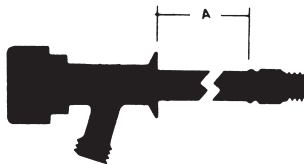
DIMENSIONS (INCHES)		Approx. Weight
LENGTH	A	
6	6	1.35
8	8	1.40
10	10	1.50
12	12	1.55
14	14	1.80

RATING

- 150 PSI NON-SHOCK

FEATURES

- 1/2" COMB. SWEAT & MSPS END
- CHROME PLATED BODY
- HEAVY DUTY PATTERN
- LARGE WATER WAYS
- BUNA-N SEATS
- LARGE PLASTIC HANDLE (EASY GRIP)
- FIG.58 INCLUDES INTEGRAL ANTI-SIPHON & INTEGRAL VACUUM BREAKER
- 100% FACTORY TESTED
- INTERNATIONAL



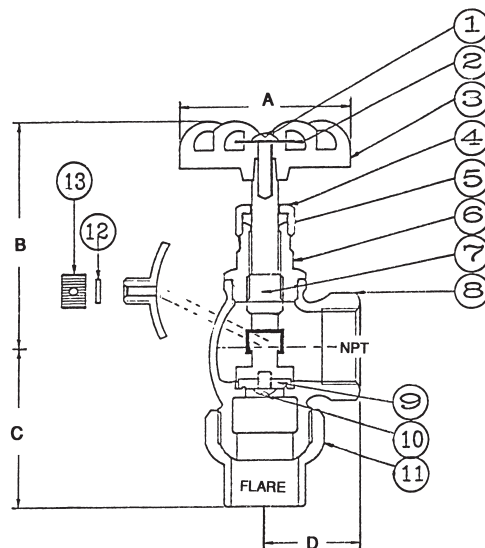
38

SILL COCK
(1/2" male IPS to hose)

DIMENSIONS (INCHES)		Approx. Weight
LENGTH	A	
4	4	1.20
6	6	1.30
8	8	1.40
10	10	1.45
12	12	1.60
14	14	1.70

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



DIMENSIONS (INCHES)					Approx. Weight	Approx. Weight
SIZE	A	B	C	D	547	548
3/4 X 1/2	2.38	3.53	2.16	1.34	0.44	0.45
3/4 X 3/4	2.38	3.53	2.16	1.34	1.18	1.18
1 X 3/4	2.75	4.34	3.13	1.63	0.89	0.97
1 X 1	2.75	4.34	3.13	1.63	2.05	2.05

MATERIAL SPECIFICATION			
1	Screw	Steel	Commercial
2	Name Plate	Aluminum	Commercial
3	Handwheel	Cast Iron	ASTM A126
4	Packing Nut	Brass	ASTM B16
5	Packing Gland	Buna	ASTM D2000
6	Bonnet	Forged Brass	ASTM B124, C37700
7	Stem	Brass	ASTM B16
8	Body	Bronze	ASTM B584, C84400
9	Seat	Buna	ASTM D2000
10	Set Screw	Brass	ASTM B16
11	Coupling	Bronze	ASTM B584, C84400
12	Gasket	Buna	ASTM D2000
13	Cap	Brass	ASTM B16

RATING

- 225 PSI NON-SHOCK

FEATURES

- BRONZE BODY
- FLARED SOLDER END X THREADED
- THREADED BONNET
- ADJUSTABLE PACKING NUT
- RISING STEM
- BUNA DISC
- IRON HANDWHEEL
- 100% FACTORY TESTED
- DESIGNED FOR WATER METER APPLICATIONS
- INTERNATIONAL

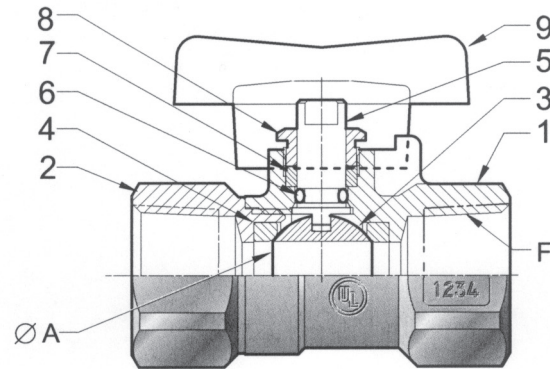
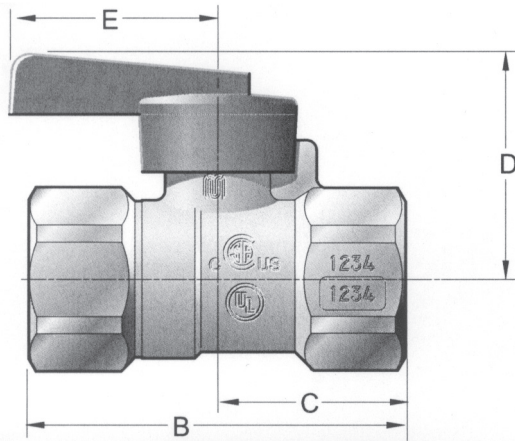
The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



87501

87601



MATERIALS LIST			
ITEM	PART	MATERIALS	ASTM SPEC.
1	Body	Brass, Forged	B283 C37700
2	Tailpiece	Brass, Forged	B283 C37700
3	Ball	Brass	B124 C37700
		Chrome Plating	B456 SC1
4	Ball Seal	Teflon	PTFE
5	Stem	Brass	B124, C37700
6	O-Ring	Buna-N	UL LISTED
7	Packing	Teflon	PTFE
8	Packing Nut	Brass	B124, C37700
9	Handle	Zinc	B86, AG40B

AGENCY APPROVALS



FEATURES

- FORGED TWO-PIECE BRASS
- STANDARD-PORT BALL VALVE
- INTERNATIONAL

DIMENSIONS					
DIMENSIONS		UNITS	1/2"	3/4"	1"
A Ø		INCHES	0.394	0.591	0.787
		mm	10.0	15.0	20.0
B		INCHES	2.244	2.508	2.953
		mm	57.0	63.7	75.0
C		INCHES	1.122	1.256	1.476
		mm	28.5	31.9	37.5
D	875 Lever	INCHES	1.445	1.583	1.776
	mm	45.1			
D	876 T-Handle	INCHES	36.7	40.2	NA
	mm				
E	875 Lever	INCHES	1.378		1.5
	mm		35.0		38.0
E	876 T-Handle	INCHES	0.866		NA
	mm		22.0		
F	THREAD		1/2"	3/4"	1"
	NPT				

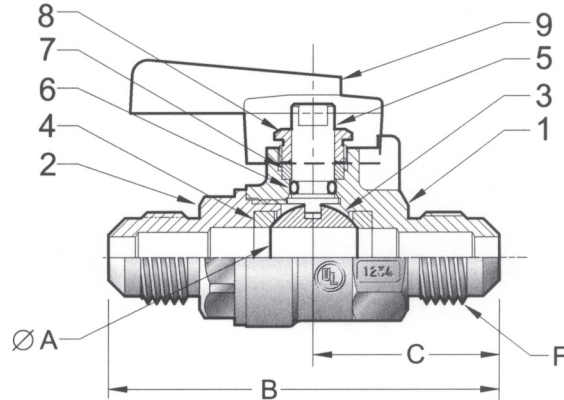
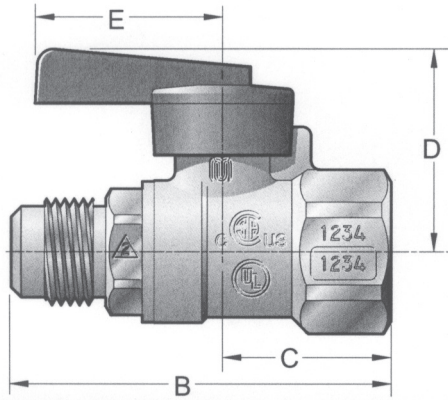
The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



87901

87801



MATERIALS LIST			
ITEM	PART	MATERIALS	ASTM SPEC.
1	Body	Brass, Forged	B283 C37700
2	Tailpiece	Brass, Forged	B283 C37700
3	Ball	Brass	B124 C37700
		Chrome Plating	B456, SC1
4	Ball Seal	Teflon	PTFE
5	Stem	Brass	B124, C37700
6	O-Ring	Buna-	UL LISTED
7	Packing	Teflon	PTFE
8	Packing Nut	Brass	B124, C37700
9	Handle	Zinc	B86, AG40B

AGENCY APPROVALS



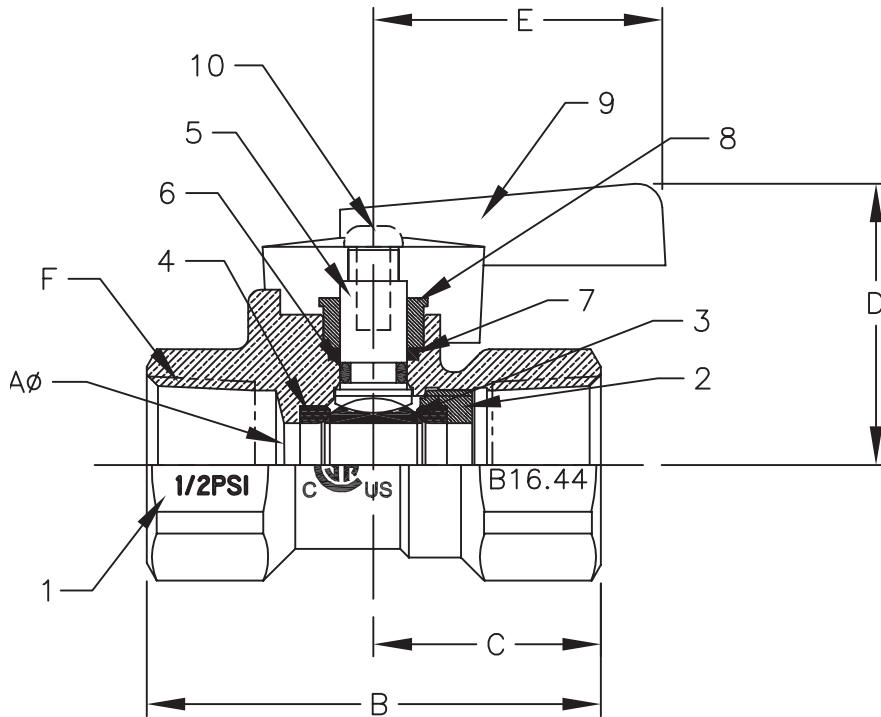
FEATURES

- FORGED TWO-PIECE BRASS
- STANDARD-PORT BALL VALVE
- ANSI/SAE FLARE J512 FEATURE
- SIZE MARKED ON OUTSIDE
- INTERNATIONAL

DIMENSIONS					
NOMINAL SIZE					
UNITS		1/2x1/2"	1/2x3/8"	3/8x3/8"	1/2x1/2"
MODEL		879	879	878	878
A Ø	INCHES	0.394	0.394	0.394	0.394
	mm	10.0	10.0	10.0	10.0
B	INCHES	2.937	2.748	2.894	3.213
	mm	74.6	69.8	73.5	81.6
C	INCHES	1.122	1.122	1.398	1.398
	mm	28.5	28.5	35.5	35.5
D	INCHES	1.445			
	mm	36.7			
E	INCHES	1.378			
	mm	35.0			
F	INLET	1/2" NPT	1/2" NPT	3/8" FLARE SAE-J512	1/2" FLARE SAE-J512
	OUTLET	1/2" FLARE SAE-J512	3/8" FLARE SAE-J512	3/8" FLARE SAE-J512	1/2" FLARE SAE-J512

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



MATERIALS LIST			
ITEM	PART	MATERIALS	ASTM SPEC.
1	Body	Brass, Forged	B283, C37700
2	Tailpiece	Brass, Forged	B283, C37700
3	Ball	Brass	B124, C37700
		Chrome Plating	B456, SC1
4	Ball Seal	Teflon	PTFE
5	Stem	Brass	B124, C37700
6	O-Ring	Buna-	UL LISTED
7	Packing	Teflon	PTFE
8	Packing Nut	Brass	B124, C37700
9	Handle	Zinc	B86, AG40B
10	Screw	Steel/Zinc Plate	B633

AGENCY APPROVALS



DIMENSIONS			
DIMENSIONS	UNITS	1/2"	3/4"
A Ø	INCHES	0.39	0.591
	mm	10.0	15.0
B	INCHES	2.14	2.508
	mm	54.4	63.7
C	INCHES	1.07	1.256
	mm	27.3	31.9
D	INCHES	1.33	1.583
	mm	33.7	40.2
E	INCHES	1.36	1.36
	mm	34.6	34.6
F	THREAD	1/2"	3/4"
	NPT		

FEATURES

- FORGED ONE-PIECE BRASS
- STANDARD-PORT BALL VALVE

RATINGS MARKING

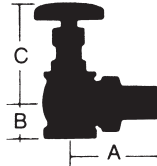
- 5G = 5 PSI
- 1/2" 150,000 BTU/HR
- 3/4" 400,000 BTU/HR
- MINIMUM FLOW CAPACITY
- INTERNATIONAL

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



100-25
STEAM
RADIATOR
ANGLE
(female IPS)



DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.31	0.97	2.97	0.98
3/4	2.66	1.09	2.72	1.33
1	2.94	1.28	2.94	1.67
1 1/4	3.31	1.47	3.25	2.67

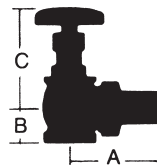
RATING

- FIG. 100-25
 15# WSP & 60 PSI NON-SHOCK HOT WATER
 (for low pressure steam and hot water)
- FIG.200-GRAVITY
 HOT WATER

FEATURES

- BRASS BODY
- EPDM DISC
- PHENOLIC HAND-WHEEL (heat resistant)
- ADJUSTABLE PACKING NUT
- TAIL PIECE & UNION NUT PART OF ASSEMBLY
- 100% FACTORY TESTED
- INTERNATIONAL

200
HOT WATER
ANGLE
(female IPS)



DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.31	0.97	2.97	0.98
3/4	2.66	1.09	2.72	1.33
1	2.94	1.28	2.94	1.67
1 1/4	3.31	1.47	3.25	2.67

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.



102
UNION GATE
(male union X female
IPS)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.31	0.97	2.97	0.98
3/4	2.28	1.09	3.59	1.41
1	2.88	1.28	4.09	1.91
1 1/4	3.22	1.47	4.66	2.79
1 1/2	3.38	1.75	3.38	3.72

RATING

- FIG. 102 = 125 WSP & 200 WOG
- FIG. 108 = 15 WSP & 60 PSI NON-SHOCK HOT WATER (for low pressure steam and hot water)
- FIG. 201 = 60 PSI HOT WATER

FEATURES

- BRONZE BODY
- EPDM DISC
- PHENOLIC HAND-WHEEL (heat resistant)
- ADJUSTABLE PACKING NUT
- TAIL PIECE & UNION NUT PART OF ASSEMBLY
- 100% FACTORY TESTED
- INTERNATIONAL



108
CONVECTOR
STEAM ANGLE
(female union X
female IPS)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1	1.69	2.31	3.53	1.87
1 1/4	1.75	2.84	3.81	2.43



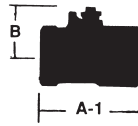
201
CIRCULATOR
ANGLE VALVE
(male union X sweat)

DIMENSIONS (INCHES)				Approx. Weight
SIZE	A	B	C	
1/2	2.50	0.78	1.88	0.70
3/4	2.88	0.94	2.06	0.96

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

CIRCULATOR VALVES & ELBOWS 8201-15 -8211-15 - 300 - 302



8201-15
CIRCULATOR
SLOTTED STEM
(threaded ends)

DIMENSIONS (INCHES)			Approx. Weight
SIZE	A-1	B	
1/2	2.84	0.94	0.30
3/4	2.16	1.06	0.50
1	2.63	1.41	0.80

RATING

- 150 PSI SATURATED STEAM (8201-15 & 8211-15)
- 400 PSI NON-SHOCK COLD WATER, OIL OR GAS (8201-15 & 8211-15)



8211-15
CIRCULATOR -
SLOTTED STEM
(solder ends)

DIMENSIONS (INCHES)			Approx. Weight
SIZE	A	B	
1/2	2.09	0.94	0.20
3/4	2.78	1.06	0.40
1	2.63	1.41	0.70

FEATURES

- FORGED BRASS BODY (ASTM - B283)
- BRASS UNION END & TAILPIECE (ASTM-B16) (300 & 302)
- STANDARD PORT OPENING (8201-15 & 8211-15)
- CHROME PLATED BALL (8201-15 & 8211-15)
- ADJUSTBLE PACKING NUT (8201-15 & 8211-15)
- TFE SEATS & SEALS
- 100% FACTORY TESTED
- INTERNATIONAL



300
UNION ELBOW
(threaded end)

DIMENSIONS (INCHES)			Approx. Weight
SIZE	A	B	
1/2	2.38	1.06	0.45
3/4	2.69	1.19	0.64
1	3.06	1.44	1.00
1 1/4	3.44	1.75	1.54



302
UNION ELBOW
(solder end)

DIMENSIONS (INCHES)			Approx. Weight
SIZE	A	B	
1/2	0.75	1.25	0.39
3/4	0.75	1.50	0.56

The information presented on this sheet is correct at time of publication. Hammond Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to www.hammondvalve.com. Hammond Valve is a registered trademark of Milwaukee Valve.

⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit www.p65warnings.ca.gov.

ENGINEERING DATA

SHOCK

Pressure ratings of valves for liquid service are applicable only when no shock is present.

Shock (or water hammer) is the term used to denote a sudden increase in pressure when a liquid flow is suddenly stopped by the rapid closure of a valve. This increase in pressure is only partly related to the working pressure of the system, but more to the velocity at which the liquid is flowing.

For example, a system having a working pressure of 200 PSIG with a velocity of 4 ft. per second will be subject to the same increment of pressure due to water hammer as one having a working pressure of 1000 PSIG.

Shock occurs most frequently in lines supplied by reciprocating pumps, equipped with check or other quick closing valves. It can occur if conventional globe or gate valves are closed too rapidly and it is, therefore, recommended that care always be used in closing valves in lines carrying liquids.

Where shock is likely to be present, it is recommended that the maximum shock pressure be added to the working pressure of the system in order to obtain the pressure rating of the valves which should be used.

INSTALLING SOLDER END VALVES

The following outlines the normal procedures in making up sound leak-tight solder joints.

1. The copper tube ends are to be cut square, removing all burrs by reaming with a file or scraper.
2. The copper tube ends and the inside of the solder cup should be cleaned to bright metal with steel wool or by wire brushing.
3. Apply flux to the outside of the copper tubing and inside the solder cup making sure that all surfaces to be joined are completely covered.
4. Insert the copper tubing into the valve's solder cup until it bottoms against the shoulder, turning the tube in the cup to distribute the flux evenly.
5. Before applying heat, be certain that the valve is in its fully opened position. It is also recommended that the valve and tubing be supported during the soldering operation to prevent straining while cooling.
6. Apply heat of the torch uniformly around the copper tubing first adjacent to the end of the valve. The heat should then

- be applied towards the end of the valve's solder cup, directing the flame away from the valve body. Care should be taken to avoid prolonged heating of the valve itself to prevent distortion and/or destruction of the disc, in case it is constructed of non-metallic material.
7. Apply solder at the juncture of the copper tube and the end of the valve's solder cup. When the joint is sufficiently heated the solder will flow into the joint. A ring of solder will form around the circumference of the juncture indicating the completion of the solder joint.
 8. Any excess solder should then be removed using a cloth or brush.

NOTE: Bronze solder joint valves should never be used in services where the media may reach higher temperatures than that at which the solder begins to soften. See the pressure/temperature ratings for solder joints shown below.

INSTALLING THREADED END VALVES

1. Inspect both the valve and the pipe ends to make sure they are free of dirt, rust, oil, or anything that may prevent a proper connection.
2. Pipe ends must be properly threaded and prepared for installation (pipe threads that are cut either too large or too small can damage the valve; if there is any question, gage the threads).
3. Prior to installation, clean pipe and valve ends with compressed air and/or water and wipe with a clean cloth.
4. PTFE-based sealants are recommended for threaded end valves when making up joints. Consult the sealant manufacturer's instructions for proper use of the sealant.

- The sealant should be applied to the pipe, not the female threads in the valve.
5. Because bronze and brass are soft metals and often softer than mating pipe materials, the pipe should be held in a vise and the valve turned onto the pipe using a smooth jawed wrench applied to the valve end being turned onto the pipe (if the body side port is being threaded onto the mating pipe, driving from the endplate side can introduce excessive stress to the body/tail joint).

Note: Pipe wrenches should be used on pipe and certain fittings only – they should never be used on a valve.

FLUID COMPATIBILITY

Consider the corrosive, erosive and adhesive effects of the fluids on the valve and piping components. It is the responsibility of the equipment owner or his engineering designer to ensure that the valve is compatible with the fluids and other material in the system.