

BALL VALVES



APOLLO BALL VALVE NUMBERING SYSTEM

APOLLO NUMBERING SYSTEM FORMULA: 70 - 105 - 01

XX	-	X	X	X	- XX
SERIES		CONFIGURATION	VARIATIONS	SIZE*	OPTIONS
32		1 = FNPT	4 = 316 Stainless Steel	1 = 1/4"	-01 = Standard
50		2 = Solder	Ball & Stem	2 = 3/8"	-02 = Grounded
51		3 = Union End NPT	9 = Pinned Retainer	3 = 1/2"	-04 = 2-1/4" Stem extension
6PLF		6 = 3-Way NPT		4 = 3/4"	-07 = Tee Handle
		7 = Full-Port Refrigeration Valves		5 = 1"	-08 = 90° Reversed Stem
		8 = Male X FNPT		6 = 1-1/4"	-10 = Stainless Steel Lever & Nut
		9 = 3-Way Solder		7 = 1-1/2"	-11 = Therma-Seal™ Insulating Handle
70				8 = 2"	-12 = Stamped "157 SWP" & Bagged
70HC				9 = 2-1/2"	-13 = Stamped "157 SWP"
70LF				0 = 3"	-14 = Side Vented Ball (uni-directional)
70LFHC				A = 4"	-15 = Round Handle, Steel
71					-16 = Chain Lever - Vertical
75					-17 = Rough Chrome Plated
77					-18 = Plain Yellow Grip
77C					-19 = Lock Plate
77CLF					-20 = Slot Vented Ball (bi-directional)
77D					-21 = UHMWPE Trim (non-PTFE)
					-24 = Graphite Packing
77F					-27 = Stainless Steel Latch-Lock Lever & Nut
77FLF					-30 = Cam-Lock and Grounded
77V					-32 = Stainless Steel Tee Handle & Nut
77VLF					-35 = VTFE Trim (PTFE)
77W					-36 = Stainless Steel Hi-Rise Round Handle, Stainless Steel Nut
77WLF					-39 = SS Hi-rise Locking Round Handle, SS Nut
78					-40 = Cyl-Loc and Grounded
79					-41 = Automatic Drain
77B					-45 = Less Lever and Nut
7K					-46 = Latch-Lock Lever - Lock in Closed Position Only
80					-47 = SS Oval Latch-Lock Handle & Nut
82					-48 = SS Oval Handle (No Latch) & Nut
82LF					-49 = Assembled Dry
9A					-50 = 2-1/4" Carbon Steel Locking Stem Extension
90					-56 = Multifill Seats & Packing
94A					-57 = Oxygen Cleaned
94ALF-A					-58 = Chain Lever - Horizontal
94MBV					-59 = SS External Trim - 3-pc. Valves & Flange
94XLF					-60 = Grounded Ball & Stem
94VLF					-62 = Body Center Section (82 Series)
95ALF					-63 = NPT x Solder (-100-63-NPT Body; -200-63-Sweat Body)
					-64 = 250 SWP
					-65 = Multifill Seats & Graphite Packing
					-72 = RTFE Packing
					-91 = Locking SS Tee (3/4" and 1")
					-92 = Balancing Stop
					-94 = -04 & Balancing stop
					-BC = Ball Check
					-HC = Hose Thread and Cap Option
					-SV = Safety vent - 77-100/7K-100 series (Auto drain)
					-SW = Limit switch mounted
					-TH = Tested, Hydrostatic
					-TC = Tested, Hydrostatic, w/certification
					-TW = Tested, Hydrostatic, w/witness and certification

*BODY SIZE WHEN ENDS ARE MIXED.

NOTE: NOT ALL VARIATIONS AND FEATURES ARE AVAILABLE ON SAME VALVE. CONSULT CONBRACO REPRESENTATIVE.

** LEAD FREE: The wetted surfaces of this product shall contain no more than 0.25% lead by weighted average. Complies with Federal Public Law 111-380. ANSI 3rd party approved and listed.

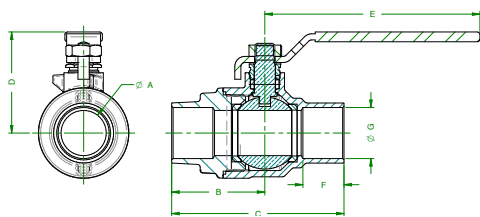
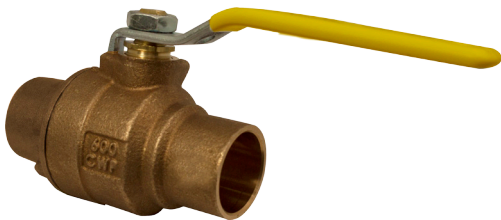
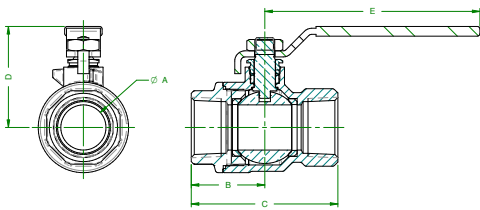
BALL VALVES

contractor series valves



77C-100/200-A SERIES

New!



CONTRACTOR SERIES FULL PORT BRONZE BALL VALVE WITH SOLID BALL

Apollo's® solid ball design delivers true full-port performance with 100 percent American construction. **New for 2016**, next generation mod -"A" adds a new beefier lever, simplified packing adjustment, wider seats and stem packing and a 150 SWP body marking.

FEATURES

- ASTM grade bronze castings
- Solid brass ball, plated
- 600 psig CWP, non-shock
- 150 SWP steam rating
- Generous RPTFE seats and stem packing
- Adjustable stem packing
- Blow-out proof stem design
- Vacuum service to 29 in. Hg
- Full-port design through 2-1/2"
- ANSI B16.18 solder end version available as 77C-200 Series
- CSAB51-CRN
- **Proudly made in USA**

OPTIONS*

- 2-1/4" stem extension (-04)
- CS tee handle (-07)
- Therma-Seal™ insulating tee handle (-11)
- SS Latch-lock handle (-27),
- Stem extension and balancing stop (-94)
- Reversible handle option
- SS vented ball and stem (77C140 and 77C240 series)
- **77C-ULA UL258 Fire Protection Trim & Drain option** *New!*
- Other handle options available
- Also available in a Lead Free version as the 77CLF Series.

* Lever option kits for the 77C and 77C-A models differ. Refer to the latest Apollo kit listing or contact Apollo Tech Support for assistance.

Model Number	Size (in.)	Dimensions (in.)							C _v	Wt. (lbs.)
		A	B	C	D	E	F	G		
Threaded Connection										
77C-101-01A	1/4"	0.37	.095	1.80	1.62	2.86	-	-	5	0.6
77C-102-01A	3/8"	0.37	1.07	1.86	1.62	2.86	-	-	7	0.5
77C-103-01A	1/2"	0.50	1.15	2.29	1.79	3.74	-	-	16	0.6
77C-104-01A	3/4"	0.75	1.32	2.67	2.00	4.88	-	-	36	1.0
77C-105-01A	1"	1.00	1.53	3.24	2.19	4.88	-	-	68	1.8
77C-106-01A	1-1/4"	1.25	2.04	3.75	3.13	7.06	-	-	125	4.4
77C-107-01A	1-1/2"	1.50	2.12	4.11	3.29	7.06	-	-	177	4.6
77C-108-01A	2"	2.00	2.43	4.85	3.83	7.06	-	-	389	8.1
77C-109-01A	2-1/2"	2.50	3.12	6.02	4.51	8.06	-	-	503	16.2
Solder Connection										
*77C-202-01A	3/8"	0.37	1.25	2.18	1.65	2.86	0.41	0.50	16	0.6
77C-203-01A	1/2"	0.50	1.41	2.47	1.79	3.74	0.50	0.63	16	0.6
77C-204-01A	3/4"	0.75	1.64	3.2	2.00	4.88	0.75	0.88	36	1.0
77C-205-01A	1"	1.00	1.92	3.81	2.19	4.88	0.91	1.13	68	1.6
77C-206-01A	1-1/4"	1.25	2.36	4.21	3.13	7.06	0.97	1.38	125	3.9
77C-207-01A	1-1/2"	1.50	2.63	4.91	3.29	7.06	1.09	1.63	177	4.3
77C-208-01A	2"	2.00	3.17	6.07	3.83	7.06	1.37	2.13	389	7.6
77C-209-01A	2-1/2"	2.50	3.77	7.17	4.51	8.06	1.48	2.63	503	15.9

*available soon



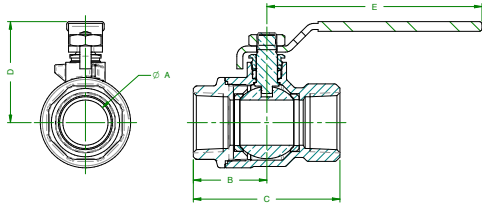
BALL VALVES

contractor series valves

77CLF-100/200 SERIES



New!



CONTRACTOR SERIES FULL PORT LEAD FREE BRONZE BALL VALVE WITH SOLID BALL
 Apollo's® solid ball design delivers true full-port performance with 100 percent American construction. **New for 2016**, next generation mod -"A" adds a new beefier lever, simplified packing adjustment, wider seats and stem packing and a 150 SWP body marking.

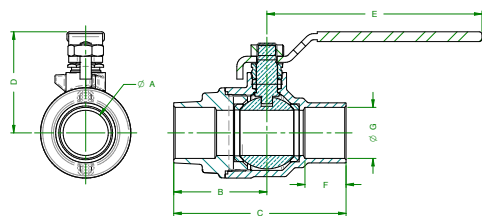
FEATURES

- ASTM grade EZ-Solder™ lead free bronze
- Solders just like standard bronze
- 600 psig CWP, non-shock
- 150 SWP steam rating
- Vacuum service to 29 in. Hg
- Generous RPTFE seats and stem packing
- Adjustable stem packing
- Blow-out proof stem design
- Solid brass ball, plated
- Full-port design through 2-1/2"
- NSF/ANSI 61 Water Quality
- NSF/ANSI 372 Lead Free
- IAPMO
- CSAB51-CRN
- **Proudly made in USA**

OPTIONS*

- 2-1/4" stem extension (-04)
- CS tee handle (-07)
- Therma-Seal™ insulating tee handle (-11)
- SS Latch-lock handle (-27),
- Stem extension and balancing stop (-94)
- Reversible handle option
- SS vented ball and stem (77CLF140-A and 77CLF240-A series)
- Other handle options available

* Lever option kits for the 77CLF and 77CLF-A models differ. Refer to the latest Apollo kit listing or contact Apollo Tech Support for assistance.



LF Model Number	Size (in.)	Dimensions (in.)							C _v	Wt. (lbs.)
		A	B	C	D	E	F	G		
Threaded Connection										
77CLF-101-01A	1/4"	0.37	.095	1.80	1.62	2.86	-	-	5	0.6
77CLF-102-01A	3/8"	0.37	1.07	1.86	1.62	2.86	-	-	7	0.5
77CLF-103-01A	1/2"	0.50	1.15	2.29	1.79	3.74	-	-	16	0.6
77CLF-104-01A	3/4"	0.75	1.32	2.67	2.00	4.88	-	-	36	1.0
77CLF-105-01A	1"	1.00	1.53	3.24	2.19	4.88	-	-	68	1.8
77CLF-106-01A	1-1/4"	1.25	2.04	3.75	3.13	7.06	-	-	125	4.4
77CLF-107-01A	1-1/2"	1.50	2.12	4.11	3.29	7.06	-	-	177	4.6
77CLF-108-01A	2"	2.00	2.43	4.85	3.83	7.06	-	-	389	8.1
77CLF-109-01A	2-1/2"	2.50	3.12	6.02	4.51	8.06	-	-	503	16.2
Solder Connection										
*77CLF-202-01A	3/8"	0.37	1.25	2.18	1.65	2.86	0.41	0.50	16	0.6
77CLF-203-01A	1/2"	0.50	1.41	2.47	1.79	3.74	0.50	0.63	16	0.6
77CLF-204-01A	3/4"	0.75	1.64	3.2	2.00	4.88	0.75	0.88	36	1.0
77CLF-205-01A	1"	1.00	1.92	3.81	2.19	4.88	0.91	1.13	68	1.6
77CLF-206-01A	1-1/4"	1.25	2.36	4.21	3.13	7.06	0.97	1.38	125	3.9
77CLF-207-01A	1-1/2"	1.50	2.63	4.91	3.29	7.06	1.09	1.63	177	4.3
77CLF-208-01A	2"	2.00	3.17	6.07	3.83	7.06	1.37	2.13	389	7.6
77CLF-209-01A	2-1/2"	2.50	3.77	7.17	4.51	8.06	1.48	2.63	503	15.9

*available soon

BALL VALVES

general purpose valves



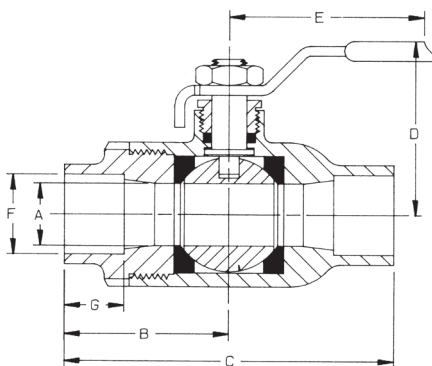
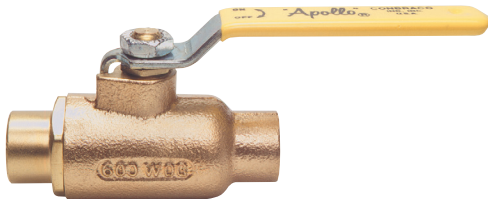
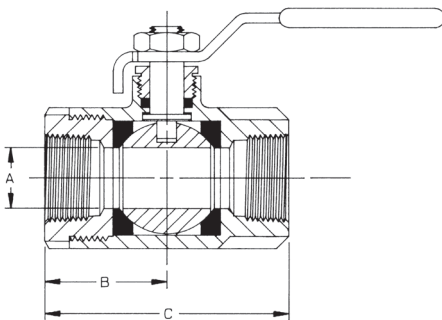
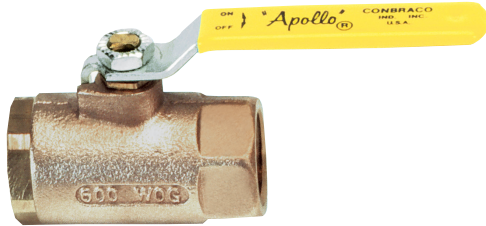
70-100/200 SERIES

BRONZE BALL VALVE

The Apollo® 70 series is the most widely used and trusted bronze ball valve in the industry. It features blowout-proof stem, RPTFE seats and stuffing box ring and plated brass ball.

FEATURES

- Heavy pattern construction
- Rated 600 psig CWP, non-shock
- 150 psig for saturated steam
- 100% tested
- Vacuum service to 29 in. Hg
- Adjustable packing gland
- Multiple options and configurations available (see pages 22-23)
- **Lead Free** option (70LF)
- **Made in USA**



Model Number	Size (in.)	Dimensions (in.)*		
		A	B	C
Threaded Connections				
70-101-01	1/4	0.37	1.03	2.06
70-102-01	3/8	0.37	1.03	2.06
70-103-01	1/2	0.50	1.12	2.25
70-104-01	3/4	0.68	1.50	3.00
70-105-01	1	0.87	1.68	3.37
70-106-01	1-1/4	1.00	2.00	4.00
70-107-01	1-1/2	1.25	2.18	4.37
70-108-01	2	1.50	2.34	4.68
70-109-01A	2-1/2	2.00	3.12	6.25
70-100-01	3	2.50	3.37	6.75
70-10A-01	4	3.12	3.68	7.37

* Body only. Total will vary with handle and end connection options. Contact Conbraco Customer Service for additional dimensions.

NOTE: 1/4", 3/8", and 1/2" are full port.

Model Number	Size (in.)	Dimensions (in.)*						
		A	B	C	D	E	F	G
Solder Connections								
70-202-01	3/8	0.37	1.28	2.56	1.75	3.87	0.505	0.37
70-203-01	1/2	0.50	1.43	2.87	1.75	3.87	0.63	0.50
70-204-01	3/4	0.68	1.93	3.87	2.12	4.87	0.88	0.75
70-205-01	1	0.87	2.25	4.50	2.25	4.87	1.13	0.90
70-206-01	1-1/4	1.00	2.31	4.62	2.62	5.50	1.38	0.96
70-207-01	1-1/2	1.25	2.62	5.25	3.06	8.00	1.63	1.09
70-208-01	2	1.50	3.18	6.37	3.25	8.00	2.13	1.34
70-209-01A	2-1/2	2.00	3.74	7.51	3.72	8.00	2.63	1.48
70-200-01	3	2.50	4.12	8.25	4.12	8.00	3.13	1.67
70-20A-01	4	3.12	4.61	9.22	5.22	9.94	4.13	2.16

* Based on 70-200-01 – Dimensions may vary with options. Soldering temperature: 500°F or less

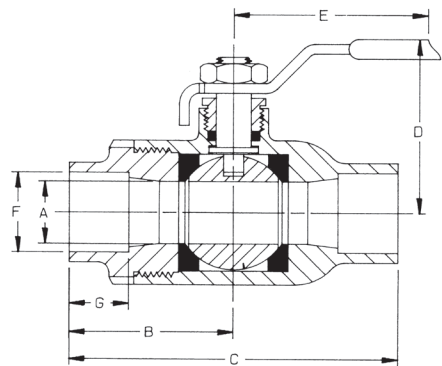
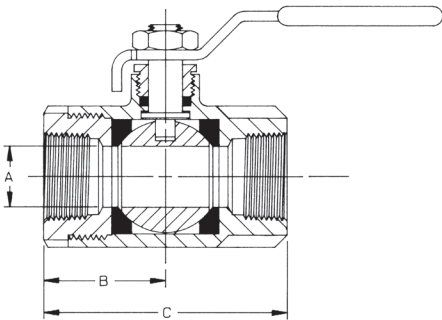
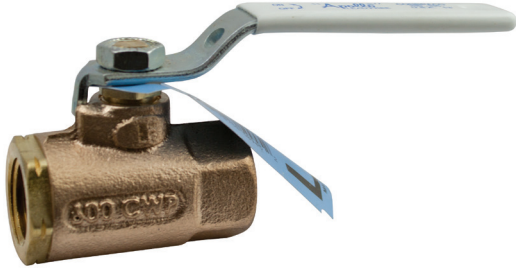
NOTE: 1/4", 3/8", and 1/2" are full port.



BALL VALVES

general purpose valves

70LF-100/200 SERIES



LEAD FREE BRONZE BALL VALVE

The Apollo® 70LF series is the most widely used and trusted lead free bronze ball valve in the industry. It features blowout-proof stem, RPTFE seats and stuffing box ring and plated brass ball.

FEATURES

- Heavy pattern construction
- EZ-Solder™ Lead Free Bronze
- Solders just like standard bronze
- Rated 600 psig CWP, non-shock
- 150 psig for saturated steam
- 100% factory tested
- Vacuum service to 29 in. Hg
- NSF/ANSI 61-G Water Quality
- NSF/ANSI 372 Lead Free
- Adjustable packing gland
- Multiple options and configurations available (see pages 22-23)

LF Model Number	Size (in.)	Dimensions (in.)*		
		A	B	C
Threaded Connections				
70LF-101-01	1/4	0.37	1.03	2.06
70LF-102-01	3/8	0.37	1.03	2.06
70LF-103-01	1/2	0.50	1.12	2.25
70LF-104-01	3/4	0.68	1.50	3.00
70LF-105-01	1	0.87	1.68	3.37
70LF-106-01	1-1/4	1.00	2.00	4.00
70LF-107-01	1-1/2	1.25	2.18	4.37
70LF-108-01	2	1.50	2.34	4.68
70LF-109-01A	2-1/2	2.00	3.12	6.25
70LF-100-01	3	2.50	3.37	6.75
70LF-10A-01	4	3.12	3.68	7.37

* Body only. Total will vary with handle and end connection options. Contact Conbraco Customer Service for additional dimensions.

NOTE: 1/4", 3/8", and 1/2" are full port.

LF Model Number	Size (in.)	Dimensions (in.)*						
		A	B	C	D	E	F	G
Solder								
70LF-202-01	3/8	0.37	1.28	2.56	1.75	3.87	0.505	0.37
70LF-203-01	1/2	0.50	1.43	2.87	1.75	3.87	0.63	0.50
70LF-204-01	3/4	0.68	1.93	3.87	2.12	4.87	0.88	0.75
70LF-205-01	1	0.87	2.25	4.50	2.25	4.87	1.13	0.90
70LF-206-01	1-1/4	1.00	2.31	4.62	2.62	5.50	1.38	0.96
70LF-207-01	1-1/2	1.25	2.62	5.25	3.06	8.00	1.63	1.09
70LF-208-01	2	1.50	3.18	6.37	3.25	8.00	2.13	1.34
70LF-209-01A	2-1/2	2.00	3.74	7.51	3.72	8.00	2.63	1.48
70LF-200-01	3	2.50	4.12	8.25	4.12	8.00	3.13	1.67
70LF-20A-01	4	3.12	4.61	9.22	5.22	9.94	4.13	2.16

* Based on 70-200-01 – Dimensions may vary with options. Soldering temperature: 500°F or less

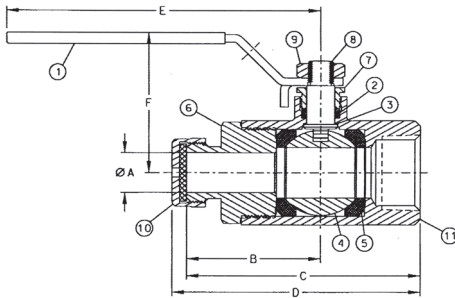
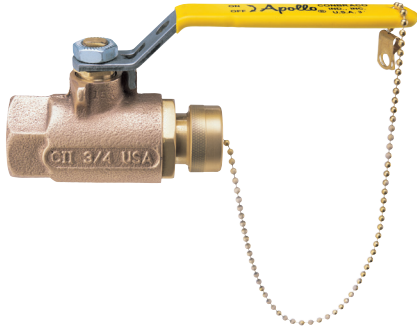
NOTE: 1/4", 3/8", and 1/2" are full port.

BALL VALVES

general purpose valves



70-HC SERIES



CAP & CHAIN VALVE WITH 3/4 INCH HOSE CONNECTION, HEAVY BRASS CAP AND REVERSE HANDLE

Ideally suited for draining or sampling of HVAC or potable water systems, these valves allow direct connections to hoses. Valve features a securely attached cover (includes chain) which prevents damage to hose threads. -200 model designed for soft soldering into lines without disassembly.

FEATURES

- Heavy pattern construction
- Reverse lever is standard for easier installation
- Stainless steel lever & nut standard
- NPT and solder connections
- EZ-Solder™ Lead Free Bronze
- ASTM B584 Bronze
- Blowout-proof stem design
- RPTFE seats and stuffing box ring
- Adjustable packing gland
- Vacuum Service to 29 in. Hg
- Maximum pressure: 600 psi CWP
- Temperature rating: 200°F
- Full pressure rated brass hose cap

OPTIONS

- Therma-Seal® insulating lever option (-11)
- Stainless Steel ball and stem option (70-24X-HC/70LF-24X-HC)
- 70LF is NSF 61 and NSF 372 certified Lead Free

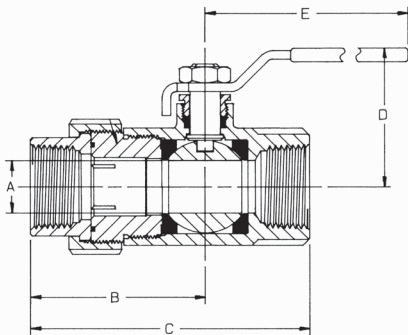
Model Number	LF Model Number	Size (in.)	Dimensions (in.)					
			A	B	C	D	E	F
70-103-HC	70LF-103-HC	1/2 NPT x 3/4 Hose	0.50	1.68	2.81	2.97	3.87	1.75
70-104-HC	70LF-104-HC	3/4 NPT x 3/4 Hose	0.68	1.96	3.50	3.67	4.87	2.12
70-105-HC	70LF-105-HC	1 NPT x 3/4 Hose	0.87	2.24	3.92	4.16	5.28	2.43
70-203-HC	70LF-203-HC	1/2 Solder x 3/4 Hose	0.50	1.68	3.14	3.28	3.89	1.75
70-204-HC	70LF-204-HC	3/4 Solder x 3/4 Hose	0.68	1.96	3.94	4.09	4.89	2.12
70-205-HC	-	1 Solder x 3/4 Hose	0.87	2.24	4.49	4.73	5.28	2.43



BALL VALVES

general purpose valves

70-300/400 SERIES



BALL VALVE WITH FNPT x UNION END

This valve combines a pipe union with ball valve shut-off; it saves time and labor by eliminating the need for extra connections. Viton O-ring sealed union requires light torque for proper seal.

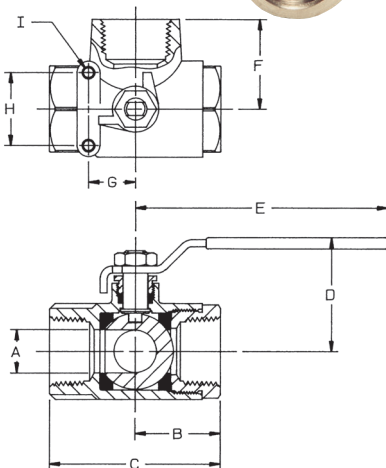
FEATURES

- ASTM B584 Bronze
- Blowout-proof stem design
- Adjustable packing gland
- 600 psig CWP, non-shock
- NPT and solder union connection
- Vacuum service to 29 in. Hg
- 70LF-300/400 Series features EZ-Solder™ Lead Free Bronze

Model Number	LF Model Number	Size (in.)	Dimensions (in.)				
			A	B	C	D	E
NPT							
70-301-01	–	1/4	0.37	1.90	2.93	1.75	3.87
70-302-01	–	3/8	0.37	1.90	2.93	1.75	3.87
70-303-01	70LF-303-01	1/2	0.50	2.01	3.14	1.81	3.87
70-304-01	70LF-304-01	3/4	0.68	2.46	3.96	2.12	4.87
70-305-01A	70LF-305-01A	1	0.87	2.84	4.52	2.25	4.87
70-306-01	70LF-306-01	1-1/4	1.00	2.68	4.68	2.62	5.50
70-307-01	70LF-307-01	1-1/2	1.25	2.87	5.06	3.05	8.00
70-308-01	70LF-308-01	2	1.50	3.25	5.59	3.24	8.00
Solder							
70-403-01	–	1/2	0.50	2.00	3.43	1.75	3.87
70-404-01	70LF-404-01	3/4	0.68	2.62	4.56	2.06	4.78
70-405-01A	70LF-405-01A	1	0.87	2.87	5.66	2.25	4.78
70-406-01	70LF-406-01	1-1/4	1.00	2.87	5.18	2.62	5.50
70-407-01	70LF-407-01	1-1/2	1.25	2.92	5.53	3.10	8.00
70-408-01	70LF-408-01	2	1.50	3.50	6.75	3.24	8.00

NOTE: 1/4", 3/8", and 1/2" are full port.

70-600 SERIES



THREADED 3-WAY DIVERTER BALL VALVE

Ideal for applications requiring flow diversion, this valve combines the features of two valves. Its large ports make tank selection and fluid transfers quicker and easier. Easy quarter-turn operation.

FEATURES

- Simple quarter-turn operation
- ASTM B584 Bronze
- 400 psig CWP, non-shock
- Blowout-proof stem
- Adjustable stem packing
- Vacuum service to 29 in. Hg
- See 70-900 for solder version

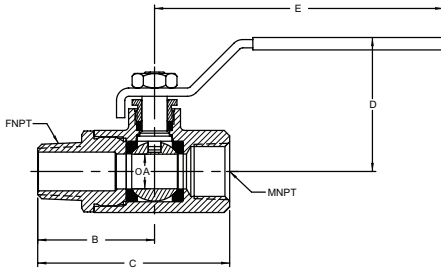
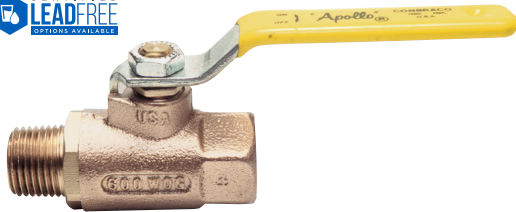
Model Number	Size (in.)	Dimensions (in.)								
		A	B	C	D	E	F	G	H	I
70-601-01	1/4	0.37	1.12	2.32	1.80	3.88	1.18	0.875	1.37	10-24
70-602-01	3/8	0.37	1.12	2.32	1.80	3.88	1.18	0.875	1.37	10-24
70-603-01	1/2	0.50	1.09	2.25	1.75	3.87	1.18	0.87	1.37	10-24
70-604-01	3/4	0.68	1.50	3.00	2.12	4.87	1.62	0.87	1.37	10-24
70-605-01	1	0.81	1.59	3.18	2.25	4.87	1.71	0.87	1.37	10-24
70-606-01	1-1/4	1.00	1.97	3.95	2.69	5.50	2.01	0.93	1.50	1/4-20
70-607-01	1-1/2	1.25	2.21	4.40	2.87	5.50	2.38	0.94	1.50	1/4-20
70-608-01	2	1.50	2.34	4.69	3.00	5.50	2.50	0.94	1.50	1/4-20

BALL VALVES

general purpose valves



70-800 SERIES



MALE X FEMALE NPT BALL VALVE

Eliminates need for extra nipple when connecting to female connection to save time and labor. Ruggedly built for lasting performance with chromium-plated ball and blowout-proof stem.

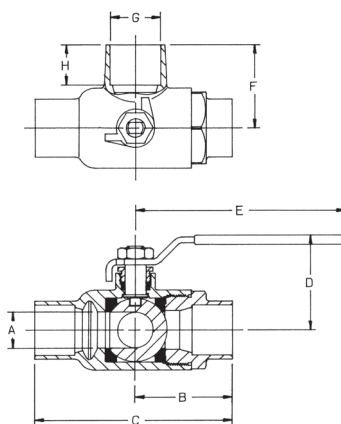
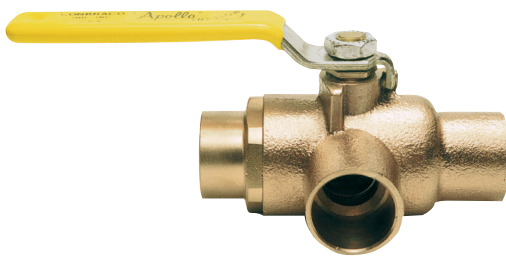
FEATURES

- 600 psig CWP, non-shock
- 150 SWP steam rating
- RPTFE seats and stuffing box ring
- Adjustable stem packing
- Vacuum service to 29" Hg

Model Number	LF Model Number	Size (in.)	Dimensions (in.)				
			A	B	C	D	E
70-801-01	—	1/4	0.37	1.40	2.43	1.75	3.87
70-802-01	—	3/8	0.37	1.46	2.50	1.75	3.87
70-803-01	70LF-803-01	1/2	0.50	1.68	2.81	1.81	3.87
70-804-01	70LF-804-01	3/4	0.68	2.00	3.50	2.12	4.87
70-805-01	70LF-805-01	1	0.87	2.31	4.00	2.25	4.87
70-806-01	70LF-806-01	1-1/4	1.00	2.31	4.31	2.62	5.50
70-807-01	70LF-807-01	1-1/2	1.25	3.00	5.18	3.06	8.00

NOTE: 1/4", 3/8", and 1/2" are full port.

70-900 SERIES



3-WAY DIVERTER VALVE WITH SOLDER ENDS

Tank selection and fluid transfers are easier because of large port diameters. The valve is 100 percent air tested under water. Designed to be soft soldered without disassembly.

FEATURES

- Simple quarter-turn operation
- ASTM B584 Bronze
- 400 psig CWP, non-shock
- Blowout-proof stem
- Adjustable packing
- See 70-600 for NPT version
- **Made in USA**

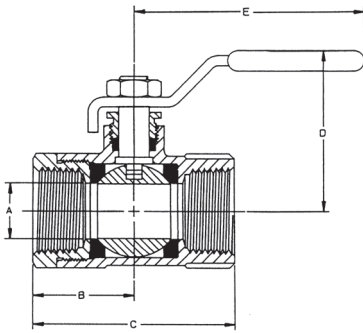
Model Number	Size (in.)	Dimensions (in.)							
		A	B	C	D	E	F	G	H
70-903-01	1/2	0.50	1.44	2.87	1.75	3.87	1.34	0.628	0.50
70-904-01	3/4	0.68	1.94	3.87	2.12	4.87	1.69	0.878	0.90
70-905-01	1	0.81	2.19	4.42	2.25	4.87	1.87	1.129	0.90



BALL VALVES

general purpose valves

32-100 SERIES



REGULAR PORT THREADED END BRONZE BALL VALVE

NPT threaded ball valve rated to 400 psig CWP, non-shock and 125 psig for saturated steam. Blowout-proof stem design with adjustable packing gland.

FEATURES

- ASTM B584 Bronze
- PTFE seats and MPTFE stuffing box ring
- **Made in USA**

OPTIONS

- 2-1/4" stem extension (-04)
- Tee handle (-07)
- Round handle (-15)
- SS latch-lock lever & nut (-27)
- Balancing stop (-92)

Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
32-101-01	1/4	0.37	0.80	1.60	1.65	2.87
32-102-01	3/8	0.37	0.80	1.60	1.65	2.87
32-103-01	1/2	0.40	1.00	2.00	1.68	2.87
32-104-01	3/4	0.65	1.20	2.41	1.90	3.87
32-105-01	1	0.75	1.55	3.09	2.18	4.87
32-106-01	1-1/4	1.00	1.72	3.44	2.53	5.50
32-107-01	1-1/2	1.12	1.93	3.87	2.69	5.50
32-108-01	2	1.50	2.17	4.37	2.94	5.50

BALL VALVES

common ball valve options



Suffix No.

-04

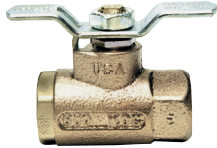


Apollo offers these options on the 70 Series as well as many other valve series. Note: Not all options are available on all sizes and models. Review the latest submittal sheet or contact the factory to determine availability. Most available as a factory installed option or as a kit for field installation or retrofit.

STANDARD BALL VALVE WITH STEM EXTENSION

A plated steel stem extension to accommodate 2" thick pipe insulation or to relocate handle position.

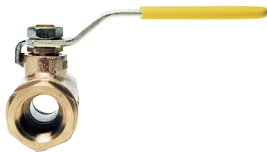
-07



TEE HANDLE

Plated steel tee handle is ideal when space is limited and where safety is a consideration. Handle still provides visual indication of OPEN or CLOSED position.

-08



90° REVERSED STEM

Used in applications when handle is required to be in a parallel position when closed.

-10



STAINLESS STEEL LEVER AND NUT

Additional corrosion resistance for damp or marine installations.

-11



THERMA-SEAL® HANDLE - NEW UL 2043 LISTING

The Thermo-Seal thermal insulating tee-handle is designed to be use in applications where vapor barrier piping insulation is required. Manufactured from high strength glass reinforced nylon, these handles are ideally suited for the toughest commercial and industrial applications. Handles are available as a factory installed option (-11 option suffix) or as a kit for retro fits. UL 2043 listed for plenum installations.

-16 or -58



CHAIN LEVER BALL VALVES

Reliable quarter turn operation in overhead applications. A favorite for use in industrial environments.

- Specify suffix -16 for assembly with valve in vertical position
- Specify -58 for valve in horizontal position

-17



ROUGH CHROME PLATING

Use where a clean, bright finish is required or for matching up with other chrome-plated equipment.



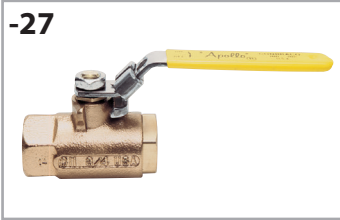
BALL VALVES

common ball valve options

Apollo offers these options on the 70 Series as well as many other valve series. Note: Not all options are available on all sizes and models. Review the latest submittal sheet or contact the factory to determine availability.

Suffix No.

-27



STAINLESS STEEL LATCH LOCK - LOCKING LEVER HANDLE

Sliding lock mechanism secures handle in open or closed position. Valve can also be padlocked open or closed.

-30



CAM-LOCK® HANDLE

Patented Cam-Lock® handle gives valve extra protection against accidental operation. Reliable quarter-turn shut-off from a versatile, ruggedly built valve.

- RPTFE seats and stuffing box ring
- Rated 600 psig CWP, non-shock
- Available for the following Series: 70, 71, 73A, 76, 82, 83, 86, 87, 89, 9A, 92, and 96

-32 and -83



STAINLESS STEEL TEE HANDLE AND NUT

Increased corrosion resistance versus the plated steel -07 option.

- -32 for standard bronze
- -83 for 77B/77BLF and 77C/77CLF Series

-41



BALL VALVE WITH AUTOMATIC DRAIN

When this valve is closed for maintenance of pneumatic tool, downstream pressure from valve to tool is automatically drained to atmosphere to prevent accidental operation of the tool, causing possible injury.

- Conforms to certain OSHA requirements in pneumatic installations
- Easy, safe maintenance of pneumatic tools
- Cannot be used where drained media could cause damage
- Temperature range: 50°F to 200°F
- Rated 125 psig CWP, non-shock air or water
- Includes directional arrow for correct installation
- Available with latch lock option, specify -27 -41 suffix
- Available for the following Series: 70, 71, 75, and 78

-48



STAINLESS STEEL OVAL HANDLE

- Available for the following Series: 70, 71, 73A, 76, 76F, 77, 82, 83, 85, 86, 89, 9A, 92 and 96
- Resistant to accidental operation

-94

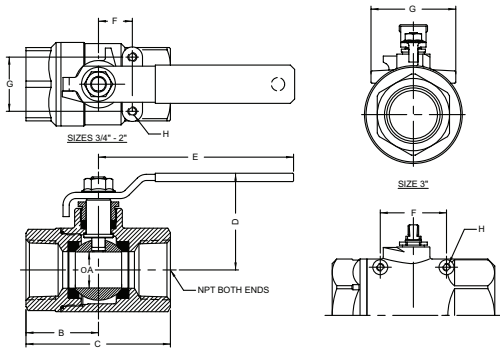
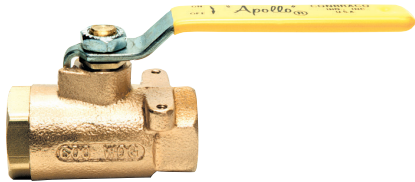


BALL VALVE WITH BALANCING STOP AND STEM EXTENSION

Ideal for HVAC systems. Stop plate and a 2-1/4" stem extension combination to accommodate insulation and handle repositioning. *Contact customer service for exact handle dimensions*



71-100 SERIES



BALL VALVE WITH MOUNTING PAD

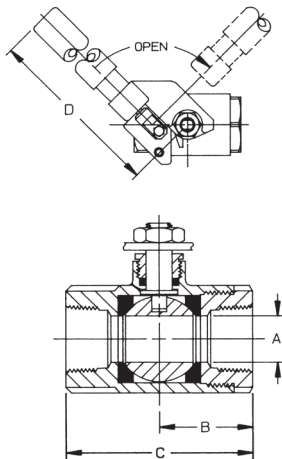
Designed to easily accommodate spring return handle, actuator or simple panel mounting. Threaded end connections with RPTFE seats and stuffing box ring.

FEATURES

- 3/4" to 3" models (See 77 Series for 1/4" - 1/2")
- 600 CWP non-shock
- Blowout-proof stem
- ASTM B584 Bronze
- Round handle option
- Adjustable packing

Model Number	Size (in.)	Dimensions (in.)							
		A	B	C	D	E	F	G	H
71-104-01	3/4	0.68	1.50	3.00	2.12	4.87	0.87	1.37	10-24 NC
71-105-01	1	0.87	1.68	3.37	2.25	4.87	0.87	1.37	10-24 NC
71-106-01	1-1/4	1.00	2.00	4.00	2.62	5.50	0.93	1.50	1/4-20 NC
71-107-01	1-1/2	1.25	2.18	4.37	2.87	8.00	0.93	1.50	1/4-20 NC
71-108-01	2	1.50	2.34	4.68	3.06	8.00	0.93	1.50	1/4-20 NC
71-100-01	3	2.50	3.37	6.75	4.12	8.00	3.37	2.75	1/4-20 NC

71-500 SERIES



CAST BRONZE VALVE WITH SPRING RETURN HANDLE

Ideal in applications where the valve must be in OFF position at all times such as feeding fuel lines. Can be used in reverse with 90° reverse stem option. Basic configuration: spring return to CLOSED. All lever components are stainless steel.

FEATURES

- Rated 600 psig CWP, non-shock
- 150 psig for saturated steam
- Spring return to OPEN (-08)

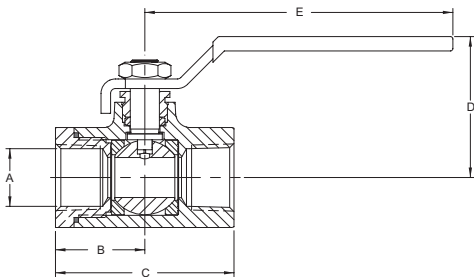
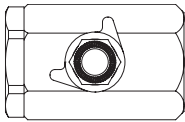
Model Number	Size (in.)	Dimensions (in.)			
		A	B	C	D
71-501-01	1/4	0.43	1.12	2.25	7.00
71-502-01	3/8	0.50	1.12	2.25	7.00
71-503-01	1/2	0.50	1.12	2.25	7.00
71-504-01	3/4	0.68	1.50	3.00	7.00
71-505-01	1	0.87	1.68	3.37	7.00
71-506-01	1-1/4	1.00	2.00	4.00	9.00
71-507-01	1-1/2	1.25	2.18	4.37	9.00
71-508-01	2	1.50	2.34	4.68	9.00



BALL VALVES

heavy duty valves

73A-100 SERIES



FORGED CARBON STEEL BALL VALVE

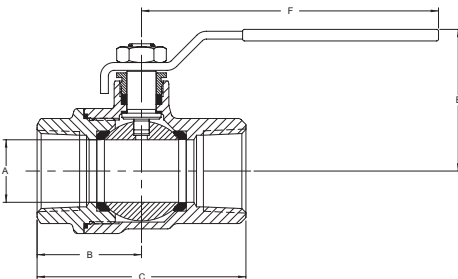
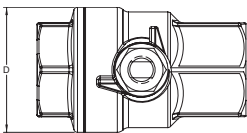
Threaded, 2 piece design, 1/4" to 1" 2000 psig CWP, 1-1/4" to 2" 1500 psig CWP Cold Non-Shock. 150 psig Saturated Steam.

FEATURES

- RPTFE seats & packing
- Forged construction
- Raised handle stops
- Blow-out-proof stem design
- Adjustable packing gland
- Zinc phosphate corrosion protection
- (-24) Fire safe to API 607 4th ed. class 600 burn
- AAR Approved #E999032
- Vacuum Service to 29 inches Hg.

Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
73A-101-01A	1/4"	.37	1.02	2.30	1.72	3.85
73A-102-01A	3/8"	.37	1.08	2.37	1.72	3.85
73A-103-01A	1/2"	.50	1.18	2.31	1.78	3.85
73A-104-01A	3/4"	.68	1.57	3.07	2.07	4.75
73A-105-01A	1"	.87	1.73	3.40	2.18	4.75
73A-106-01	1-1/4"	1.00	1.98	3.97	2.72	5.50
73A-107-01	1-1/2"	1.25	2.14	4.32	3.12	7.75
73A-108-01	2"	1.50	2.73	5.44	3.27	7.75

76F-100-A SERIES



STAINLESS STEEL FULL PORT BALL VALVE

Threaded, 2 piece design, 1/2"-2" 1000 psig CWP Cold Non-Shock, 150 psig Saturated Steam, Vacuum Service to 29 inches Hg.

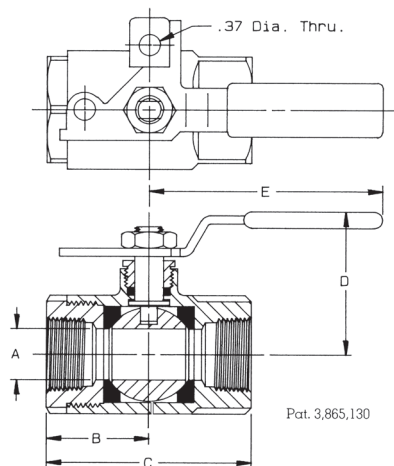
FEATURES

- 316 SS Investment cast components
- RPTFE seats
- Two-piece body
- Blow-out-proof stem design
- Adjustable packing gland
- (-24) Certified to API 607, 6th Edition, Class 600 burn
- Meets NACE MR-01-75-2000
- SS lever and nut
- Available with SS latch lock lever (-27)
- Therma Seal tee handle option (-11)
- Standard valve is certified **Lead Free**
- NSF/ANSI-61-G, NSF/ANSI 372 Lead Free

Model Number	Size (in.)	Dimensions (in.)						Wt.
		A	B	C	D	E	F	
76F-101-01A	1/2"							
76F-104-01A	3/8"							
76F-103-01A	1/2"	.50	1.21	2.35	1.27	1.73	3.85	0.57
76F-104-01A	3/4"	.75	1.39	2.77	1.62	1.96	3.85	0.91
76F-105-01A	1"	1.00	1.67	3.34	2.00	2.27	4.75	1.38
76F-106-01A	1-1/4"	1.25	1.96	3.92	2.73	3.21	7.77	4.17
76F-107-01A	1-1/2"	1.50	2.05	4.10	2.92	3.31	7.77	4.69
76F-108-01A	2"	2.00	2.37	4.74	3.75	3.69	7.77	6.90



75-100-41 SERIES



PADLOCKING BALL VALVE WITH AUTOMATIC DRAIN

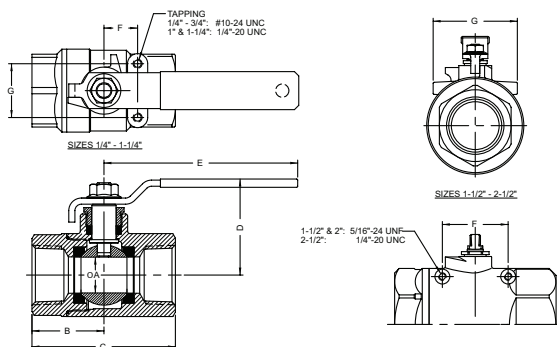
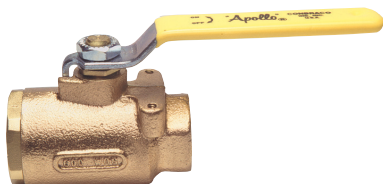
Meets OSHA standards and provides for easy, safe maintenance of pneumatic tools. Valve drains downstream pressure for safety when lever is closed. Valve can be padlocked OPEN or CLOSED with same hardware.

FEATURES

- Blowout-proof stem design
- Adjustable packing gland
- ASTM B584 Bronze
- RPTFE seats and stuffing box ring
- Pad lock lever
- Rated to 600 psi CWP - 150 SWP
- Temperature range: 50°F to 200°F
- Valve without drain option (suffix -01)

Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
75-101-41	1/4	0.43	1.12	2.25	1.81	3.00
75-102-41	3/8	0.50	1.12	2.25	1.81	3.00
75-103-41	1/2	0.50	1.12	2.25	1.81	3.00
75-104-41	3/4	0.87	1.68	3.37	2.25	3.87
75-105-41	1	0.87	1.68	3.37	2.25	3.87
75-106-41	1-1/4	1.00	2.00	4.00	2.62	5.50
75-107-41	1-1/2	1.25	2.16	4.37	2.87	5.50
75-108-41	2	1.50	2.34	4.68	3.06	5.50

77-100 SERIES



HEAVY DUTY FULL PORT NPT PANEL MOUNT BALL VALVE

Designed for easy actuator mounting or panel mounting where highest Cv values are desired. RPTFE seats and stuffing box ring. Also available with 250 lb. steam trim option.

FEATURES

- Mounting pad
- ASTM B584 Bronze
- Blowout-proof stem design
- Adjustable packing gland
- Full flow, minimum pressure drop
- 600 CWP, non-shock pressure rating
- 150 SWP steam rating
- Chain lever kits available 3/4" - 2-1/2" (-16, -58)

77 OPTIONS INCLUDE:

- 2-1/4" Stem Extension Latch Lock Lever (-27)
- Balance stop (-92)

Model Number	Size (in.)	Dimensions (in.)								Cv*
		A	B	C	D	E	F	G		
77-101-01	1/4	0.43	1.12	2.25	1.81	3.87	0.50	1.12	8.1	
77-102-01	3/8	0.50	1.12	2.25	1.81	3.87	0.50	1.12	15	
77-103-01	1/2	0.50	1.12	2.25	1.81	3.87	0.50	1.12	15	
77-104-01	3/4	0.81	1.56	3.12	2.12	4.87	0.87	1.37	51	
77-105-01	1	1.00	1.81	3.62	2.62	5.50	0.93	1.50	68	
77-106-01	1-1/4	1.25	2.12	4.25	2.87	5.50	0.93	1.50	125	
77-107-01	1-1/2	1.50	2.37	4.75	3.34	8.00	2.08	3.06	177	
77-108-01	2	2.00	2.65	5.37	3.71	8.00	2.41	3.52	389	
77-109-01	2-1/2	2.50	3.25	6.50	4.12	8.00	2.75	3.37	503	

Actuation assistance available on page 62, with the Apollo Actuator Wizard located at actuatorwizard.conbraco.com or by calling customer support at (704)841-6000.

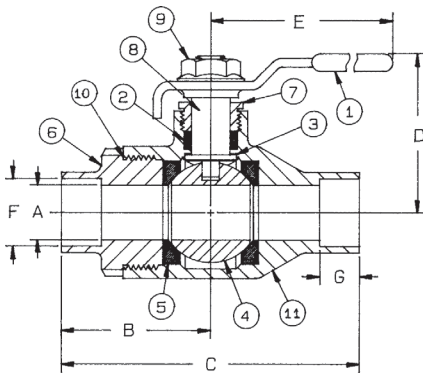
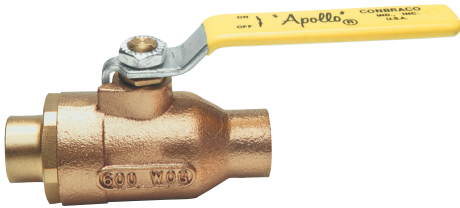
* The Cv factor is the gallons of water per minute that the valve will pass with 1 psig pressure drop.



BALL VALVES

heavy duty valves

77-200 SERIES



HEAVY DUTY FULL PORT SOLDER END BALL VALVE

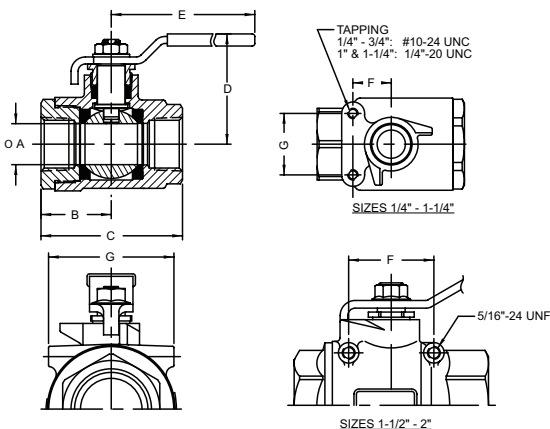
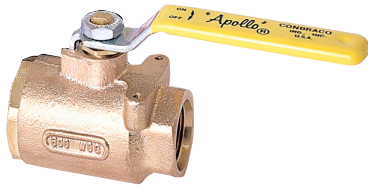
Designed to be soldered into lines without disassembly. This allows a factory tested valve to be installed without disturbing the seats and seals. Designed for soft solder with melt points less than 500°F.

FEATURES

- Heavy duty cast bronze body
- Chromium plated ball
- Blowout-proof stem design
- Adjustable packing gland
- Full flow, minimum pressure drop
- 600 CWP, non-shock pressure rating
- 150 SWP

Model Number	Size (in.)	Dimensions (in.)						
		A	B	C	D	E	F	G
77-204-01	3/4	0.81	2.12	4.12	2.12	4.87	0.88	0.75
77-205-01	1	1.00	2.33	4.60	2.62	5.50	1.13	0.90
77-206-01	1-1/4	1.25	2.60	5.15	2.87	5.50	1.38	0.96
77-207-01	1-1/2	1.50	3.00	6.00	3.34	8.00	1.63	1.09
77-208-01	2	2.00	3.62	7.24	3.71	8.00	2.13	1.34
77-209-01	2-1/2	2.50	3.93	7.87	4.12	8.00	2.63	1.48

77-900 SERIES



FULL PORT SAE STRAIGHT-THREAD BALL VALVES

Valve connections are designed for extended leak-free and energy saving performance in a broad range of applications, especially in manufacturing environments.

FEATURES

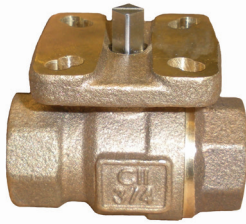
- Mounting pad for easy actuation
- 600 CWP non-shock
- 150 SWP
- ASTM B584 Bronze
- SAE J1926-1 (ISO 11926-1) connections
- RPTFE seats & packing
- Blowout-proof stem and lever handle standard
- Adjustable packing gland
- Full port
- Straight thread w/o-ring boss connection

Model Number	Nom. Tube O.D. (in.)	Size (in.)	Dimensions (in.)						
			A	B	C	D	E	F	G
77-901-01	1/4	7/16-20	0.43	1.12	2.25	1.81	3.87	0.50	1.12
77-902-01	3/8	9/16-18	0.50	1.12	2.25	1.81	3.87	0.50	1.12
77-903-01	1/2	3/4-16	0.50	1.12	2.25	1.81	3.87	0.50	1.12
77-904-01	3/4	11/16-12	0.81	1.56	3.12	2.12	4.87	0.87	1.37
77-905-01	1	15/16-12	1.00	1.81	3.62	2.62	5.50	0.93	1.50
77-906-01	1-1/4	1-5/8-12	1.25	2.12	4.25	2.87	5.50	0.93	1.50
77-907-01	1-1/2	1-7/8-12	1.50	2.37	4.75	3.34	8.00	2.08	3.06
77-908-01	2	2-1/2-12	2.00	2.65	5.37	3.71	8.00	2.41	3.52

Actuation assistance available on page 62, with the Apollo Actuator Wizard located at actuatorwizard.conbraco.com or by calling customer support at (704)841-6000.



77D SERIES

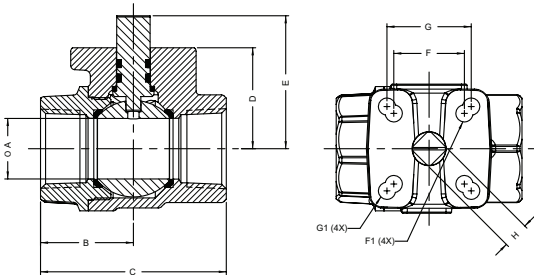


FULL PORT BRONZE BALL VALVE WITH DIRECT ISO MOUNTING PAD

Apollo's solid stainless steel ball design in a bronze valve with an integral ISO 5211 mounting pad with 100% American construction

FEATURES

- 600 CWP pressure rating
- Multi-fill seats and stem bearing
- Blowout-proof stem design
- Vacuum service to 29 in. Hg
- High cycle dual o-ring stem seal design (EPDM is standard). Most liquids and gases compatible with the o-ring seals
- Ball is slot vented to equalize cavity and line pressure
- MSS SP-110 compliant
- Direct mount actuator ready



Suffix	Material	Temp Range	Steam (max)
-01E (std)	EPDM	-20 to 400°F	150 SWP @ 366°F
-01N	Nitrile	-20 to 250°F	15 SWP @ 250°F
-01V	Viton	-20 to 400°F	50 SWP @ 297°F

Actuation assistance available on page 62, with the Apollo Actuator Wizard located at actuatorwizard.conbraco.com or by calling customer support at (704)841-6000.

Model Number	Size (in.)	Dimensions (in.)									
		A	B	C	D	E	F	ØF1	G	ØG1	H
77D-143-01E	1/2	0.50	1.15	2.25	1.00	1.37	0.997	0.224	1.167	0.281	0.275
77D-144-01E	3/4	0.75	1.33	2.65	1.38	1.79	1.167	0.281	1.392	0.281	0.275
77D-145-01E	1	1.00	1.54	3.07	1.67	2.20	1.167	0.281	1.392	0.281	0.430
77D-147-01E	1-1/2	1.50	2.12	4.23	2.31	3.05	N/A	N/A	1.949	0.344	0.551
77D-148-01E	2	2.00	2.43	4.85	2.68	3.43	N/A	N/A	1.949	0.344	0.551

7K-100 SERIES

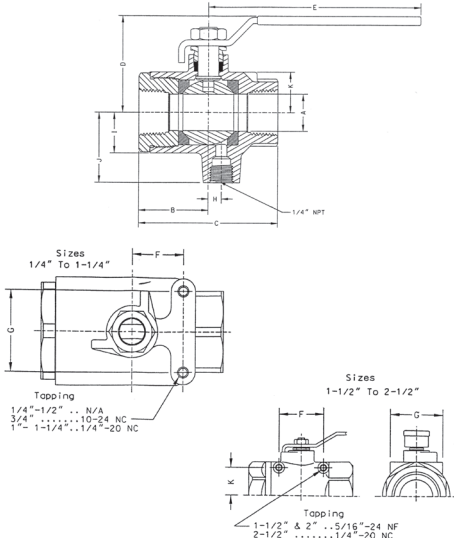


FULL PORT SAFETY EXHAUST VALVE WITH 1/4" NPT TAP FOR DRAIN

For use on pneumatic equipment. Furnished with a 1/4" NPT tapped drain to accommodate a muffler or to pipe the exhausted air to a safe location.

FEATURES

- Safely vents compressed air (or other non-hazardous gases) from piping downstream of the closed valve
- Sizes 1/4" - 2-1/2"
- FNPT threads
- Rated 125 psig-air or water, CWP, non-shock
- Temperature range: +50°F - +200°F
- Optional stainless steel latch lock handle that locks in closed position only, specify suffix (-46)



Model Number	Size (in.)	Dimensions (in.)										
		A	B	C	D	E	F	G	H	I	J	K
7K-101-01	1/4	0.37	1.03	2.06	1.75	3.87	N/A	N/A	0.09	0.53	1.18	N/A
7K-102-01	3/8	0.37	1.03	2.06	1.75	3.87	N/A	N/A	0.09	0.53	1.18	N/A
7K-103-01	1/2	0.50	1.10	2.19	1.75	3.87	N/A	N/A	0.12	0.59	1.25	N/A
7K-104-01	3/4	0.81	1.56	3.12	2.12	4.78	0.87	1.37	0.29	0.90	1.56	0.90
7K-105-01	1	1.00	1.80	3.61	2.62	5.50	0.93	1.50	0.31	1.12	1.78	1.12
7K-106-01	1-1/4	1.25	2.12	4.25	2.87	5.50	0.93	1.50	0.37	1.37	2.03	1.37
7K-107-01	1-1/2	1.50	2.37	4.74	3.30	7.78	2.08	3.06	0.50	1.56	2.21	1.28
7K-108-01	2	2.00	2.70	5.38	3.71	7.78	2.41	3.52	0.62	2.03	2.68	1.56
7K-109-01	2-1/2	2.50	3.25	6.50	4.05	7.78	2.75	3.37	1.09	2.34	3.00	2.00

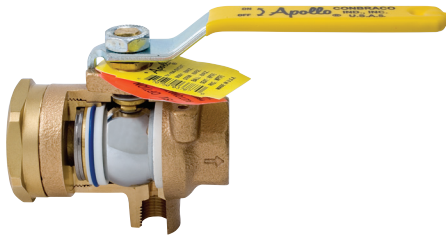
Also available in 70 & 77 Series as -41 option (without tapped drain)



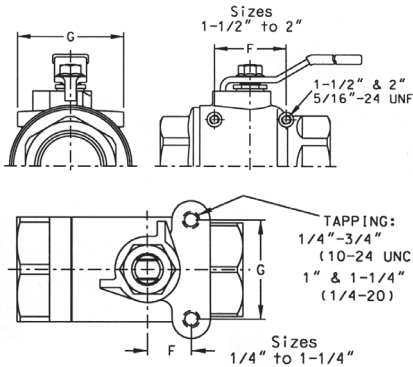
BALL VALVES

specialty valves

7K-SV SERIES



(7K-SV Series Shown)



SECURE-VENT FEATURE (-SV)

Available on the Apollo 77 and 7K full port bronze ball valves. Safely vents compressed air (or other non-hazardous gases) from piping downstream of the closed valve.

FEATURES

- Reliable shut-off and venting
- Pressure rating: 200 psig CWP, non-shock
- Temp. range: -20°F to 200°F
- Economical "no leakage" operation
- Belleville spring live-loaded active upstream seating
- Available with a full complement of handles

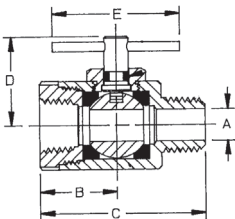
Model Number	Size (in.)	Dimensions (in.)						
		A	B	C	D	E	F	G
7K-101-SV	1/4	0.43	1.43	2.52	1.76	3.88	0.50	1.12
7K-102-SV	3/8	0.50	1.60	2.69	1.76	3.88	0.50	1.12
7K-103-SV	1/2	0.50	1.50	2.59	1.76	3.88	0.50	1.12
7K-104-SV	3/4	0.81	1.82	3.37	2.16	5.43	0.87	1.37
7K-105-SV	1	1.00	2.05	3.86	2.69	5.43	0.93	1.50
7K-106-SV	1 1/4	1.25	2.37	4.50	2.91	5.43	0.93	1.50
7K-107-SV	1 1/2	1.50	2.37	7.78	3.31	7.78	2.08	3.06
7K-108-SV	2	2.00	3.00	5.69	3.73	7.78	2.40	3.52

78-260/290 SERIES

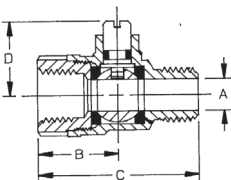


78LF-290: Bronze 78-261: Brass

Bronze Valves - Tee



Bronze Valves - Slot



BRASS AND BRONZE INSTRUMENTATION BALL VALVES AND BACKFLOW TEST COCKS

Male x Female threaded. 400 psig CWP, non-shock. Air and liquid service.

FEATURES

- Micro-finish ball
- Blowout-proof stem design
- PTFE seats
- Nitrile stem seal
- Plated steel tee handle
- Compact design
- Optional mixed end fittings available

BRASS INSTRUMENTATION BALL VALVE - TEE HANDLE

Model Number	Size (in.)	Dimensions (in.)						
		A	B	C	D	E	Cv*	Wt.
78-261-05	1/4M x 1/4F	0.31	0.43	1.43	0.87	1.25	5.50	0.19

BRONZE INSTRUMENTATION BALL VALVE (INTERNATIONAL) - SCREW SLOT - LEAD FREE

Model Number	Size (in.)	Dimensions (in.)						
		A	B	C	D	E	Cv*	Wt.
78LF-290-01	1/8M x 1/4F	0.21	0.80	1.60	0.72	N/A	4.00	0.19
78LF-291-01	1/4M x 1/4F	0.31	0.80	1.60	0.72	N/A	5.50	0.19
78LF-292-01	1/8 x 1/4 SAE	0.21	0.80	1.60	0.72	N/A	4.00	0.19
78LF-293-01	1/4 x 1/4 SAE	0.31	0.80	1.60	0.72	N/A	5.50	0.19

* The Cv factor is the gallons of water per minute that the valve will pass with a 1 psig pressure drop.

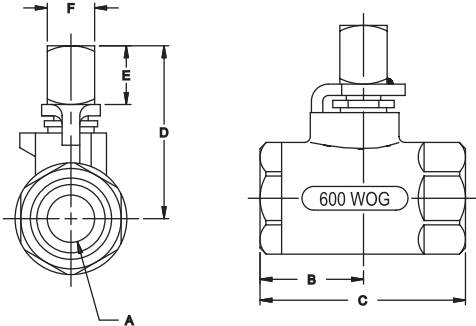
* Also see 94MBV Instrumentation Ball Valve



78-130 SERIES

FEMALE END IRRIGATION VALVE FOR UNDERGROUND SERVICE

Ideal for underground or below grade applications. This series (3/8"-2" FNPT) features a square head nut welded to the stem to allow operations with a ground key from standard grade.



Model Number	Size (in.)	Dimensions (in.)					
		A	B	C	D	E	F
78-132-01	3/8	0.37	1.03	2.06	1.75	0.62	0.50
78-133-01	1/2	0.50	1.09	2.18	1.83	0.62	0.50
78-134-01	3/4	0.68	1.50	3.00	2.12	0.62	0.62
78-135-01	1	0.87	1.68	3.37	2.25	0.62	0.62
78-136-01	1 1/4	1.00	2.00	4.00	2.88	0.75	0.75
78-137-01	1 1/2	1.25	2.18	4.38	3.06	0.75	0.75
78-138-01	2	1.50	2.34	4.68	3.25	0.75	0.75

OPTIONS

-41 Auto-drain (directional)

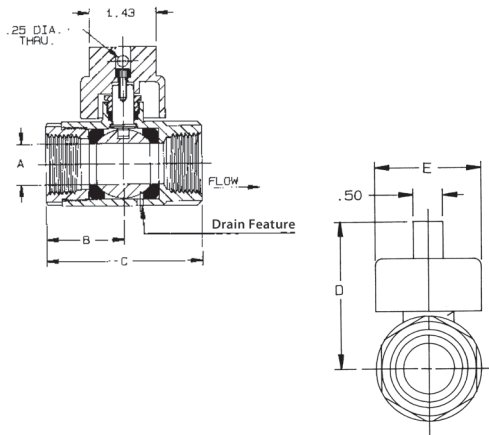
78-620 SERIES

BRONZE NPT IRRIGATION VALVE WITH AUTO-DRAIN

Ideal for underground use or where drained media will not cause damage. Heavy pattern design features ASTM B584 Bronze body.

FEATURES

- Auto-drain feature (when valve is in closed position) is standard
- Adjustable packing gland
- RPTFE seats and seals
- Stainless steel cover
- 200 psig water, CWP, non-shock
- Temperature range +50°F to 200°F



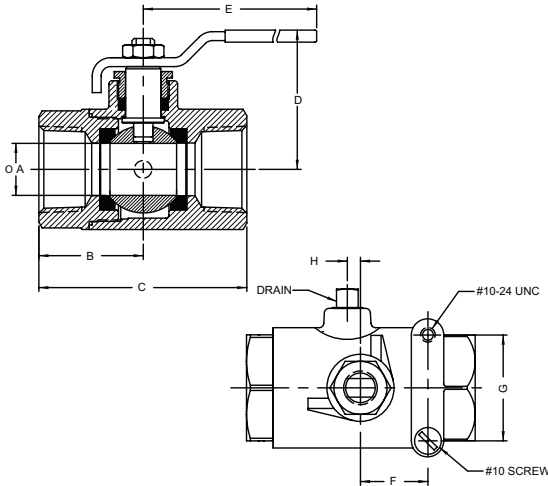
Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
78-621-01	3/4	0.68	1.47	2.96	2.40	1.81
78-622-01	1	0.87	1.66	3.34	2.53	1.81
78-623-01	1-1/4	1.00	1.98	3.97	3.00	2.50
78-624-01	1-1/2	1.25	2.12	4.28	3.18	2.50
78-625-01	2	1.50	2.35	4.67	3.37	2.50



BALL VALVES

heavy duty valves

78-660 & 962 SERIES



BRONZE PURGE & DRAIN BALL VALVE WITH CENTER DRAIN

Center tap drain allows for winterization or purge and drain function. Features bronze body with built-in mounting pad for panel mounting or actuation. Ideal for hydronic heating and marine applications.

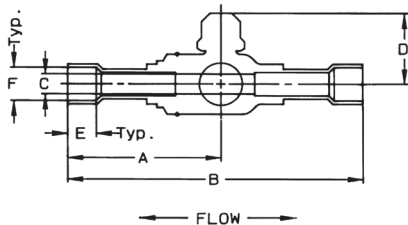
FEATURES

- 1/8" NPT side tap and plug
- RPTFE seats and stuffing box ring
- Stainless steel lever and nut
- Blowout-proof stem
- 600 psig CWP, non-shock
- Adjustable packing
- Drainable ball cavity to prevent freezing

Actuation assistance available on page 62, with the Apollo Actuator Wizard located at actuatorwizard.conbraco.com or by calling customer support at (704)841-6000.

Model Number	Size (in.)	Dimensions (in.)							
		A	B	C	D	E	F	G	H
78-664-01	3/4	0.68	1.50	3.00	2.12	4.87	0.87	1.37	0.17
78-665-01	1	0.87	1.68	3.37	2.25	4.87	0.87	1.37	0.21
78-666-01	1-1/4	1.00	2.00	4.00	2.62	5.50	0.93	1.50	0.28
78-667-01	1-1/2	1.25	2.18	4.37	3.05	8.00	0.93	1.50	0.40
78-962-01	2	1.50	2.34	4.68	3.24	8.00	0.93	1.50	0.45

79-700 SERIES



UL-LISTED REFRIGERANT BALL VALVE ASSEMBLY

Complete hermetically welded assembly includes copper extensions and forged brass refrigerant ball valve with capped, triple-sealed stem to minimize leaks.

FEATURES

- Chrome plated ball
- RPTFE seats and seals
- Full port through 2-5/8"
- Bi-directional flow design
- Sizes from 3/8" to 3-1/8" O.D. tube
- All sizes UL listed - SFJQ
- Rated 500 psig CWP, non-shock
- For use with refrigerant Group 2 fluids

Model Number	Size (in.)	Dimensions (in.)							Cv*
		A	B	C	D	E	F		
79-701-01	3/8	3.38	6.45	0.45	1.56	0.38	0.38	8.5	
79-702-01	1/2	3.38	6.45	0.45	1.56	0.38	0.50	8.5	
79-703-01	5/8	3.56	6.82	0.50	1.56	0.50	0.62	9.8	
79-704-01	7/8	3.91	7.53	0.68	1.79	0.75	0.87	32.0	
79-705-01	1-1/8	4.39	8.51	0.87	1.98	0.90	1.12	44.0	
79-706-01	1-3/8	4.42	8.94	1.25	2.62	0.96	1.38	66.0	
79-707-01	1-5/8	4.55	9.19	1.25	2.62	1.09	1.62	148.0	
79-708-01	2-1/8	5.16	10.31	1.50	2.93	1.34	2.12	218.0	
79-709-01	2-5/8	6.50	13.00	2.50	3.90	1.48	2.62	440.0	
79-600-01	3-1/8	7.00	14.00	2.50	3.90	1.67	3.12	390.0	

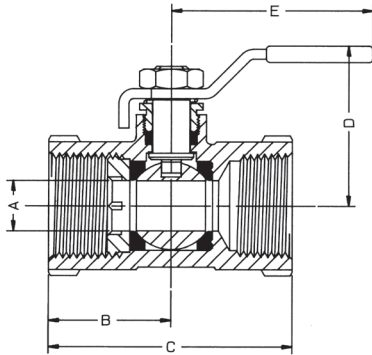
* The Cv factor is the gallons of water per minute that the valve will pass with 1 psig pressure drop.

BALL VALVES

uni-body general purpose valves & three-piece full port valves



9A-100 SERIES



HEAVY PATTERN UNI-BODY THREADED BALL VALVE

One piece bronze valve eliminates leak paths. Features static grounding devices and adjustable packing gland. Lever handle standard.

FEATURES

- Rated 600 psig CWP, non-shock
- 150 SWP
- Blowout-proof stem design

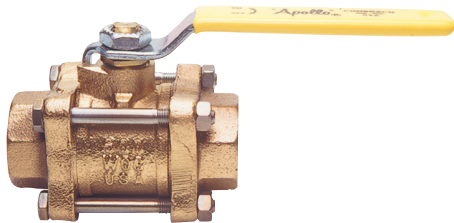
OPTIONS INCLUDE:

- Cam lock option (-30 suffix)
- Round handle option (-15 suffix)
- Latch lock handle option (-27 suffix)

Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
9A-101-01	1/4	0.37	1.34	2.59	1.68	3.87
9A-102-01	3/8	0.37	1.34	2.59	1.68	3.87
9A-103-01	1/2	0.37	1.34	2.59	1.81	3.87
9A-104-01	3/4	0.50	1.44	2.84	1.84	3.87
9A-105-01	1	0.62	1.72	3.28	2.00	4.87
9A-106-01	1-1/4	0.81	1.94	3.84	2.18	4.87
9A-107-01	1-1/2	1.00	2.06	4.00	2.68	5.50
9A-108-01	2	1.25	2.29	4.56	2.87	5.50

Three-Piece Full Port Valves

82-100 SERIES



FULL PORT BRONZE NPT THREE-PIECE VALVE

This inline-repairable threaded ball valve offers RPTFE seats and seals and a 600 CWP, non-shock rating.

FEATURES

- ASTM B584 Bronze body and ends
- SAE Grade 8 body bolts
- Adjustable packing nut
- Full port flow
- 600 CWP, 150 SWP (3"-4" 400 CWP, 150 SWP)
- Numerous options available
- 82-14X with SS ball and stem option
- **Lead Free** option (82LF)
 - NSF/ANSI 61-G and NSF/ANSI 372 Lead Free
 - Easily Identifiable White Handle Grip and Blue "Lead Free" Hang Tag

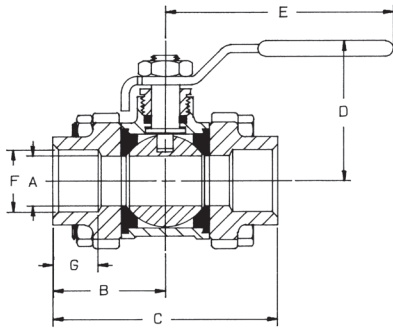
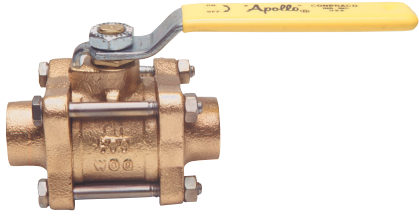
Model Number	LF Model Number	Size (in.)	Dimensions (in.)				
			A	B	C	D	E
82-101-01	82LF-101-01	1/4	0.43	1.28	2.56	1.81	3.87
82-102-01	82LF-102-01	3/8	0.50	1.28	2.56	1.81	3.87
82-103-01	82LF-103-01	1/2	0.62	1.40	2.81	1.93	4.87
82-104-01	82LF-104-01	3/4	0.81	1.71	3.43	2.18	4.87
82-105-01	82LF-105-01	1	1.00	1.93	3.87	2.62	5.50
82-106-01	82LF-106-01	1-1/4	1.25	2.37	4.75	2.87	5.50
82-107-01	82LF-107-01	1-1/2	1.50	2.62	5.25	3.37	8.00
82-108-01	82LF-108-01	2	2.00	3.01	6.03	3.68	8.00
82-109-01	82LF-109-01	2-1/2	2.50	3.62	7.25	5.14	9.75
82A-140-01	-	3	3.00	4.18	8.37	8.10	19.13
82A-14A-01	-	4	4.00	5.43	10.86	8.88	19.13



BALL VALVES

three-piece full port valves

82-200 SERIES



FULL PORT BRONZE THREE-PIECE SOLDER/BRAZED END VALVE

Valve features full port and is easily repaired inline. Designed for soft soldering or brazed* installation. Includes RPTFE seats and seals.

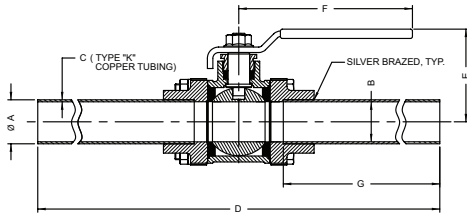
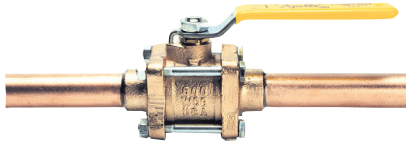
FEATURES

- ASTM B584 Bronze
- SAE Grade 8 body bolts
- 600 CWP, non-shock
- 150 SWP steam rating
- 82-24X with SS ball and stem option
- **Lead Free** option (82LF) featuring EZ-Solder™ Lead Free Bronze
 - NSF/ANSI 61-G and NSF/ANSI 372 Lead Free
 - Easily Identifiable White Handle Grip and Blue "Lead Free" Hang Tag

Model Number	LF Model Number	Size (in.)	Dimensions (in.)						
			A	B	C	D	E	F	G
82-202-01	82LF-202-01	3/8	0.50	1.28	2.56	1.81	3.87	0.50	0.37
82-203-01	82LF-203-01	1/2	0.62	1.40	2.81	1.93	4.87	0.63	0.50
82-204-01	82LF-204-01	3/4	0.81	1.71	3.43	2.18	4.87	0.88	0.75
82-205-01	82LF-205-01	1	1.00	1.93	3.87	2.62	5.50	1.13	0.90
82-206-01	82LF-206-01	1-1/4	1.25	2.37	4.75	2.87	5.50	1.38	0.96
82-207-01	82LF-207-01	1-1/2	1.50	2.60	5.25	3.37	8.00	1.63	1.09
82-208-01	82LF-208-01	2	2.00	3.01	6.03	3.68	8.00	2.13	1.34
82-209-01	82LF-209-01	2-1/2	2.50	3.62	7.25	5.14	9.38	2.63	1.47
82A-240-01	-	3	3.00	4.18	8.37	8.10	19.13	3.13	1.66
82A-24A-01	-	4	4.00	5.43	10.86	8.88	19.13	4.13	2.16

* Model 82LF suitable for soft soldering only.

82-200/82-240 SERIES



THREE-PIECE FULL PORT VALVE WITH BRAZED TUBE EXTENSIONS

This valve is useful in pharmaceutical, medical gas, pneumatic, and liquid applications where valves should not be disassembled prior to soldering or brazing.

FEATURES

- 6" type K copper tubing brazed into both end cups
- Rated 600 psig CWP, non-shock
- Optional gage port tapping
- Oxygen service option
- Complies with NFPA99 and CGA G4.1 (oxygen cleaned models)
- ASTM B584 Bronze
- SS ball and stem option

Size (in.)	Standard Model No.	Standard Model No. 316 Ball & Stem	Oxygen Cleaned Model No.	Oxygen Cleaned Model No. 316 Ball & Stem	Dimensions (in.)						
					A	B	C	D	E	F	G
3/8					1/2	0.50	0.049	13.54	1.76	3.88	6.00
1/2	82-203-B8	82-243-A8	82-203-K1	82-243-K1	5/8	0.62	0.049	13.81	2.00	4.87	6.00
3/4	82-204-A8	82-244-B3	82-204-K1	82-244-K1	7/8	0.81	0.065	13.93	2.18	4.87	6.00
1	82-205-B7	82-245-B1	82-205-K1	82-245-K1	1-1/8	1.00	0.065	14.04	2.62	5.50	6.00
1-1/4	82-206-B7	82-246-B0	82-206-K1	82-246-K1	1-3/8	1.25	0.065	14.75	2.89	5.50	6.00
1-1/2	82-207-B2	82-247-B2	82-207-K1	82-247-K1	1-5/8	1.50	0.072	15.07	3.37	8.00	6.00
2	82-208-B7	82-248-B2	82-208-K1	82-248-K1	2-1/8	2.00	0.083	15.23	3.70	8.00	6.00
2-1/2	82-209-A2	82-249-A2	82-209-K1	82-249-K1	2-5/8	2.50	0.095	23.51	5.14	9.38	9.60
3	-	82A-240-A2	-	82A-240-K1	3-1/8	3.00	0.109	24.00	6.77	18.00	9.40
4	-	82A-24A-A0	-	82A-24A-K1	4-1/8	4.00	0.134	25.50	8.26	18.00	9.41

BALL VALVES

medical gas ball valves



DESIGN: "F1", "F3", & "G3" CONFIGURATIONS

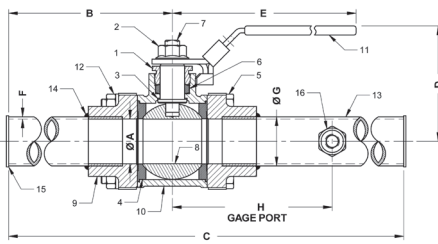
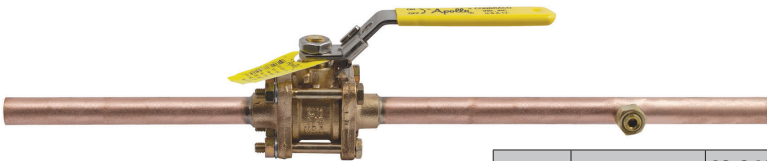
- Cast bronze valve body & valve end caps
- RPTFE seats and stuffing box ring
- 600 psig CWP non-shock (3" & 4" 400 CWP)
- Vacuum Service to 29 inches Hg
- Full port in all sizes
- Blow-out-proof stem design
- Adjustable packing nut
- In-line repairable
- Locking handle
- Cleaned and bagged for oxygen service per CGA G4.1 & NFPA 99
- Factory brazed, male extensions for solder or brazed installation without disassembly (Type K copper tubing brazed into both end caps)
- Single or double gauge ports
- Optional 316 stainless steel ball & stem
- **Made in USA**

OUTSIDE THE ZONE BOX

NFPA 99 requires the valves to be secured in the open position. For medical gas applications that are Outside-the-Zone-Box, Apollo offers three standard configurations: "F1" (1 gage port), "F3" (2 gage ports), and "G3" (no gage ports).

82-200-F1 AND 82-240-F1 SERIES

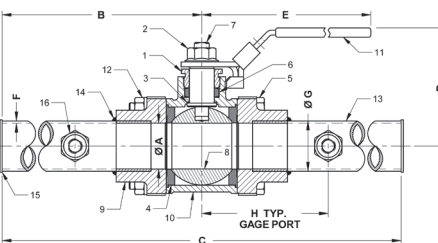
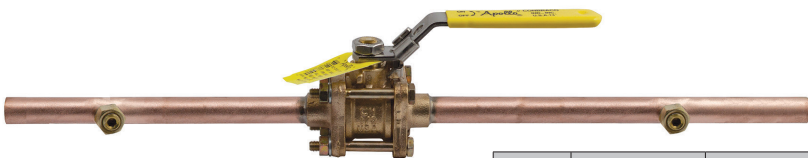
MALE EXTENSIONS AND 1 GAUGE PORT



Size (in.)	82-200 Model Number	82-240 Model Number 316SS Ball & Stem	Dimensions (in.)							
			A	B	C	D	E	F	G	H
1/2	82-203-F1	82-243-F1	0.62	6.91	17.41	2.23	5.31	0.049	0.625	7.15
3/4	82-204-F1	82-244-F1	0.81	6.97	17.47	2.41	5.31	0.065	0.75	7.22
1	82-205-F1	82-245-F1	1.00	7.03	17.62	3.01	6.29	0.065	1.25	7.28
1-1/4	82-206-F1	82-246-F1	1.25	7.38	22.71	3.22	6.29	0.065	1.375	7.00
1-1/2	82-207-F1	82-247-F1	1.50	7.50	22.57	4.04	8.93	0.072	1.625	6.74
2	82-208-F1	82-248-F1	2.00	7.74	22.58	4.15	8.93	0.083	2.125	6.51
2-1/2	82-209-F1	82-249-F1	2.50	11.75	23.50	5.31	10.06	0.095	2.50	6.38
3	-	82A-240-F1	3.00	11.94	23.87	8.10	18.00*	0.0450	3.00	7.75
4	-	82A-24A-F1	4.00	12.68	25.37	8.88	18.00*	0.0700	4.00	8.00

82-200-F3 AND 82-240-F3 SERIES

MALE EXTENSIONS AND 2 GAUGE PORTS



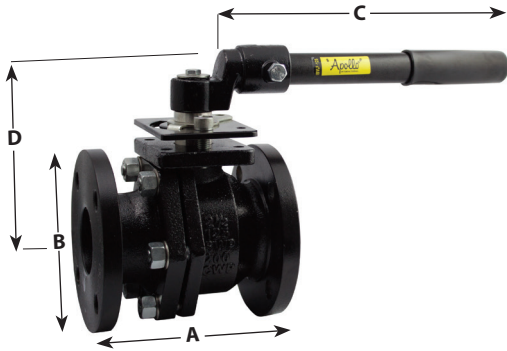
Size (in.)	82-200 Model Number	82-240 Model Number 316SS Ball & Stem	Dimensions (in.)							
			A	B	C	D	E	F	G	H
1/2	82-203-F3	82-243-F3	0.62	12.27	24.53	2.23	5.31	0.049	0.625	4.25
3/4	82-204-F3	82-244-F3	0.81	12.25	24.50	2.41	5.31	0.065	0.75	4.24
1	82-205-F3	82-245-F3	1.00	12.30	24.60	3.01	6.29	0.065	1.25	4.24
1-1/4	82-206-F3	82-246-F3	1.25	12.23	24.46	3.22	6.29	0.065	1.375	4.23
1-1/2	82-207-F3	82-247-F3	1.50	12.25	24.50	4.04	8.93	0.072	1.625	4.25
2	82-208-F3	82-248-F3	2.00	12.25	24.50	4.15	8.93	0.083	2.125	4.25
2-1/2	82-209-F3	82-249-F3	2.50	11.75	23.50	5.31	10.06	0.095	2.50	6.38
3	-	82A-240-F3	3.00	11.94	23.87	8.10	18*	.0450	3.00	7.75
4	-	82A-24A-F3	4.00	12.68	25.37	8.88	18*	.0700	4.00	8.00



BALL VALVES

apollo international™ cast iron ball valves & gas/fuel shut-off valves

6PLF SERIES



CAST IRON CLASS 125 FLANGED BALL VALVE - LEAD FREE

The cast iron/epoxy coated, Class 125 Apollo International™ 6PLF Series Lead Free* Ball Valves offer unobstructed turbulence-free flow that gate and butterfly valves can't match. Compact design and low profile handle for easy installation in tight areas.

FEATURES

- A126 Class B Cast Iron Body with FDA food-grade epoxy powder coat
 - Stainless steel ball & stem
 - PTFE Seats
 - 200 CWP/125 SWP
 - ISO 5211 mounting pad for easy actuation
 - Adjustable stem packing
 - Full port through 6"
 - Vacuum service to 29"
 - Lever handles 2-6"
- Gear operators 8-10"
 - NSF/ANSI 61-G Water Quality
 - NSF/ANSI 372 Lead Free
 - ANSI B16.10 Face to Face dimensions allow direct replacement of comparable gate valves

Actuation assistance available on page 62, with the Apollo Actuator Wizard located at actuatorwizard.conbraco.com or by calling customer support at (704)841-6000.

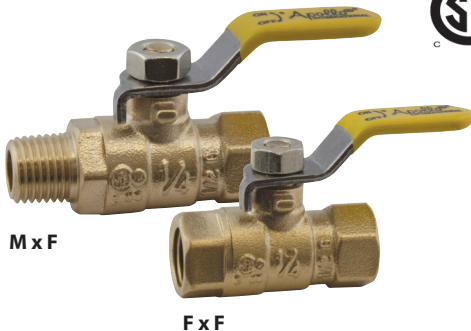
LF Model Number	Size (in.)	Dimensions (in.)				Wt.
		A	B	C	D	
6PLF-208-01	2	7.00	6.00	12.20	6.50	22.70
6PLF-209-01	2-1/2	7.50	7.00	13.78	7.42	36.73
6PLF-200-01	3	8.00	7.50	13.78	8.17	46.63
6PLF-20A-01	4	9.00	9.00	15.75	9.00	71.83
6PLF-20C-01	6	10.50	11.00	30.00	11.32	111.99
6PLF-20E-01*	8	11.50	13.50	30.00	11.32	210.54
6PLF-20G-01*	10	13.00	16.00	33.00	13.05	294.10

*Gear Operated

Valve Size	Actuation Kit	Description
2"	78253001	KIT, MTG, 6PLF208 TO A0150
2-1/2"	78253101	KIT, MTG, 6PLF209 TO A0150
3"	78253201	KIT, MTG, 6PLF200 TO A0150
4"	78253301	KIT, MTG, 6PLF20A TO A0350/0600
6"	78253401	KIT, MTG, 6PLF20C TO A0950
8" - 10"	78253501	KIT, MTG, 6PLF20E/20G TO A01600/A2500

Gas/Fuel Shut-Off Valves

94 MBV SERIES

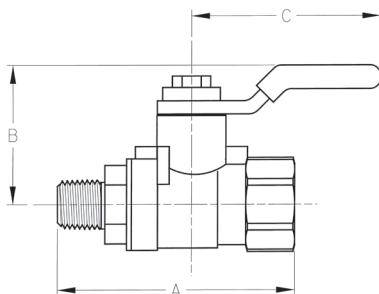


MINI BALL VALVE GAS RATED – APOLLO INTERNATIONAL™

Designed for commercial and light industrial use. Full port, constructed of heavy-duty forged brass, PTFE seats and gland follower with double viton o-rings, to prevent stem leakage.

FEATURES

- Reversible handle
- Blowout-proof stem
- Double Viton o-ring stem seals
- Large raised wrench flats
- Chrome plated brass ball
- Ideal for use as a gas cock or gauge cock
- Maximum 600 psig at 100°F, non-shock
- Temps from -40°F to 300°F
- ANSI Z21.15-2009 / CSA 9.1-2009 (1/2 psi) Manually Operated Gas Valves for Appliances.
- ASME B16.44-2002 Manually Operated Metallic Gas Valves for use in Above Ground Piping Systems (2 and 5 psig).
- MSS-SP110 compliant



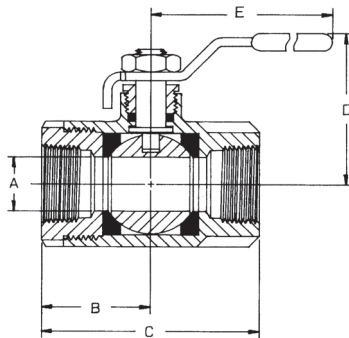
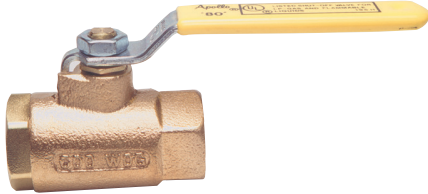
Model Number	Size (in.)	Dimensions (in.)			Port (Dia.)	Wt. (lbs.)
		A	B	C		
94-MBV-01	1/4 FNPT x 1/8 MNPT	1.95	1.09	1.71	0.31	0.19
94-MBV-02	1/4 FNPT x 1/4 MNPT	1.95	1.09	1.71	0.31	0.20
94-MBV-03	1/4 FNPT x 1/4 FNPT	1.68	1.09	1.71	0.31	0.17
94-MBV-04	1/8 FNPT x 1/8 MNPT	1.95	1.09	1.71	0.31	0.16
94-MBV-05	1/8 FNPT x 1/8 FNPT	1.68	1.09	1.71	0.31	0.16

BALL VALVES

gas/fuel shut-off valves



80-100 SERIES



UL LISTED GAS BRONZE SHUT-OFF VALVES

UL listed and designed as safe shut-off valve for LP gas, natural gas, flammable liquids and heated oil. Features easy quarter-turn ON/OFF, a large port to reduce pressure drop and NPT connections.

FEATURES

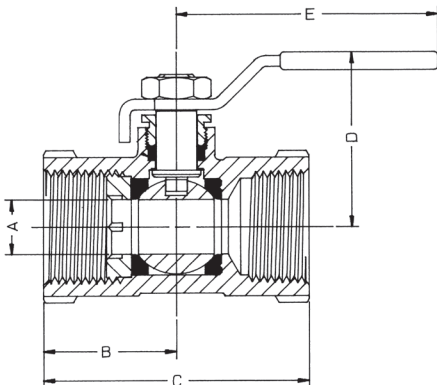
- RPTFE seats and seals
- Rated 600 psig CWP, non-shock
- 250 psig LP Gas
- Tee handle (-07)
- Latch lock handle (-27)
- Oxygen cleaned (-57)

UL LISTED

- YQNZ - UL1477
- YRBX - UL842
- YRPV - UL842
- YSDT - UL125
- MHKZ - UL842

Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
80-101-01	1/4	0.37	1.03	2.06	1.75	3.87
80-102-01	3/8	0.37	1.03	2.06	1.75	3.87
80-103-01	1/2	0.50	1.12	2.25	1.81	3.87
80-104-01	3/4	0.68	1.50	3.00	2.12	4.87
80-105-01	1	0.87	1.68	3.37	2.25	4.87
80-106-01	1-1/4	1.00	2.00	4.00	2.62	5.50
80-107-01	1-1/2	1.25	2.18	4.37	2.87	5.50
80-108-01	2	1.50	2.34	4.68	3.06	5.50
80-109-01	2-1/2	2.50	3.25	6.50	4.12	8.00
80-100-01	3	2.50	3.37	6.75	4.12	8.00

90-100 SERIES



UL LISTED UNI-BODY BRONZE THREADED BALL VALVE

A compact valve that's UL listed at 400 psig CWP, non-shock for fuel, inert gases and flammable liquids. Features ASTM Grade Bronze body, RPTFE seats and seals.

FEATURES

- Blowout-proof stem design
- One piece bronze body
- Optional tee handle (-07)
- Reduced port

UL LISTED

- YQNZ - UL1477
- YRBX - UL842
- YRPV - UL842

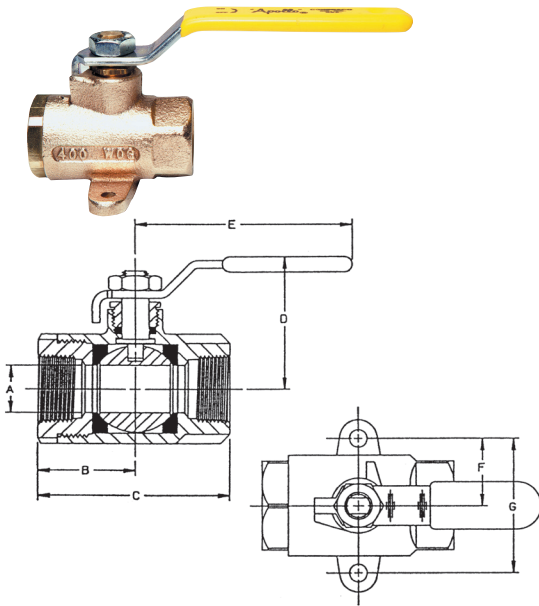
Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
90-103-01A	1/2	0.37	1.14	2.15	1.68	3.87
90-104-01A	3/4	0.50	1.36	2.61	1.75	3.87
90-105-01A	1	0.62	1.50	2.90	2.00	4.87
90-106-01A	1-1/4	0.81	1.81	3.50	2.18	4.87
90-107-01A	1-1/2	1.00	2.06	3.79	2.62	5.50
90-108-01A	2	1.25	2.43	4.42	2.81	5.50



BALL VALVES

gas/fuel shut-off valves

78-256 SERIES



MULTI PURPOSE SHUT-OFF VALVE WITH SURFACE MOUNTING EARS

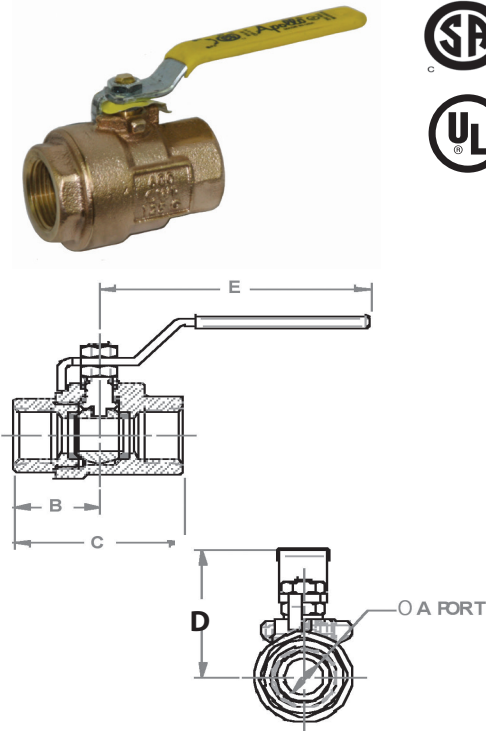
Excellent for use with liquid fuels and often specified as a fuel tank shut-off valve in marine applications. All wetted parts are brass or cast bronze. Mounting ears for easy, positive installation.

FEATURES

- 400 psig CWP, non-shock
- Tested to 100 psig air under water
- Optional tee handle
- NPT threaded, both ends
- RPTFE seats and seals

Model Number	Size (in.)	Dimensions (in.)						
		A	B	C	D	E	F	G
78-248-01	1/4	0.43	1.12	2.25	1.78	3.87	0.93	1.87
78-250-01	3/8	0.43	1.12	2.25	1.78	3.87	0.93	1.87
78-256-01	1/2	0.50	1.12	2.25	1.78	3.87	0.93	1.87
78-438-01	3/4	0.68	1.50	3.00	2.12	4.87	1.06	2.12

77G-UL SERIES



FULL PORT CSA & UL BRONZE GAS SHUT-OFF VALVES

UL and CSA listed fuel shut off valve that features a durable bronze body, premium "multi-fill" MPTFE seats and stem packing, and a "Solid Ball" design that delivers true full port flow performance.

FEATURES

- Blowout-proof stem design
- ASTM B584 Bronze
- Maximum body pressure: 600 psig CWP
- CSA Rating: 125 psig
- CSA Rating: -20°F to 150°F
- UL Rating: 250 psig max @ 125°F
- MSS SP-110 ball valves
- CSA to ASME B16.33, 125
- CGA 3.16-M88, 125

UL LISTED

- MHKZ
- YSDT
- YQNZ
- YRBX
- YRPV

UL LISTED

- YRPV7
- YRBX7
- MHKZ7
- YSDT7

Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
77G-103-UL	1/2	0.50	1.19	2.35	1.80	3.74	0.68
77G-104-UL	3/4	0.75	1.42	2.74	1.98	4.78	1.26
77G-105-UL	1	1.00	1.64	3.18	2.18	4.78	2.08

BALL VALVES

gas/fuel shut-off valves



GB-10 SERIES

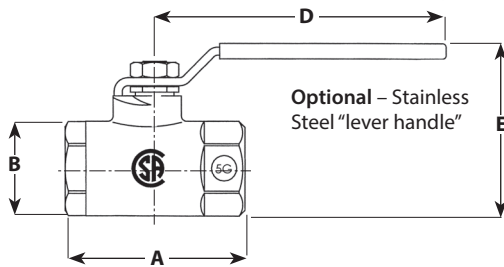
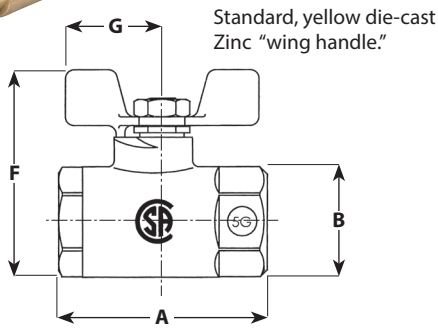


CSA GAS SHUT-OFF VALVES

Manual shut-off valves engineered specifically for low pressure gas service. Canadian Standard Association design and capacity certified with American-made quality. High-copper content body, chrome-plated ball, and PTFE seats.

FEATURES

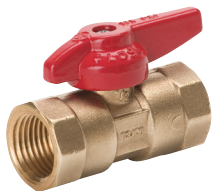
- Complies with ANSI Z21.15, CR91-002, and ASME 16.44
- Use with natural, manufactured, mixed and liquefied petroleum gases, LP gas-air mixtures
- Temperature range: 32°F - 125°F at pressures of 1/2 and 5 psig
- Standard die-cast zinc "wing" handle (-01), epoxy coated
- Lever (-L1) or tee handle (-T1) options
- **Made in USA**



Model Number	Size (in.)	Connection	BTU/Hr*	Dimensions (in.)						
				A	B	C	D	E	F	G
51GB-201	3/8	3/8 NPT	318,700	2.04	1.06	0.38	3.85	2.24	2.20	0.81
51GB-301	1/2	1/2 NPT	623,750	2.24	1.18	0.50	3.85	2.30	2.24	0.81
51GB-401	3/4	3/4 NPT	1,265,000	2.97	1.55	0.69	4.75	2.85	2.90	1.00
51GB-501	1	1 NPT	2,037,500	3.33	1.81	0.88	4.75	3.10	3.15	1.00

* Capacity based on a gas having a heating value of 1000 Btu/cubic feet and an S.G. of 0.64 at a P.D. of 1" W.C.

GB-15 SERIES



GB-15



GAS BALL VALVE – APOLLO INTERNATIONAL™

Designed for natural gas, manufactured and mixed gas, liquefied petroleum gases and LP gas-air mixture applications.

APPROVALS

- ANSI Z21.15 (Appliance & Hose)/CGA9.1(1/2 psi)
- ASME B16.44 (5 psi)
- UL Guide YRBX (Flammable Liquid Shut-Off)
- UL Guide MHKZ (Manual Valves)
- UL Guide YRPV (Gas Shut-Off –250#)
- UL Guide YSDT (LP Gas)

Model Number	Part Number	Size & End Connection (in.)
GB-15	51GF301A	1/2 FNPT x 1/2 FNPT
GB-15	51GF401A	3/4 FNPT x 3/4 FNPT



BALL VALVES

gas/fuel shut-off valves

GB-50 & GB-50A SERIES



GB-50



GB-50A



CSA GAS SHUT-OFF VALVES

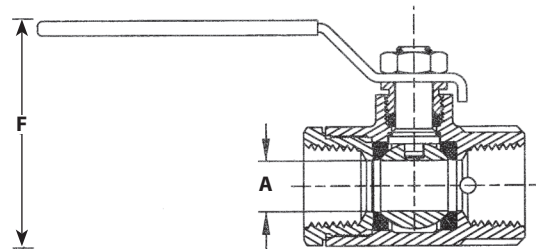
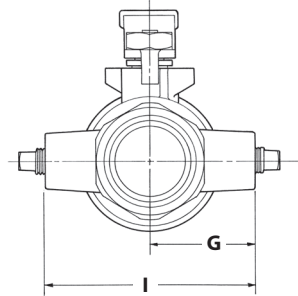
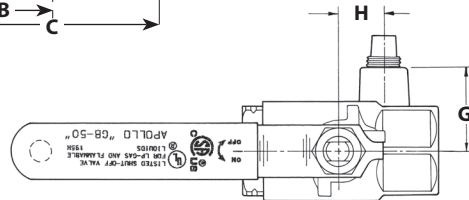
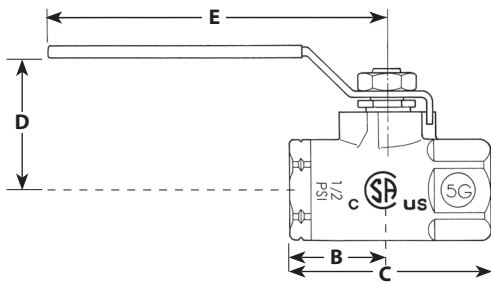
Designed for "main burner" applications with cast-in single or dual pilot tap. ASTM B584 bronze body, chrome-plated ball, brass stem, retainer and gland screws for corrosion resistance.

FEATURES

- For natural gas, manufactured and mixed Gas, liquefied petroleum gases and LP gas-air mixtures
- Rated pressures of 1/2 and 5 psig
- Standard connection is FNPT x FNPT
- High BTU capacity
- Reversible plated steel lever handle. Optional "tee" handle (-07)

APPROVALS

- ANSI Z21.15, CGA9.1
- ASME B16.44 (2 and 5 psig)
- MSS-SP110
- UL Guide YRBX
- UL Guide MHKZ
- UL Guide YRPV
- UL Guide YSDT
- UL 125, UL 842



Model No. Single Tapped	Model No. Dual Tapped	Size (in.)	Tapping	Dimensions (in.)									Capacity BTU/Hr.
				A	B	C	D	E	F	G	H	I	
50GB-301	--	1/2	1/8	0.50	1.11	2.25	1.68	3.85	2.27	1.00	0.53	-	693,000
50GB-401	50GB-401A	3/4	1/8	0.75	1.26	2.67	1.93	3.85	2.72	1.12	0.75	2.24	1,258,000
50GB-501	50GB-501A	1	1/8	1.00	1.65	3.42	2.19	4.78	3.18	1.53	0.94	3.06	3,144,000
50GB-601	50GB-601A	1-1/4	1/8	1.25	1.87	3.86	2.37	4.78	3.56	1.62	1.15	3.24	6,441,000
50GB-701	50GB-701A	1-1/2	1/8	1.50	2.05	4.22	2.81	5.40	4.21	1.81	1.31	3.62	7,745,000
50GB-801	50GB-801A	2	1/8	2.00	2.48	5.02	3.18	5.40	4.93	2.18	1.68	4.36	14,741,000
50GB-5A1	50GB-5A1A	1	1/4	1.00	1.65	3.42	2.19	4.78	3.18	1.53	0.94	3.06	3,144,000
50GB-6A1	50GB-6A1A	1-1/4	1/4	1.25	1.87	3.86	2.37	4.78	3.56	1.62	1.15	3.24	6,441,000
50GB-7A1	50GB-7A1A	1-1/2	1/4	1.50	2.05	4.22	2.81	5.40	4.21	1.81	1.31	3.62	7,745,000
50GB-8A1	50GB-8A1A	2	1/4	2.00	2.48	5.02	3.18	5.40	4.93	2.18	1.68	4.36	14,741,000

* Note: Capacities based on 1000 Btu/cubic feet gas at 0.64 specific gravity, at a P.D. of 1" W.C.

BALL VALVES

gas/fuel shut-off valves



78-124/78-125 SERIES



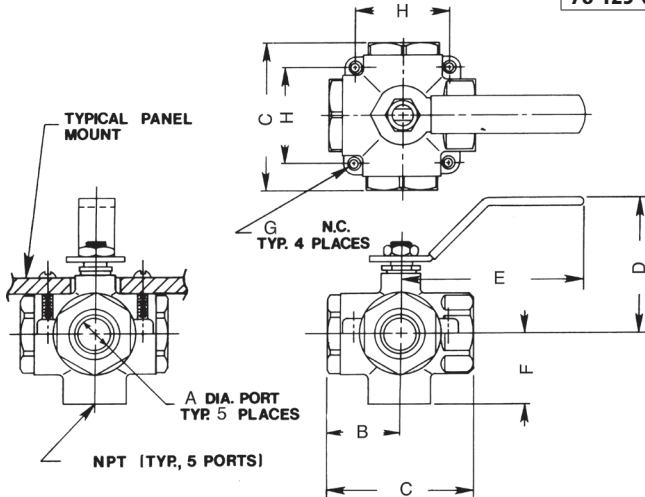
5-PORT TANK SELECTOR

Unique ball design allows for higher flow capacities. Five port construction allows access to four tanks using only one valve.

FEATURES

- Five NPT connections
- Bronze ball valve with stainless steel Lever and Nut
- PTFE seats and RPTFE stem packing
- Stem packing adjustable for wear
- Non-lubricated
- 50 psig pressure rating
- Operation: four selected inlets feed one common outlet
- Pointer on handle indicates the selected inlet
- Easy mounting design

Series Number	Size (in.)	Dimensions (in.)								Wt./100 (lbs.)
		A	B	C	D	E	F	G	H	
78-124-01	1/2	0.50	1.26	2.52	2.27	3.53	1.12	10-24	1.40	106
78-125-01A	3/4	0.75	1.56	3.12	2.93	3.87	1.53	1/4-20	1.98	264





BALL VALVES

economy plumbing/gas ball valves

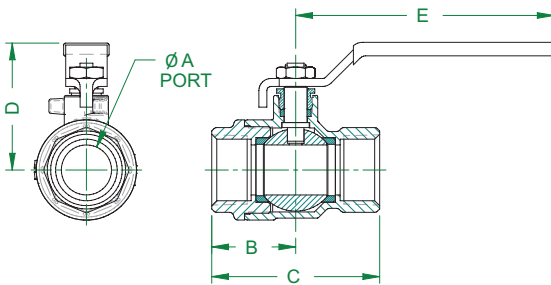
77F/77FLF SERIES



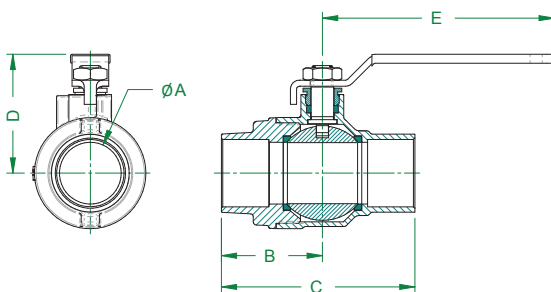
New!



Large Diameter



Large Diameter



FULL PORT THREADED FORGED BRASS BALL VALVES

The Apollo 77F Series is a full port forged brass ball valve suitable for a wide range of plumbing and heating applications. These NPT threaded or solder, 2-piece valves combine reliable operation with maximum economy. Valves include most pertinent agency approvals. **Proudly Made in the USA.**

FEATURES

- Heavy pattern forged design
- Full-port flow
- Superior RPTFE seats and packing
- Adjustable stem packing
- Blow-out proof stem
- Corrosion resistant materials
- 100% Factory tested
- Popular lever options and stainless steel trim available
- Silicone free assembly
- **Made in USA**, ARRA compliant
- Rating: 600 CWP (1/4" - 2")
- Rating: 400 CWP (2-1/2" - 4")
- Steam rating: 150 psi SWP
- Vacuum service to 29 in. Hg

77FLF FEATURES

- Easily identifiable white handle grip and blue "lead free" hang tag
- EZ-Solder® lead free brass
- Lead free dezincification Resistant brass
- NSF/ANSI 61-G
- NSF/ANSI 372 Lead Free
- Rating: 600 CWP (1/4" - 2")
- Rating: 400 CWP (2-1/2" - 4")
- Steam rating: 150 psi SWP
- Vacuum service to 29 in. Hg

Model Number	LF Model Number	Size (in.)	Dimensions (in.)					Wt.
			A	B	C	D	E	
NPT								
77F-101-01	77FLF-101-01	1/4"	0.38	0.81	1.62	1.61	2.85	0.3
77F-102-01	77FLF-102-01	3/8"	0.38	0.85	1.70	1.61	2.85	0.3
77F-103-01	77FLF-103-01	1/2"	0.50	1.14	2.25	1.66	2.85	0.5
77F-104-01	77FLF-104-01	3/4"	0.75	1.26	2.51	1.91	3.86	0.8
77F-105-01	77FLF-105-01	1"	1.00	1.60	3.20	2.11	3.86	1.3
77F-106-01	77FLF-106-01	1-1/4"	1.25	1.73	3.46	2.44	4.75	2.1
77F-107-01	77FLF-107-01	1-1/2"	1.50	2.00	4.00	2.91	5.42	3.2
77F-108-01	77FLF-108-01	2"	2.00	2.37	4.47	3.69	7.77	5.6
77F-109-01	77FLF-109-01	2-1/2"	2.50	2.99	5.98	4.14	7.77	12.8
77F-100-01	77FLF-100-01	3"	3.00	3.52	7.05	5.03	9.92	19.7
77F-10A-01	77FLF-14A-01	4"	4.00	3.83	7.65	5.70	14.78	25.5
Solder								
77F-203-01	77FLF-203-01	1/2"	0.50	1.37	2.37	1.66	2.85	0.4
77F-204-01	77FLF-204-01	3/4"	0.75	1.72	3.13	1.91	3.86	0.9
77F-205-01	77FLF-205-01	1"	1.00	2.01	3.73	2.11	3.86	1.3
77F-206-01	77FLF-206-01	1-1/4"	1.25	2.07	3.97	2.44	4.75	2.0
77F-207-01	77FLF-207-01	1-1/2"	1.50	2.42	4.69	2.91	5.42	3.3
77F-208-01	77FLF-208-01	2"	2.00	2.91	5.82	3.69	7.77	5.6
77F-209-01	77FLF-209-01	2-1/2"	2.50	3.68	7.05	4.14	7.77	11.6
77F-200-01	77FLF-200-01	3"	3.00	4.26	8.15	5.03	9.92	19.3
77F-20A-01	77FLF-24A-01	4"	4.00	4.82	9.57	5.70	14.78	25.6

APPROVALS

- MSS-SP-110
- IAPMO IGC-157 Ball Valves
- CGA 3.16 (125 PSI)
- CGA CR91-002 (5 PSI)
- ANSI Z21.15/CSA 9.1 (1/2 PSI)
- ASME B16.44 (5 PSI)
- ASME B16.33 (125 PSI) (1/2" - 2")



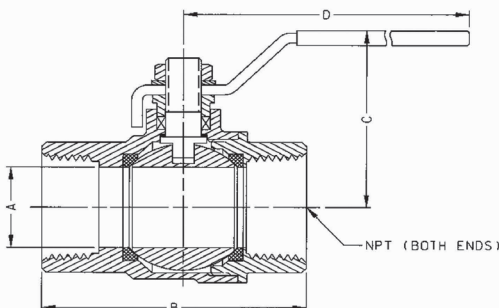
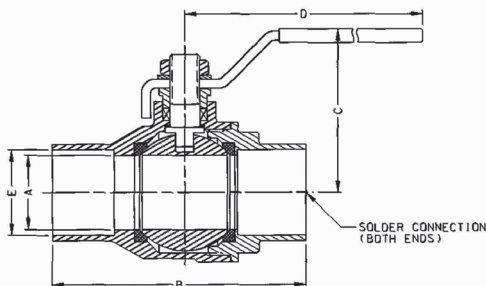
- FM 1140 (1/4" - 2")
- UL Guides: YSDT, MHKZ, YQNZ, YRBX & YRPV
- UL Guide VQGU (1/4" - 2")

BALL VALVES

economy plumbing/gas ball valves



94A SERIES



APOLLO INTERNATIONAL™ ECONOMY FULL PORT BALL VALVES

These full port ball valves with forged brass body are UL listed and CSA approved. Ideal for general purpose non-potable applications including air, gas, HVAC, irrigation, fire protection, etc.

FEATURES

- Adjustable stem packing nut
- Meets MSS SP110 requirements
- 600 CWP non-shock (1/4" - 2")
- 400 CWP non-shock (2-1/2" - 4")
- 2-1/4" memory stop option
- 100% Factory Tested
- **Lead Free** option (94ALF-A)

APPROVALS

CSA listed (File # 226234) per the following standards:

- CAN 1-9.1 1/2 psig
- CGA 3.16 125 psig
- CGA CR91-002 5 psig
- ANSI Z21.15 1/2 psig
- ASME B16.44 5 psig
- ANSI/ASME B16.33 125 psig



UL listed

- Guides YQNZ, YRBX, YRPV, YSDT and MHKZ (1/4" - 4" NPT only)
- UL 258 – VQGU Fire Protection Trim & Drain 175# max (1/4" – 2")



FM 1140 Fire Protection Quick Opening Valves

* Gas approvals apply to NPT models only



Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
NPT							
94A-101-01	1/4"	0.395	1.746	1.840	3.543	–	0.33
94A-102-01	3/8"	0.407	1.756	1.840	3.543	–	0.30
94A-103-01	1/2"	0.583	2.047	1.921	3.543	–	0.44
94A-104-01	3/4"	0.748	2.362	2.087	3.780	–	0.66
94A-105-01	1"	0.945	2.756	2.559	4.528	–	1.10
94A-106-01	1-1/4"	1.260	3.307	2.953	4.528	–	1.57
94A-107-01	1-1/2"	1.575	3.661	3.346	5.512	–	2.40
94A-108-01	2"	1.969	4.181	3.681	5.512	–	3.37
94A-109-01	2-1/2"	2.520	5.378	4.764	8.661	–	7.60
94A-100-01	3"	2.953	6.039	5.079	8.661	–	9.36
94A-10A-01	4"	3.898	7.386	5.866	9.606	–	16.85
Solder							
94A-203-01	1/2"	0.583	2.047	1.839	3.543	0.630	0.38
94A-204-01	3/4"	0.748	2.748	1.996	3.780	0.878	0.64
94A-205-01	1"	0.945	3.228	2.441	4.528	1.130	0.99
94A-206-01	1-1/4"	1.260	3.819	2.854	4.528	1.378	1.40
94A-207-01	1-1/2"	1.575	4.425	3.169	5.512	1.630	2.17
94A-208-01	2"	1.969	5.315	3.449	5.512	2.130	2.97
94A-209-01	2-1/2"	2.520	6.283	4.764	8.661	2.630	6.36
94A-200-01	3"	2.953	7.150	5.079	8.661	3.130	8.32
94A-20A-01	4"	3.945	9.276	5.866	9.606	4.130	15.78

94A OPTIONS

Size	Replacement Handles	2-1/4" Stem Extension + Memory Stop
1/4"-3/8"	W932400	78217101
1/2"	W932500	78217201
3/4"	W936000	78217301
1"	W932600	78217401
1-1/4"	W932700	78217501
1-1/2"-2"	W932800	78217601
2-1/2"-3"	W932900	78217701
4"	W933000	78217801

- Kits do not include stem nut

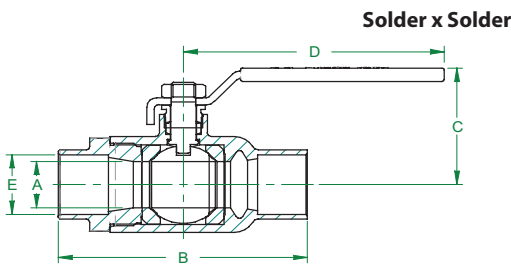
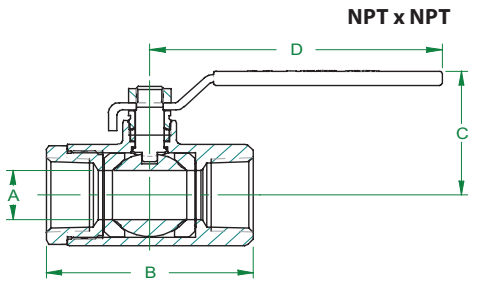
- Replacement handles are not UL marked



BALL VALVES

economy plumbing/gas ball valves

94ALF-A SERIES



APOLLO INTERNATIONAL™ ECONOMY FULL PORT BALL VALVES

These Lead Free ball valves with forged DZR brass body are UL listed and CSA approved. Ideal for plumbing and heating, fuel gas, fire protection and other general purpose applications.

FEATURES

- Lead Free* materials and certification
- Solders like standard brass
- Distinctive white "Lead Free" handle grip and blue "Lead Free" hang tag
- 2-Piece, Full-Port design
- Blow-out Proof Stem
- Adjustable Stem Packing Nut
- Multiple agency approvals
- Valve Design Rating: 600 CWP – 1/4 to 2", 400 CWP – 2-1/2" to 4"
- Temperature Range: -20°F to 366°F
- 100% Factory Tested

APPROVALS

- MSS SP-110 - Ball Valves
- NSF/ANSI 61-G Water Quality
- NSF/ANSI 372 Lead Free
- IAPMO IGC 157 (cUPC)
- ANSI Z21.15 (1/2 psi) (CSA 9.1) (1/4" – 2")
- ASME B16.44 (5 psi) (CR91-002) (1/4" – 2")
- ASME B16.33 (125 psi) (CGA 3.16) (1/4" – 2")
- UL: Guides YQNZ, YRBX, YRPV, YSDT and MHKZ (1/4" - 4" NPT only)
- UL 258 – VQGU Fire Protection Trim & Drain 175# max (1/4" – 2")
- FM 1140 (1/4" - 2" NPT & Solder) Fire Protection Quick Opening Valves



Note: Gas approvals apply to NPT valves only

94ALF-A OPTIONS

Size	Replacement Handles	2-1/4" Stem Extension + Memory Stop
1/4"-3/8"	W234700	78217101
1/2"	W234800	78217201
3/4"	W234900	78217301
1"	W235000	78217401
1-1/4"	W235100	78217501
1-1/2"-2"	W235200	78217601
2-1/2"-3"	W235300	78217701
4"	W273800	78217801

- Replacement handles are not UL marked

LF Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
NPT							
94ALF-101-01A	1/4"	0.39	1.76	1.73	3.54	-	0.29
94ALF-102-01A	3/8"	0.39	1.76	1.73	3.54	-	0.30
94ALF-103-01A	1/2"	0.59	2.05	1.94	3.54	-	0.44
94ALF-104-01A	3/4"	0.75	2.36	2.11	3.78	-	0.71
94ALF-105-01A	1"	0.95	2.76	2.58	4.53	-	1.10
94ALF-106-01A	1-1/4"	1.26	3.31	2.96	4.53	-	1.63
94ALF-107-01A	1-1/2"	1.58	3.66	3.37	5.51	-	2.41
94ALF-108-01A	2"	1.97	4.18	3.70	5.51	-	3.66
94ALF-109-01A	2-1/2"	2.52	5.38	4.76	8.66	-	7.60
94ALF-100-01A	3"	2.95	6.04	5.08	8.66	-	9.60
94ALF-10A-01A	4"	3.90	7.39	5.86	9.61	-	21.00
Solder							
94ALF-203-01A	1/2"	0.59	2.05	1.84	3.54	0.63	0.40
94ALF-204-01A	3/4"	0.75	2.75	2.00	3.78	0.88	0.68
94ALF-205-01A	1"	0.95	3.23	2.45	4.53	1.13	1.15
94ALF-206-01A	1-1/4"	1.26	3.82	2.86	4.53	1.38	1.53
94ALF-207-01A	1-1/2"	1.57	4.43	3.17	5.51	1.63	2.31
94ALF-208-01A	2"	1.96	5.38	3.49	5.51	2.13	3.77
94ALF-209-01A	2-1/2"	2.52	6.28	4.76	8.66	2.63	6.79
94ALF-200-01A	3"	2.92	7.15	5.08	8.66	3.13	8.67
94ALF-20A-01A	4"	3.90	9.28	5.87	9.61	4.13	16.67

BALL VALVES

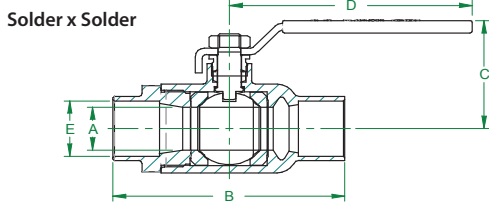
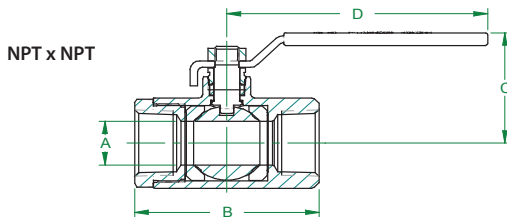
economy plumbing/gas ball valves



95ALF SERIES



New!



FULL-PORT LEAD FREE BRASS STOP & WASTE BALL VALVE

The **Apollo International™** 95ALF Lead Free forged DZR brass ball valves combine reliable operation with maximum economy. Ideal for plumbing or hydronic systems where draining is required. Valves are certified by IAPMO and ANSI 3rd party certified lead free.

FEATURES

- Lead Free materials and certification
- Blow-out proof stem design
- Adjustable stem packing nut
- Drain port with finger tight shut-off
- Fast, quarter-turn operation
- Valve Design Rating: 600 CWP
- Temperature Range: 32°F to 250°F
- IAPMO IGC157
- NSF/ANSI 61-G Water Quality
- NSF/ANSI 372 Lead Free

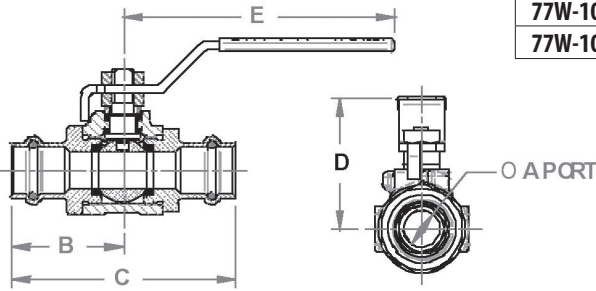
LF Model Number	Size (in.)	Dimensions (in.)				
		A	B	C	D	E
NPT						
95ALF-103-01	1/2	0.59	2.24	1.78	3.74	-
95ALF-104-01	3/4	0.79	2.53	2.09	3.94	-
95ALF-105-01	1	0.98	3.15	2.36	4.33	-
Solder						
95ALF-203-01	1/2	0.59	2.12	1.78	3.74	0.63
95ALF-204-01	3/4	0.79	2.87	1.94	3.94	0.88
95ALF-205-01	1	0.98	3.53	2.36	4.33	1.13



BALL VALVES

apolloxpress® ball valves

77W SERIES



APOLLOXPRESS® BRONZE AND LEAD FREE BRONZE FULL PORT BALL VALVES

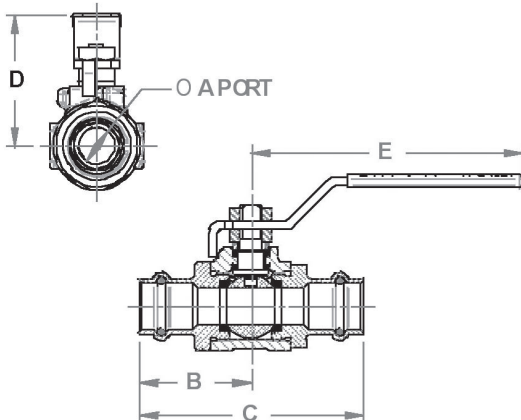
Apollo 77W Series APOLLOXPRESS® ball valves install in seconds, but the valve and the connection are made to last. Ideal for mechanical and heating systems. Not for use with natural gas.

FEATURES

- Full port
- Rigid® "XL" Press Tool compatible
- Leak Before Press® technology
- 250 CWP, non-shock to 250°F max.
- MSS SP-110 ball valves
- Adjustable stem packing
- Excellent for hydronic heating (90% glycol max)
- Popular lever options and stainless steel trim available
- **Made in the USA**

Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
77W-103-01	1/2	0.50	1.54	3.08	1.50	3.74	0.6
77W-104-01	3/4	0.75	1.78	3.55	2.01	4.78	1.1
77W-105-01	1	1.00	1.93	3.86	2.20	4.78	1.8
77W-106-01	1-1/4	1.25	2.44	4.87	3.13	7.04	4.3
77W-107-01	1-1/2	1.50	2.91	5.81	3.10	7.04	4.6
77W-108-01	2	2.00	3.74	7.47	3.48	7.04	8.2

77WLF SERIES



APOLLOXPRESS® LEAD FREE BRONZE FULL PORT BALL VALVES

Apollo 77WLF Series APOLLOXPRESS® ball valves install in seconds, but the valve and the connection are made to last. Ideal for most plumbing and heating systems including potable water. Not for use with natural gas.

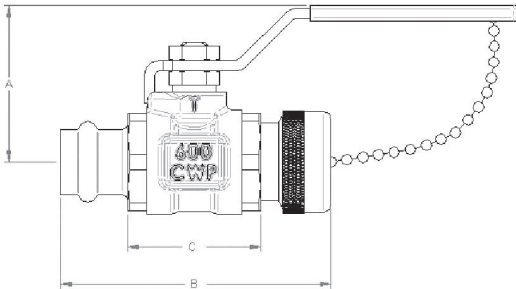
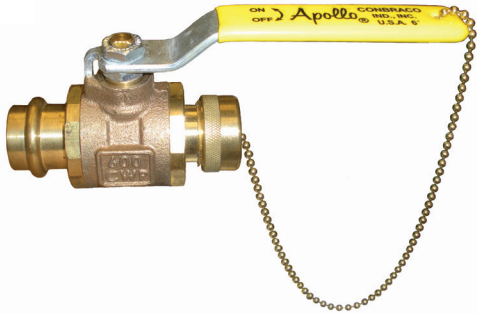
FEATURES

- Full port
- Rigid® "XL" Press Tool compatible
- Leak Before Press® technology
- 250 CWP, non-shock to 250°F max.
- MSS SP-110 ball valves
- NSF/ANSI 61-8 (2010) compliant
- NSF/ANSI 372 Lead Free
- Adjustable stem packing
- Excellent for hydronic heating (90% glycol max)
- Popular lever options and stainless steel trim available
- **Made in the USA**

LF Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
77WLF-103-01	1/2	0.50	1.54	3.08	1.50	3.74	0.6
77WLF-104-01	3/4	0.75	1.78	3.55	2.01	4.78	1.1
77WLF-105-01	1	1.00	1.93	3.86	2.20	4.78	1.8
77WLF-106-01	1-1/4	1.25	2.44	4.87	3.13	7.04	4.3
77WLF-107-01	1-1/2	1.50	2.91	5.81	3.10	7.04	4.6
77WLF-108-01	2	2.00	3.74	7.47	3.48	7.04	8.2



77W-HC SERIES



APOLLOXPRESS® x HOSE CAP & CHAIN BALL VALVE

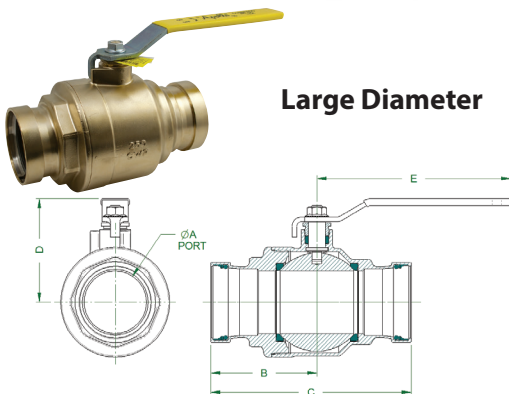
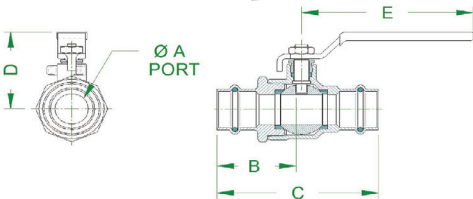
Designed for direct mechanical connection to ASTM B88-Type K,L, and M copper tubing in the hard drawn condition for sizes 1/2"-3/4". Valves feature a 3/4" hose thread connection with heavy brass cap to protect the threads and is full pressure rated. Not for use with natural gas.

FEATURES

- Full port
- Rigid® "XL" Press Tool compatible
- Leak Before Press® technology
- MSS SP-110 ball valves
- NSF/ANSI 61-G compliant (77WLF-HC)
- 77WLF supplied with Easily Identifiable White Handle Grip and Blue "Lead Free" Hang Tag
- Adjustable stem packing
- 250 CWP, non-shock to 250°F max.
- Excellent for hydronic heating (90% glycol max)
- Compatible with most 77C Series options
- Heavy brass dust cover is full pressure rated
- Popular lever and trim options available
- **Made in the USA**

Model Number	LF Model Number	Size (in.)	Dimensions (in.)			Wt. (lbs.)
			A	B	C	
77W-103-HC	77WLF-103-HC	1/2	1.80	3.12	1.54	0.61
77W-104-HC	77WLF-104-HC	3/4	2.01	3.45	1.72	1.09

77V SERIES



APOLLOXPRESS® PRESS END BRASS BALL VALVE

The APOLLOXPRESS® 77V Series two-piece press ball valve is ideal for installation in most HVAC systems. Features Leak Before Press® technology and 250 psig maximum working pressure. Proudly Made in the USA.

FEATURES

- 2 piece, heavy pattern forged design
- Full-port flow
- Max. operating pressure 250 psi
- Temperature range: 0°F - 250°F
- Superior RPTFE seats and packing
- Adjustable stem packing
- Rigid® XL press tool compatible
- 2-1/2" - 4" are XLC compatible
- Blow-out proof stem
- Corrosion resistant materials
- Silicone free assembly
- 100% factory tested
- MSS SP-110 Ball Valves
- Directive 2011/65/CE (RoHS)
- Popular lever options and SS trim available
- **Made in USA, ARRA Compliant**

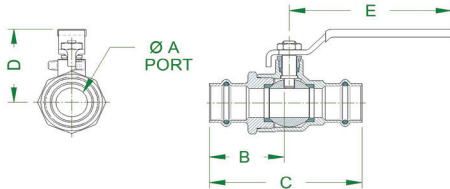
Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
77V-103-01	1/2"	0.50	1.57	2.89	1.66	2.85	0.4
77V-104-01	3/4"	0.75	1.90	3.63	1.91	3.86	0.9
77V-105-01	1"	1.00	2.20	3.88	2.11	3.86	1.2
77V-106-01	1-1/4"	1.25	2.23	4.22	2.44	4.75	2.3
77V-107-01	1-1/2"	1.50	2.84	5.45	2.91	5.42	3.4
77V-108-01	2"	2.00	3.40	6.57	3.69	7.77	6.0
77V-109-01	2-1/2"	2.50	4.26	8.04	4.13	7.77	12.0
77V-100-01	3"	3.00	5.10	9.45	5.03	9.92	19.5
77V-10A-01	4"	4.00	5.20	10.35	5.70	14.78	26.0



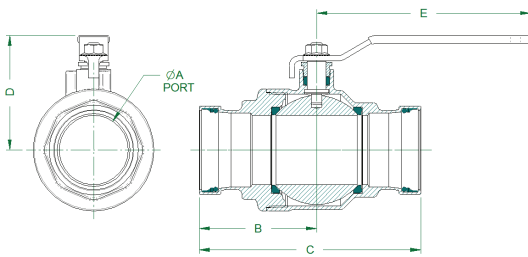
BALL VALVES

apollopress® ball valves

77VLF SERIES



Large Diameter



LEAD FREE APOLLOXPRESS® PRESS END BRASS BALL VALVE

The APOLLOXPRESS® 77VLF Series Lead Free two-piece press ball valve is ideal for installation in most plumbing and heating systems, including potable water. Features Leak Before Press® technology and 250 psig maximum working pressure. Proudly Made in the USA.

FEATURES

- Lead Free, ANSI 3rd party certified
- 2 piece, heavy pattern forged design
- Dezincification resistant materials
- Easily identifiable white handle grip and blue "Lead Free" hang tag
- Full-port flow
- Superior RPTFE seats and packing
- Adjustable stem packing
- Rigid® XL press tool compatible
- 2-1/2" - 4" are XLC compatible
- Blow-out proof stem
- Silicone free assembly
- 100% factory tested
- **Made in USA**, ARRA Compliant
- Maximum operating pressure 250 psi
- Temperature Range: 0°F - 250°F
- MSS SP-110 Ball Valves
- NSF/ANSI 61-G
- NSF/ANSI 372 Lead Free
- IAPMO IGC-157 Ball Valves
- Directive 2011/65/CE (RoHS)
- Popular lever options and stainless steel trim available

Model Number	Size (in.)	Dimensions (in.)					Wt.
		A	B	C	D	E	
77VLF-103-01	1/2"	0.50	1.57	2.89	1.66	2.85	0.4
77VLF-104-01	3/4"	0.75	1.90	3.63	1.91	3.86	0.9
77VLF-105-01	1"	1.00	2.20	3.88	2.11	3.86	1.2
77VLF-106-01	1-1/4"	1.25	2.23	4.22	2.44	4.75	2.3
77VLF-107-01	1-1/2"	1.50	2.84	5.45	2.91	5.42	3.4
77VLF-108-01	2"	2.00	3.40	6.57	3.69	7.77	6.0
77VLF-109-01	2-1/2"	2.50	4.26	8.04	4.13	7.77	12.0
77VLF-100-01	3"	3.00	5.10	9.45	5.03	9.92	19.5
77VLF-14A-01	4"	4.00	5.20	10.35	5.70	14.78	26.0

BALL VALVES

apolloxpress® ball valves &
lead free apolloxpress ball valves



94VLF SERIES



New!

LEAD FREE APOLLOXPRESS® PRESS END BRASS BALL VALVE

The **CONBRACO™ INTERNATIONAL** 94VLF Series Lead Free* two-piece press ball valve is ideal for installation in most plumbing and heating systems, including potable water.

FEATURES

- Lead Free*, ANSI 3rd party certified
- Full-port flow
- PTFE seats and packing
- Adjustable stem packing
- Rigid® XL press tool jaw compatible (1/2" – 2")
- Rigid® XLC press tool jaw compatible (2-1/2" - 4")
- Corrosion resistant materials
- 100% factory tested
- 2 year warranty

PERFORMANCE RATING

- Maximum Operating Pressure 250 psig
- Temperature Range: 0°F - 250°F

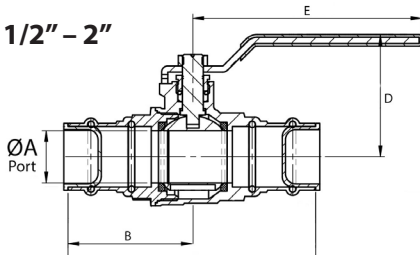
APPROVALS

- MSS SP-110 Ball Valves
- NSF/ANSI 61 Section 8
- NSF/ANSI 372 - 3rd party certified
- IAPMO IGC-157-2013 Ball Valves

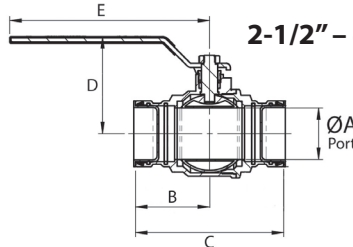
APPROVED APPLICATIONS

- Water including potable water
- Hydronic heating (90% glycol max)
- Not suitable for flammable gas service
- Designed for direct mechanical connection to ASTM B88-Type K, L, and M copper tubing in the hard drawn condition.
- Not compatible with soft annealed copper tubing.

1/2" – 2"



2-1/2" – 4"



DIMENSIONS

MODEL NUMBER	SIZE (IN.)	DIMENSIONS										WT. (LBS.)	CARTON QTY.
		A (IN.)	A (MM)	B (IN.)	B (MM)	C (IN.)	C (MM)	D (IN.)	D (MM)	E (IN.)	E (MM)		
94VLF-103-01	1/2"	.50	14.5	1.87	47.5	3.75	95	1.65	42	3.75	95	0.5	50
94VLF-104-01	3/4"	.75	19	2.23	56.7	4.46	113.4	1.91	48.5	4.33	95	1	40
94VLF-105-01	1"	1.00	25	2.34	59.5	4.69	119	2.28	58	4.33	110	1.1	20
94VLF-106-01	1-1/4"	1.25	32	2.81	71.5	5.63	143	2.76	70	5.12	130	1.9	20
94VLF-107-01	1-1/2"	1.50	39	2.96	75.3	5.93	150.6	2.95	75	5.12	130	2.4	16
94VLF-108-01	2"	2.00	50	3.50	89	7.01	178	3.50	89	6.34	161	4.2	8
94VLF-109-01	2-1/2"	2.50	62	3.50	89	7.01	178	4.61	117	9.45	240	7.8	1
94VLF-100-01	3"	3.00	74.00	3.88	103.50	8.15	207.00	4.96	126.00	9.45	240	11.20	1.00
94VLF-10A-01	4"	4.00	98.50	4.98	126.50	9.96	253.00	5.91	150.00	9.45	240	21.20	1.00

Lead Free APOLLOPEX Ball Valve

94XLF SERIES



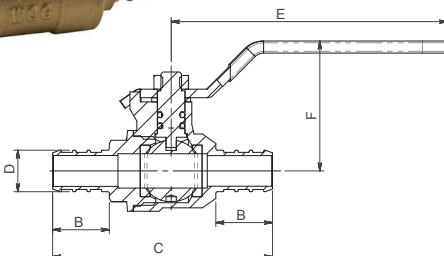
New!

BRASS PEX BALL VALVE

The **Apollo® International** 94XLF Lead Free* DZR forged brass ball valves combine reliable operation with maximum economy. Ideal for plumbing and heating applications including potable water. Valves are ANSI 3rd party Lead Free* certified and listed to NSF 14, NSF 61 and NSF 372.

FEATURES

- Lead Free* DZR materials and certification
- ASTM F1807 PEX design
- White handle grip identifies lead free construction
- Double o-ring stem seal
- Blow-out proof stem design
- Silicone free assembly



Model Number	Size (in.)	Dimensions (in.)					Wt. (lbs.)
		B	C	D	E	F	
94XLF-103-01	1/2	0.65	2.52	.47	3.17	1.49	.25
94XLF-104-01	3/4	0.65	2.62	.67	3.17	1.57	.41
94XLF-105-01	1	0.80	2.91	.86	3.17	1.57	.57



BALL VALVES