



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 = Thermo-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
77WLF					Handle, Stainless Steel Nut
78					-39 = SS Hi-rise Locking Round Handle,
79					SS Nut
77B					-40 = Cyl-Loc and Grounded
7K					-41 = Automatic Drain
80					-45 = Less Lever and Nut
82					-46 = Latch-Lock Lever - Lock in Closed
82LF					Position Only
9A					-47 = SS Oval Latch-Lock Handle & Nut
90					-48 = SS Oval Handle (No Latch) & Nut
94A					-49 = Assembled Dry
94ALF-A					-50 = 2-1/4" Carbon Steel Locking Stem Extension
94MBV					-56 = Multifill Seats & Packing
94XLF					-57 = Oxygen Cleaned
94VLF					-58 = Chain Lever - Horizontal
95ALF					-59 = SS External Trim - 3-pc. Valves & Flange
					-60 = Grounded Ball & Stem
					-62 = Body Center Section (82 Series)
					-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.



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. Most available as a factory installed option or as a kit for field installation or retrofit.

Suffix No.

-04



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 (UL 2043 LISTING)

The Therma-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 retro fit kit. UL 2043 listed for plenum installations.

-16/-58



CHAIN LEVER BALL VALVES

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

- -16 for valve in vertical position
- -58 for valve in horizontal position



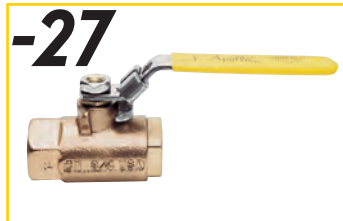
COMMON BALL VALVE OPTIONS

Suffix No.



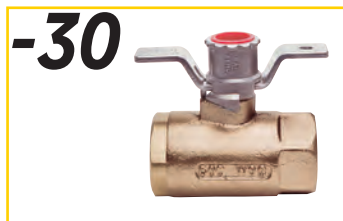
ROUGH CHROME PLATING

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



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.



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



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



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



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



BALL VALVE WITH BALANCING STOP AND STEM EXTENSION

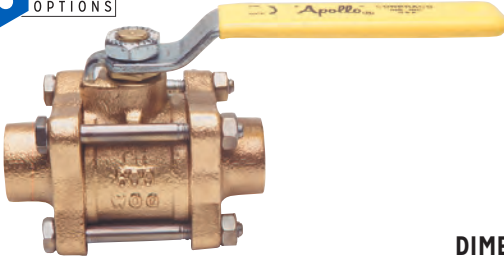
Ideal for HVAC systems. Stop plate and a 2-1/4" stem extension combination to accommodate insulation and handle repositioning. *Contact customer service for exact handle dimensions*



BALL 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

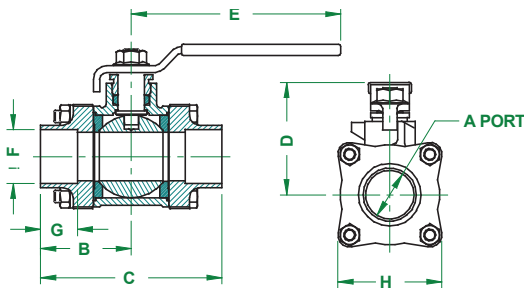
Lead Free option (82LF)

- 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

DIMENSIONS

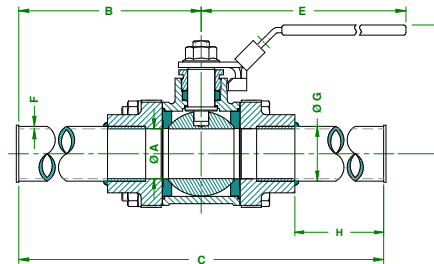
Model Number	LF Model Number	Size (in.)	Dimensions (in.)							
			A	B	C	D	E	F	G	H
82-202-01	82LF-202-01	3/8	0.44	1.28	2.56	1.81	3.87	0.50	0.38	1.60
82-203-01	82LF-203-01	1/2	0.56	1.40	2.81	1.93	4.87	0.63	0.50	1.78
82-204-01	82LF-204-01	3/4	0.83	1.71	3.43	2.18	4.87	0.88	0.75	1.98
82-205-01	82LF-205-01	1	1.00	1.93	3.87	2.62	5.50	1.13	0.90	2.22
82-206-01	82LF-206-01	1-1/4	1.25	2.37	4.75	2.87	5.50	1.38	0.97	2.70
82-207-01	82LF-207-01	1-1/2	1.50	2.62	5.25	3.37	8.00	1.63	1.09	3.03
82-208-01	82LF-208-01	2	2.00	3.01	6.03	3.68	8.00	2.13	1.34	3.87
82-209-01	82LF-209-01	2-1/2	2.50	3.62	7.25	5.14	9.75	2.63	1.47	5.05
82A-240-01	-	3	3.00	4.18	8.37	8.10	19.13	3.13	1.66	5.82
82A-24A-01	-	4	4.00	5.43	10.86	8.88	19.13	4.13	2.16	7.77

**82LF-2xxA intended for soft solder installation using solders with melting temperature of < 500°F.



82-200/82-240 SERIES

MALE EXTENSIONS - NO GAUGE PORTS



DIMENSIONS

Standard		Oxygen Cleaned					Size (in.)	Dimensions (In.)								Wt. (lbs.)
Trim Plated Part Number	316SS Ball & Stem Part Number	Trim Plated Part Number	316SS Ball & Stem Part Number	316SS Ball, Stem & Ext. Trim Part Number	Trim Plated Part Number	316SS Ball & Stem Part Number		A	B	C	D	E	F	G	H	
w/ non Locking Handle		w/ non Locking Handle			w/ Locking Handle											
82-203-B8	82-243-A8	82-203-K1	82-243-K1	82-243-C4	82-203-G3	82-243-G3	1/2"	5/8	0.62	0.049	13.81	2.00	4.87	6.00	5.50	1.66
82-204-A8	82-244-B3	82-204-K1	82-244-K1	82-244-C6	82-204-G3	82-244-G3	3/4"	7/8	0.81	0.065	13.93	2.18	4.87	6.00	5.25	2.37
82-205-B7	82-245-B1	82-205-K1	82-245-K1	82-245-E3	82-205-G3	82-245-G3	1"	1-1/8	1.00	0.065	14.04	2.62	5.50	6.00	5.09	3.43
82-206-B7	82-246-B0	82-206-K1	82-246-K1	82-246-C0	82-206-G3	82-246-G3	1-1/4"	1-3/8	1.25	0.065	14.75	2.89	5.50	6.00	5.03	5.52
82-207-B2	82-247-B2	82-207-K1	82-247-K1	82-247-C6	82-207-G3	82-247-G3	1-1/2"	1-5/8	1.50	0.072	15.07	3.37	8.00	6.00	4.91	8.51
82-208-B7	82-248-B2	82-208-K1	82-248-K1	82-248-C4	82-208-G3	82-248-G3	2"	2-1/8	2.00	0.083	15.23	3.70	8.00	6.00	4.66	14.20
82-209-A2	82-249-A2	82-209-K1	82-249-K1	-	82-209-G3	82-249-G3	2-1/2"	2-5/8	2.50	0.095	23.51	5.14	9.38	9.60	8.13	26.8
-	82A-240-A2	-	82A-240-K1	-	-	-	3"	3-1/8	3.00	0.109	24.00	6.77	18.00*	9.40	7.76	42.24
-	82A-24A-A0	-	82A-24A-K1	-	-	-	4"	4-1/8	4.00	0.134	25.50	8.26	18.00*	9.41	7.25	106.0

* 3" & 4" valves are equipped with adjustable lever handles. Locking adjustable length handles standard.



82-200/82-240 SERIES

THREE-PIECE FULL PORT VALVE WITH BRAZED TUBE EXTENSIONS

"F1 - 1 Gauge Port", "F3 - 2 Gauge Ports", & "No Gauge Port" Configurations

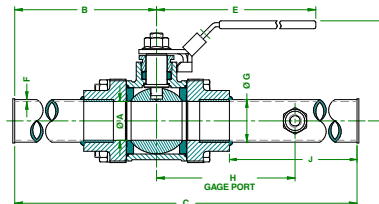
- Bronze Valve Body & End Caps
- RPTFE Seats and Stem Packing
- 600 psig CWP Non-Shock (3" & 4" 400 CWP)
- Vacuum Service to 29" Hg
- Full Port in All Sizes
- Blowout-Proof Stem Design
- Adjustable Packing Nut
- In-Line Repairable
- Latch Lock Handle
- Cleaned and Bagged for Oxygen
- Service per CGA G4.1 & NFPA 99
- Factory Brazed Male Extensions Allow Solder or Brazed Installation Without Disassembly
- Type K Copper Tubing Brazed Into Both End Caps
- **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 gauge port), "F3" (2 gauge ports) & no gauge ports.

82-200-F1/82-240-F1 SERIES

MALE EXTENSIONS - 1 GAUGE PORT



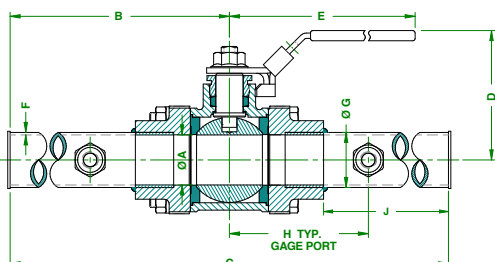
DIMENSIONS

Oxygen Cleaned					Size (in.)	Dimensions (in.)									WT. (LBS.)
Trim Plated Part Number	316SS Ball & Stem Part Number	Trim Plated Part Number	316SS Ball & Stem Part Number	316SS Ball, Stem & Ext. Trim Part Number		A	B	C	D	E	F	G	H	J	
w/ Locking Handle		w/ non Locking Handle													
82-203-F1	82-243-F1	82-203-F2	82-243-F2	82-243-E9	1/2"	0.62	6.91	17.41	2.23	5.31	0.049	0.625	7.15	9.10	1.66
82-204-F1	82-244-F1	82-204-F2	82-244-F2	82-244-E9	3/4"	0.81	6.97	17.47	2.41	5.31	0.065	0.75	7.22	8.78	2.37
82-205-F1	82-245-F1	82-205-F2	82-245-F2	82-245-E9	1"	1.00	7.03	17.62	3.01	6.29	0.065	1.25	7.28	5.09	3.43
82-206-F1	82-246-F1	82-206-F2	82-246-F2	82-246-E9	1-1/4"	1.25	7.38	22.71	3.22	6.29	0.065	1.375	7.00	12.97	5.50
82-207-F1	82-247-F1	82-207-F2	82-247-F2	82-247-E9	1-1/2"	1.50	7.50	22.57	4.04	8.93	0.072	1.625	6.74	12.48	8.51
82-208-F1	82-248-F1	82-208-F2	82-248-F2	82-248-E9	2"	2.00	7.74	22.58	4.15	8.93	0.083	2.125	6.51	11.76	14.0
82-209-F1	82-249-F1	82-209-F2	82-249-F2	82-249-E9	2-1/2"	2.50	11.75	23.50	5.31	10.06	0.095	2.50	6.38	8.13	26.81
-	82A-240-F1	-	-	82A-240-E9	3"	3.00	11.94	23.87	8.10	18.00*	0.0450	3.00	7.75	7.76	42.24
-	82A-24A-F1	-	-	82A-24A-E9	4"	4.00	12.68	25.37	8.88	18.00*	0.0700	4.00	8.00	7.25	106.0

* 3" & 4" valves are equipped with adjustable lever handles. Locking adjustable length handles standard.

82-200-F3/82-240-F3 SERIES

MALE EXTENSIONS - 2 GAUGE PORTS



DIMENSIONS

Oxygen Cleaned w/ Locking Handle		Size (in.)	Dimensions (in.)									Wt. (lbs.)
Trim Plated Part Number	316SS Ball & Stem Part Number		A	B	C	D	E	F	G	H	J	
82-203-F3	82-243-F3	1/2"	0.62	12.27	24.53	2.23	5.31	0.049	0.625	4.25	10.84	1.66
82-204-F3	82-244-F3	3/4"	0.81	12.25	24.50	2.41	5.31	0.065	0.75	4.24	10.53	2.37
82-205-F3	82-245-F3	1"	1.00	12.30	24.60	3.01	6.29	0.065	1.25	4.24	10.32	3.43
82-206-F3	82-246-F3	1-1/4"	1.25	12.23	24.46	3.22	6.29	0.065	1.375	4.23	9.89	5.50
82-207-F3	82-247-F3	1-1/2"	1.50	12.25	24.50	4.04	8.93	0.072	1.625	4.25	9.63	8.51
82-208-F3	82-248-F3	2"	2.00	12.25	24.50	4.15	8.93	0.083	2.125	4.25	9.18	14.0
82-209-F3	82-249-F3	2-1/2"	2.50	11.75	23.50	5.31	10.06	0.095	2.50	6.38	8.13	26.81
-	82A-240-F3	3"	3.00	11.94	23.87	8.10	18*	.0450	3.00	7.75	7.78	42.24
-	82A-24A-F3	4"	4.00	12.68	25.37	8.88	18*	.0700	4.00	8.00	7.25	106.0

* 3" & 4" valves are equipped with adjustable lever handles. Locking adjustable length handles standard.