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STEAM PREP BALL VALVES

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<u>MATERIALS OR STYLE</u>		<u>TYPE</u>	<u>VARIATIONS</u>	<u>SIZE</u>
70	Bronze	1 NPT Female/150 Flange	1 One Size Larger	1 1/4"
71	Bronze with pads	2 Solder & Soc. Weld/150 Flange Full Port	2 Male Retainer	2 3/8"
72	Carbon Steel, High Pressure	3 Union End NPT/Reg.Port Soc.Weld	3 Adjustable Stop Lever	3 1/2"
73	Carbon Steel	4 Union End Solder/Reg.Port Soc.Weld	4 SS Sall & Stem	4 3/4"
73A	A105 Carbon Steel	5 Spring Return/High Pressure Full Port NPT	5 Original Balancing Stop- Attach to Lever or T-Handle	5 1"
74	Nickel	6 3-way, NPT/High Pressure Soc.Weld Full Port	6 One Size Smaller	6 1 1/4"
75	Pad-Locking Bronze	7 Butt Weld/300 Flange	7 Female Retainer	7 1 1/2"
76	CF8M Stainless Steel	8 Male x Female, NPT/600 Flange	8 (Not Assigned)	8 2"
76F	CF8M Stainless Steel, Full Port	9 3-way Solder/O-Ring Boss/300 Flange Full Port	9 Pinned Retainer	9 2 1/2"
77	Bronze Full Port			0 3"
77C	Bronze Full Port Economy			A 4"
78	Special Valves			C 6"
79	Refrigerant Valves			E 8"
7A	Chlorine Carbon Steel			G 10"
7K	Bronze Full Port Drain			H 12"
80	Bronze, UL Listed			
81	Bronze UL Listed Plain Ball			
82	Bronze 3-Piece Full Port			
83	CS 3-Piece			
83R	CS 3-Piece, Actuator Ready			
85	SS 3-Piece, Reg.Port			
85R	SS 3-Piece, Reg.Port, Actuator Ready			
86	SS 3-Piece, Full Port			
86R	SS 3-Piece, FullPort, Actuator Ready			
87	CF8M SS Flanged			
87A	CF8M SS Flanged			
87A-400	Alloy-20 Flanged			
88	Carbon Steel Flanged			
88A	Carbon Steel Flanged			
89	Cast Carbon Steel w/Pads			
9A	Bronze, Hvy.Patt. Unibody			
90	Bronze, Unibody, UL Listed			
91	Bronze, Unibody			
92	Cast Carbon Steel Unibody			
93	CS Unibody			
95	Bronze Stop & Drain			
96	CF8M SS Unibody			
399	Alloy-20 NPT			
401	Alloy-20, 3-Piece, Full Port			

DESIGN

-01	Standard	-46	SS Latch Lock Lever, Lock in Closed Position Only
-02	Stem Grounded	-47	SS Oval Latch Lock Handle, SS Nut
-03	1-1/4" Carbon Steel Ext.Stem	-48	SS Oval Handle, No Latch, SS Nut
-04	2-1/4" Carbon Steel Ext.Stem	-49	Assembled Dry
-05	Plain Ball	-50	2-1/4" CS Locking Stem Extension
-06	2000 lb. 73-100 Series (1-1/4" to 2")	-51	One Tack Weld (I-7362-05-1X)
-07	Steel Tee Handle	-52	Two Tack Weld (I-7362-05-2X)
-08	90 degree reversed stem	-53	Three Tack Weld (I-7362-05-3X)
-09	SS Lever	-54	Four Tack Weld (I-7362-05-4X)
-10	SS Lever & Nut	-56	MultiFill Seats and Packing
-12	Stamp "157 SWP" & Bagged	-57	Oxygen Cleaned (Bronze and SS Only)
-13	Stamp "157 SWP"	-58	Chain Lever, Horizontal
-14	Side Vented Ball (uni-directional)	-59	SS External Trim - 3-pc Valves
-15	Wheel Handle, Steel	-60	Grounded Ball & Stem
-16	Chain Lever, Vertical	-61	Grounded Ball & Stem, Assembled Dry
-17	Rough Chrome Plate - Bronze Valves	-62	Body Centre Section
-21	UHMWPE Trim (non-PTFE)	-63	NPT x Solder/Socket Weld
-22	Viton Union Seals	-64	250 lb. Steam Trim
-23	Tank Flange (2" 3-pc valves only)	-65	MultiFill Seats & Graphite Packing
-24	Graphite Packing	-66	FNPT x Butt Weld
-25	Graphite Packing, Vented Ball & Tack Welded Ret.	-68	4" Stem Extension (3" & 4" 3-pc. 82 Series
-26	Chevron Pkg Vent Assd.Dry Monel Trim (7A)	-69	Purge Ports Drilled/Tapped @ Bottom & approx. 45" from Top
-27	SS Latch Lock Lever & Nut	-70	4" Extended Bonnet
-28	Actuator Mounting Pad Not Drilled/Tapped	-72	RTFE Packing
-29	Graphite Packing & Seals	-73	TFE Packing - Spiral Wound Body Seals - TFE Fillers - Flange BV
-30	Cam-Lock and Grounded Stem	-74	Graphite Packing - Spiral Wound Body Seals - Graphoil Fillers - Flange BV
-31	7B Series w/Boss not Drilled/Tapped	-75	MPTEF Seats, PTFE Packing, RPTFE Gaskets
-32	SS Hi-Rise Tee Handle & Nut	-76	Live Loaded 87A/88A Series (Lever)
-33	76-300 Series w/Pad Drilled/Tapped	-77	Live Loaded 87A/88A Series (Gear & Actuated)
-34	Nylatron Seats (96 Series)	-78	Delrin Seats
-35	VTFE Trim	-79	Nylon Seats/Graphite Packing 72 Series
-36	SS HiRise Round Handle, SS Nut	-80	Multi-Seal (Super TFE) 87A/88A Series
-38	Peek Seats & Bearing (Graphite packing & seals)	-97	Grnd.Whl.Handle, Pinned or Tack Welded
-39	SS Hi-Rise Locking Wheel Handle, SS Nut	-98	Grnd.Whl. Pinned or Tack Welded & 1-1/4" Stem Ext.
-40	Cyl-loc and Grounded Stem	-SW	Limit Switch Mounted
-41	Auto.Drain (Bronze Valves Only)	-MG	Gear Operated, Std. Hand Wheel
-42	Non-Vented Ball, No Holes in Slot (CS and SS)	-MH	Gear Operated, Std. Hand Wheel, Lockout Device
-43	Cyl-Loc, Grnd B&S, 680 LocTite or 2-Tack Welds	-MJ	Gear Operated, Oversize Hand Wheel
-44	Seal Weld 76-100 & 89-100	-MK	Gear Operated, Oversize Hand Wheel, Lockout Device
-45	Less Lever & Nut	-P01	BSPP (Parallel) Thread Connection
		-BC	Ball Check
		T01	BSPT (Tapered) Thread Connection

Apollo® 70-140-64 Series

Threaded Bronze 250 Lb. Steam Valve

Threaded, 600 psig WOG, Cold Non-Shock. 250 psig Saturated Steam.

Vacuum Service to 29 inches Hg.

Federal Specification: WW-V-35C, Type: II, Composition: BZ, Style: 3.

FEATURES

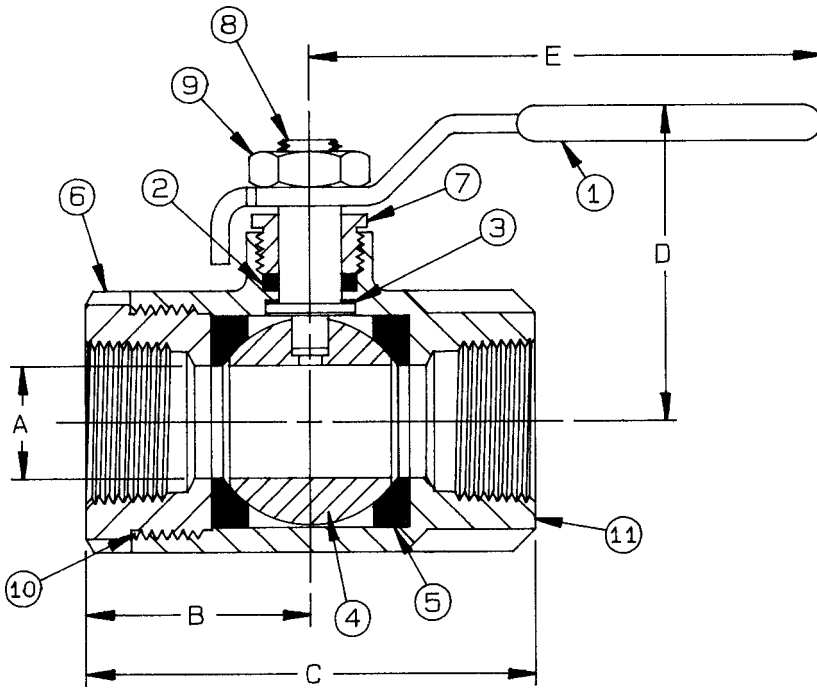
- 316 SS ball and stem
- Multifill seats
- Multifill stuffing box ring
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

1. Lever and grip	Steel, zinc plated w/vinyl	7. Gland nut	B16
2. Stem packing	Multifill PTFE	8. Stem	A276-316
3. Stem bearing	RPTFE	9. Lever nut	Steel, zinc plated
4. Ball	A276-316	10. Body seal	PTFE
5. Seat (2)	Multifill PTFE		(1-1/4" to 3")
6. Retainer	B16 (1/4" to 1")	11. Body	B584-C84400
	B584-C84400 (1-1/4" to 3")		

Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.



THREADED BRONZE 250 Lb. STEAM BALL VALVE

NUMBER	SIZE	A	B	C	D	E	Wt.
70-141-64	1/4"	.37	1.03	2.06	1.75	3.87	.59
70-142-64	3/8"	.37	1.03	2.06	1.75	3.87	.55
70-143-64	1/2"	.50	1.12	2.25	1.75	3.87	.62
70-144-64	3/4"	.68	1.50	3.00	2.12	4.87	1.37
70-145-64	1"	.87	1.68	3.37	2.25	4.87	1.71
70-146-64	1-1/4"	1.00	2.00	4.00	2.62	5.50	3.20
70-147-64	1-1/2"	1.25	2.18	4.37	3.06	8.00	4.53
70-148-64	2"	1.50	2.34	4.68	3.25	8.00	5.88
70-149-64	2-1/2"	2.50	3.25	6.50	4.12	8.00	17.03
70-140-64	3"	2.50	3.37	6.75	4.12	8.00	18.25

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4

Apollo® 71-140-64 Series

Bronze 250 Lb. Steam Ball Valve with Mounting Pad

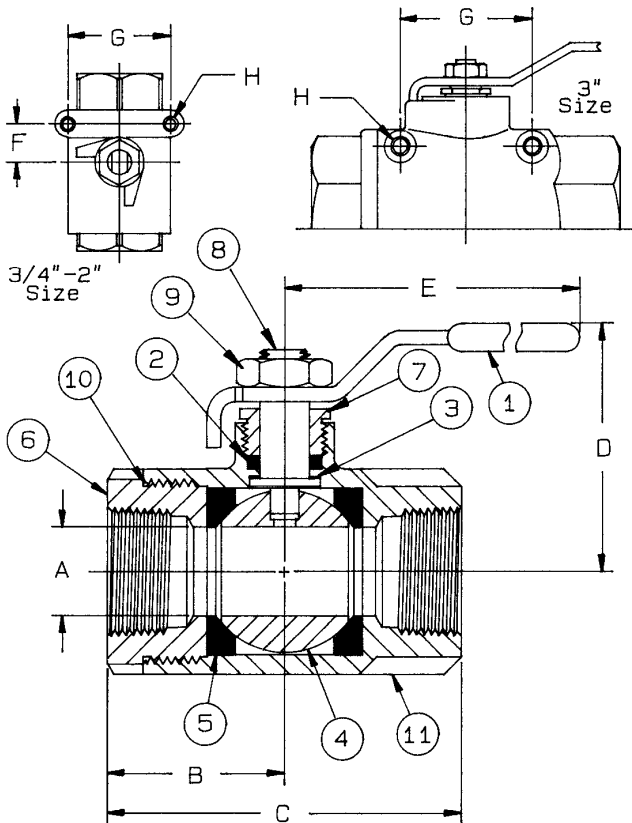
Threaded, 600 psig WOG, Cold Non-Shock. 250 psig Saturated Steam.
 Vacuum Service to 29 inches Hg.
 Federal Specification: WW-V-35C, Type: II, Composition: BZ, Style: 3.

FEATURES

- 316 SS ball and stem
- Multifill seats
- Mounting pad for easy actuator mounting
- Blow-out-proof stem design
- Adjustable packing gland
- Multifill packing

STANDARD MATERIAL LIST

1. Lever and grip	Steel, zinc plated w/vinyl	7. Gland nut	B16
2. Stem packing	Multifill PTFE	8. Stem	A276-316
3. Stem bearing	RPTFE	9. Lever nut	Steel, zinc plated
4. Ball	A276-316	10. Body seal	PTFE
5. Seat (2)	Multifill PTFE	(1-1/4" to 3")	
6. Retainer	(3/4" to 1") B16	11. Body	B584-C84400
	(1-1/4" to 3") B584-C84400		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

BRONZE 250 Lb. STEAM BALL VALVE
 WITH MOUNTING PAD

NUMBER	SIZE	A	B	C	D	E	F	G	H	Wt.
71-144-64	3/4"	.68	1.50	3.00	2.12	4.87	.87	1.37	10-24 NC	1.61
71-145-64	1"	.87	1.68	3.37	2.25	4.87	.87	1.37	10-24 NC	1.82
71-146-64	1-1/4"	1.00	2.00	4.00	2.62	5.50	.93	1.50	1/4-20 NC	3.36
71-147-64	1-1/2"	1.25	2.18	4.37	2.87	8.00	.93	1.50	1/4-20 NC	4.60
71-148-64	2"	1.50	2.34	4.68	3.06	8.00	.93	1.50	1/4-20 NC	5.64
71-140-64	3"	2.50	3.37	6.75	4.12	8.00	N/A	2.75	1/4-20 NC	19.65

**For Pressure/Temperature Ratings,
 Refer to Page N-10, Graph No. 4**

Apollo® 72-140-64 Series

Carbon Steel 250 Lb. Steam High Pressure Ball Valve

Threaded, 3000 psig WOG, Cold Non-Shock, 250 psig Saturated Steam.

Vacuum Service to 29 inches Hg.

Federal Specification: WW-V-35C, Type II, Composition: CS, Style: 3.

FEATURES

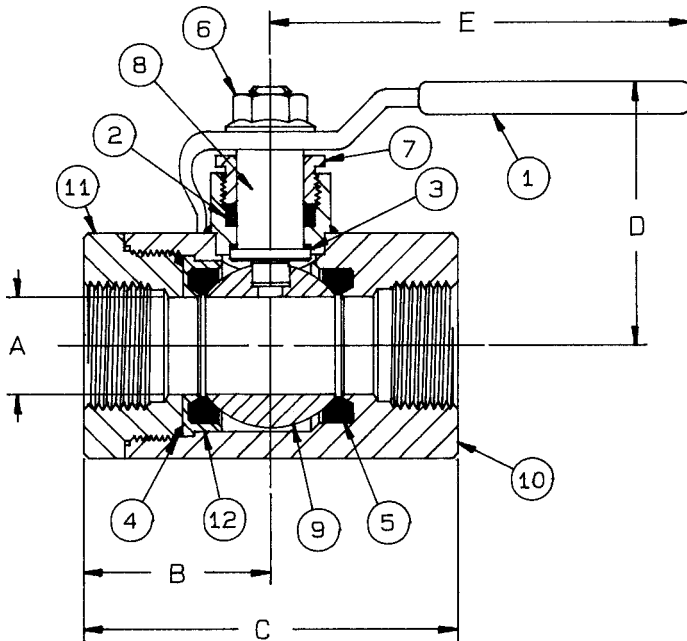
- Barstock design
- 316 SS ball and stem
- Multifill packing
- Multifill seats
- Nitride corrosion protection
- Adjustable packing gland
- Full port, except 2"
- Blow-out-proof stem design
- Heavy duty handles

STANDARD MATERIAL LIST

1. Lever and grip	CS, zinc plated w/vinyl	7. Gland nut	A108-CS
2. Stem packing	Multifill PTFE	8. Stem	A276-316
3. Stem bearing	RPTFE	9. Ball	A276-316
4. Retainer seal	RPTFE	10. Body	A108-CS
5. Seat (2)	Multifill PTFE	11. Retainer	A108-CS
6. Lever nut	CS, zinc plated	12. Seat holder	A108-CS

Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.



CARBON STEEL 250 Lb. STEAM
HIGH PRESSURE BALL VALVE

NUMBER	SIZE	A	B	C	D	E	Wt.
72-143-64	1/2"	.62	1.46	2.84	2.50	5.62	1.98
72-144-64	3/4"	.81	1.87	3.71	2.62	5.62	3.09
72-145-64	1"	1.00	2.12	4.15	3.12	6.62	4.87
72-146-64	1-1/4"	1.25	2.32	4.65	3.43	8.00	7.67
72-147-64	1-1/2"	1.50	2.64	5.23	3.56	8.00	10.50
72-148-64	2"	1.75	3.00	5.84	4.18	9.00	15.26

**For Pressure/Temperature Ratings,
Refer to Page N-16, Graph No. 15**

Apollo® 73A-140-64 Series

Carbon Steel 250 Lb. Steam Ball Valve

Threaded, 2000 psig WOG, Cold Non-Shock. 250 psig Saturated Steam.

Vacuum Service to 29 inches Hg.

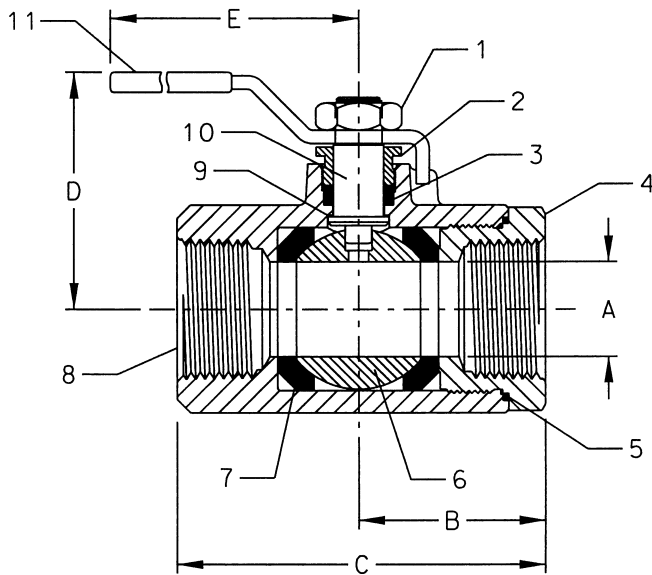
Federal Specification: WW-V-35C, Type II, Composition: CS, Style: 3.

FEATURES

- MTFE seats & packing
- Actuator mounting pads
- Forged construction
- Raised handle stops
- Blow-out-proof stem design
- Adjustable packing gland
- Nitride corrosion protection
- 316 SS ball & stem

STANDARD MATERIAL LIST

1. Lever nut	Steel, zinc plated	6. Ball	A276-316
2. Gland nut	A108-CS	7. Seat (2)	RPTFE
3. Stem packing	MTFE	8. Body	A105
4. Retainer	A108-1018	9. Stem bearing	RPTFE
5. Body seal	MTFE (1/2" to 2")	10. Stem	A276-316
		11. Lever/grip	Steel, zinc plated, with vinyl



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

CARBON STEEL 250 Lb. STEAM BALL VALVE

NUMBER	SIZE	A	B	C	D	E
73A-141-64	1/4"	.37	1.02	2.53	1.72	3.85
73A-142-64	3/8"	.37	1.02	2.53	1.72	3.85
73A-143-64	1/2"	.50	1.18	2.29	1.78	3.85
73A-144-64	3/4"	.68	1.57	3.07	2.07	4.75
73A-145-64	1"	.87	1.73	3.40	2.18	4.75
73A-146-64	1-1/4"	1.00	1.98	3.97	2.72	5.50
73A-147-64	1-1/2"	1.25	2.14	4.32	3.12	7.75
73A-148-64	2"	1.50	2.73	5.44	3.27	7.75

**For Pressure/Temperature Ratings,
Refer to Page N-15, Graph No. 13
(1/4" to 1")
Refer to Page N-14, Graph No. 11
(1-1/4" to 2")**

Apollo® 73-340-64 Series

Carbon Steel 250 Lb. Steam Double Union End Ball Valve

Threaded End, 3000 psig WOG, Cold Non-Shock, 250 psig Saturated Steam.

Vacuum Service to 29 inches Hg.

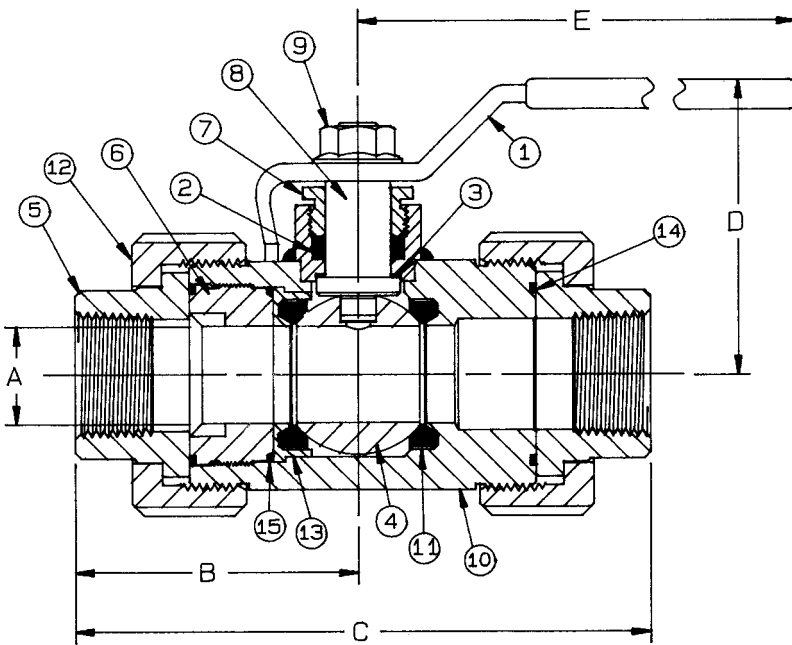
Federal Specification: WW-V-35C, Type: II, Composition: CS, Style: 1.

FEATURES

- Heavy duty quarter turn handles
- Adjustable packing gland
- Easy installation and maintenance
- Blow-out-proof stem design
- 316 SS ball and stem
- Steel barstock design
- Multifill packing
- Multifill seats
- Nitride corrosion protection

STANDARD MATERIAL LIST

1. Lever and grip	Steel, zinc plated w/vinyl	9. Lever	Steel, zinc plated
2. Stem packing	Multifill PTFE	10. Body	A108-CS
3. Stem bearing	RPTFE	11. Tailpiece (2)	A108-CS
4. Ball	A276-316	12. Union nut (2)	A108-CS
5. Seat (2)	Multifill PTFE	13. Seat holder	A108-CS
6. Retainer	A108-CS	14. Union seal (2)	RPTFE
7. Gland nut	A108-CS	15. Retainer seal	RPTFE
8. Stem	A276-316		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

CARBON STEEL 250 Lb. STEAM
DOUBLE END BALL VALVE

NUMBER	SIZE	A	B	C	D	E	Wt.
73-341-64	1/4"	.43	2.50	5.00	2.50	5.62	3.51
73-342-64	3/8"	.57	2.50	5.00	2.50	5.62	3.45
73-343-64	1/2"	.62	2.50	5.00	2.50	5.62	3.35
73-344-64	3/4"	.81	2.71	5.31	2.62	5.62	4.48
73-345-64	1"	1.00	2.96	6.06	3.12	6.62	7.04
73-346-64	1-1/4"	1.25	2.87	6.12	3.43	8.00	9.96
73-347-64	1-1/2"	1.50	3.46	7.12	3.56	8.00	14.83
73-348-64	2"	1.75	3.75	7.50	4.18	9.00	20.50

**For Pressure/Temperature Ratings,
Refer to Page N-16, Graph No. 15**

Apollo® 73-440-64 Series

Carbon Steel 250 Lb. Steam Double Union End Socket Weld Ball Valve

Socket Weld, 3000 psig WOG, Cold Non-Shock, 250 psig Saturated Steam.

Vacuum Service to 29 inches Hg.

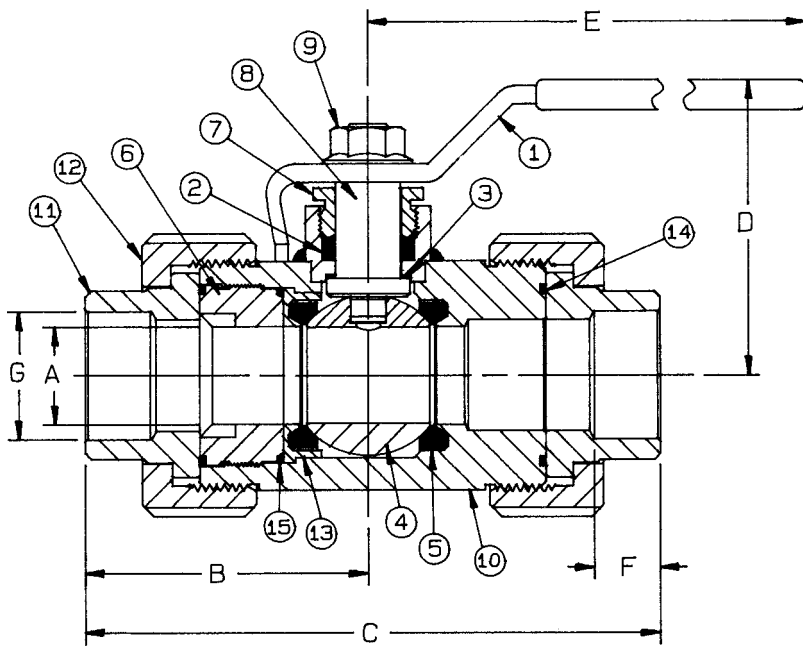
Federal Specification: WW-V-35C, Type: II, Composition: CS, Style: 1.

FEATURES

- Heavy duty quarter turn handles
- Adjustable packing gland
- Easy installation and maintenance
- Blow-out-proof stem design
- 316 SS ball and stem
- Steel barstock design
- Multifill packing
- Multifill seats
- Nitride corrosion protection

STANDARD MATERIAL LIST

1. Lever and grip	Steel, zinc plated w/vinyl	9. Lever nut	Steel, zinc plated
2. Stem packing	Multifill PTFE	10. Body	A108-CS
3. Stem bearing	RPTFE	11. Tailpiece (2)	A108-CS
4. Ball	A276-316	12. Union nut (2)	A108-CS
5. Seat (2)	Multifill PTFE	13. Seat holder	A108-CS
6. Retainer	A108-CS	14. Union seal (2)	RPTFE
7. Gland nut	A108-CS	15. Retainer seal	RPTFE
8. Stem	A276-316		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

CARBON STEEL 250 Lb. STEAM DOUBLE UNION END SOCKET WELD BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
73-443-64	1/2"	.62	2.50	5.00	2.50	5.62	.43	.855	3.35
73-444-64	3/4"	.81	2.71	5.31	2.62	5.62	.56	1.065	4.48
73-445-64	1"	1.00	2.96	6.06	3.12	6.62	.68	1.330	7.04
73-446-64	1-1/4"	1.25	2.87	6.12	3.43	8.00	.81	1.675	9.96
73-447-64	1-1/2"	1.50	3.46	7.12	3.56	8.00	.87	1.915	14.83
73-448-64	2"	1.75	3.75	7.50	4.18	9.00	1.06	2.406	20.50

For Pressure/Temperature Ratings, Refer to Page N-16, Graph No. 15

Apollo® 76-100-64 Series

Stainless Steel 250 Lb. Steam Ball Valve

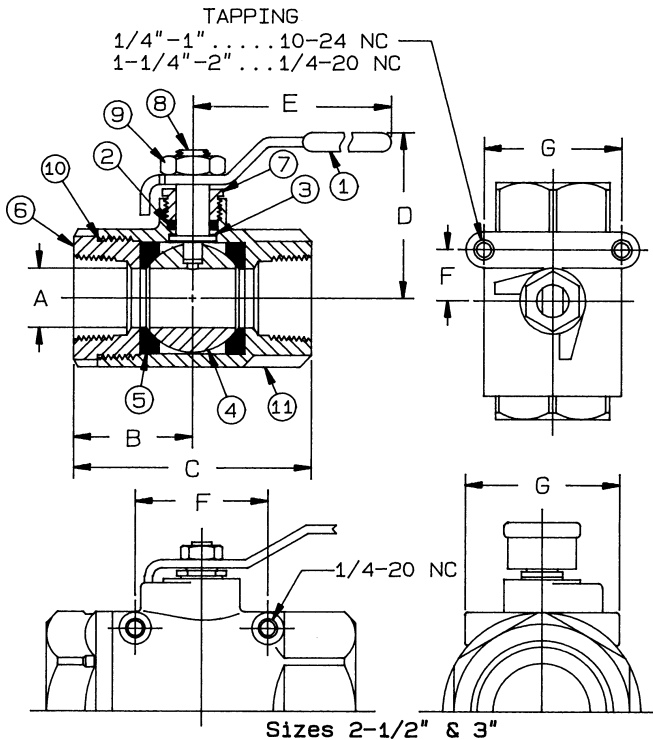
Threaded, 1/4" to 1" 2000 psig WOG; 1-1/4" to 2" 1500 psig WOG; 2-1/2" to 3" 1000 psig WOG
 Cold Non-Shock. 250 psig Saturated Steam, Vacuum Service to 29 inches Hg.
 Federal Specification: WW-V-35C, Type II, Composition: SS, Style: 3.

FEATURES

- Investment cast components
- Adjustable packing gland
- Meets NACE MR-01-75
- Blow-out-proof stem design
- 316 SS ball and stem
- Mounting pad for easy actuator mounting
- Multifill packing
- Multifill seats

STANDARD MATERIAL LIST

1. Lever and grip	304 SS w/vinyl	7. Gland nut	A276-316
2. Stem packing	Multifill PTFE	8. Stem	A276-316
3. Stem bearing	RPTFE	9. Lever nut	304 SS
4. Ball	A276-316	10. Body seal	PTFE
5. Seat (2)	Multifill PTFE	11. Body	A351-CF8M
6. Retainer	A276-316 (1/4" to 1")		
	A351-CF8M (1-1/4" & Up)		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

STAINLESS STEEL 250 Lb. STEAM BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
76-101-64	1/4"	.37	1.03	2.06	1.75	3.87	.50	1.12	.58
76-102-64	3/8"	.37	1.03	2.06	1.75	3.87	.50	1.12	.54
76-103-64	1/2"	.50	1.12	2.25	1.81	3.87	.50	1.12	.63
76-104-64	3/4"	.68	1.50	3.00	2.12	4.87	.87	1.37	1.27
76-105-64	1"	.87	1.68	3.37	2.25	4.87	.87	1.37	1.63
76-106-64	1-1/4"	1.00	2.00	4.00	2.62	5.50	.93	1.50	3.06
76-107-64	1-1/2"	1.25	2.18	4.37	3.05	8.00	.93	1.50	4.04
76-108-64	2"	1.50	2.75	5.50	3.24	8.00	.93	1.50	6.05
76-109-64	2-1/2"	2.50	3.37	6.75	4.12	8.00	2.75	3.37	15.57
76-100-64	3"	2.50	3.37	6.75	4.12	8.00	2.75	3.37	16.79

For Pressure/Temperature Ratings, Refer to Page N-15, Graph No. 14 (1/4" to 1")
Refer to Page N-14, Graph No. 12 (1-1/4" to 2")
Refer to Page N-14, Graph No. 8 (2-1/2" to 3")

Apollo® 76-300-64 Series

Stainless Steel 250 Lb. Steam Double Union End Ball Valve

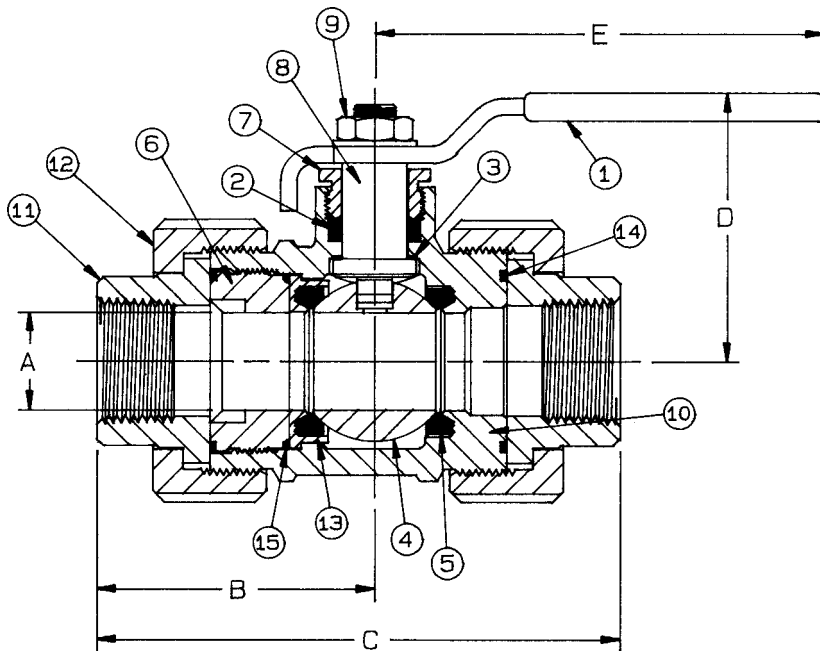
Threaded, 1/2"-1" 2000 psig WOG, 1-1/4" to 2" 1500 psig WOG. Cold Non-Shock.
250 psig Saturated Steam, Vacuum Service to 29 inches Hg.
Federal Specification: WW-V-35C, Type: II, Composition: SS, Style: 1.

FEATURES

- 316 SS ball and stem
- Adjustable packing gland
- Blow-out-proof stem design
- Multifill seats
- Multifill packing

STANDARD MATERIAL LIST

1. Lever and grip	304 SS w/vinyl	9. Lever nut	304 SS
2. Stem packing	Multifill PTFE	10. Body	A351-CF8M
3. Stem bearing	RPTFE	11. Tailpiece (2)	A276-316
4. Ball	A276-316	12. Union nut (2)	A108-CS, Nitride
5. Seat (2)	Multifill PTFE	13. Seat holder	A276-316
6. Retainer	A276-316	14. Union seal (2)	RPTFE
7. Gland nut	A276-316	15. Retainer seal	RPTFE
8. Stem	A276-316		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

STAINLESS STEEL 250 Lb. STEAM DOUBLE UNION END BALL VALVE

NUMBER	SIZE	A	B	C	D	E	Wt.
76-303-64	1/2"	.62	2.27	4.33	2.12	4.87	2.88
76-304-64	3/4"	.81	2.46	4.51	2.31	4.87	3.81
76-305-64	1"	1.00	2.89	5.45	2.75	5.50	5.98
76-306-64	1-1/4"	1.25	2.88	5.32	2.97	5.50	8.47
76-307-64	1-1/2"	1.50	2.43	6.43	3.39	7.87	12.61
76-308-64	2"	1.75	3.75	6.87	4.12	9.87	16.88

**For Pressure/Temperature Ratings,
Refer to Page N-15, Graph No. 14
(1/2" to 1")
Refer to Page N-14, Graph No. 12
(1-1/4" to 2")**

Apollo® 76-400-64 Series

Stainless Steel 250 Lb. Steam Double Union End Socket Weld Ball Valve

Socket Weld, 1/2" to 1" 2000 psig WOG, 1-1/4" to 2" 1500 psig WOG. Cold Non-Shock.
250 psig Saturated Steam, Vacuum Service to 29 inches Hg.
Federal Specification: WW-V-35C, Type: II, Composition: SS, Style: 1.

FEATURES

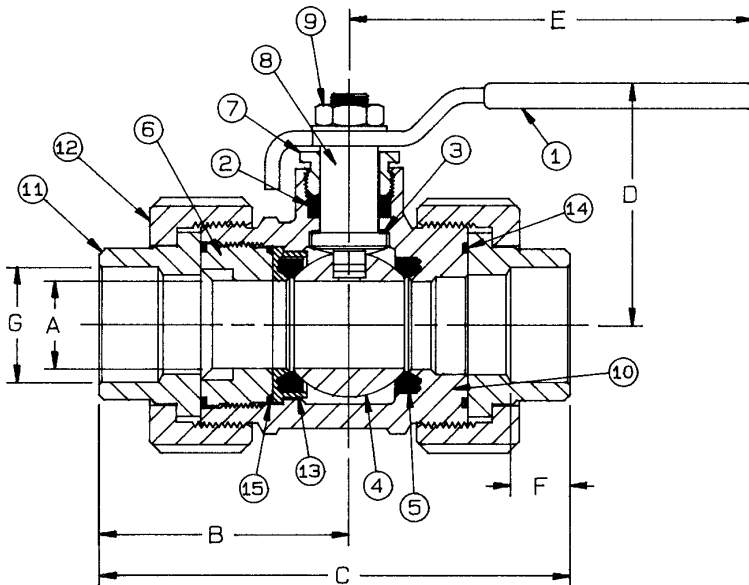
- 316 SS ball and stem
- Adjustable packing gland
- Blow-out-proof stem design
- Multifill seats
- Multifill packing

STANDARD MATERIAL LIST

1. Lever and grip	304 SS w/vinyl	9. Lever nut	304 SS
2. Stem packing	Multifill PTFE	10. Body	A351-CF8M
3. Stem bearing	RPTFE	11. Tailpiece (2)	A276-316L
4. Ball	A276-316	12. Union nut (2)	A108-CS, Nitride
5. Seat (2)	Multifill PTFE	13. Seat holder	A276-316
6. Retainer	A276-316	14. Union seal (2)	RPTFE
7. Gland nut	A276-316	15. Retainer seal	RPTFE
8. Stem	A276-316		

Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.



STAINLESS STEEL 250 Lb. STEAM DOUBLE UNION END SOCKET WELD BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
76-403-64	1/2"	.62	2.27	4.33	2.12	4.87	.43	.855	2.88
76-404-64	3/4"	.81	2.46	4.51	2.31	4.87	.56	1.065	3.81
76-405-64	1"	1.00	2.89	5.45	2.75	5.50	.68	1.330	5.98
76-406-64	1-1/4"	1.25	2.88	5.32	2.97	5.50	.81	1.675	8.47
76-407-64	1-1/2"	1.50	2.43	6.43	3.39	7.87	.87	1.915	12.61
76-408-64	2"	1.75	3.75	6.87	4.12	9.87	1.06	2.406	16.88

For Pressure/Temperature Ratings, Refer to Page N-15, Graph No. 14 (1/2" to 1")
Refer to Page N-14, Graph No. 12 (1-1/4" to 2")

Apollo® 83-540-64 Series

Carbon Steel 250 Lb. Steam 3-Piece High Pressure Full Port Ball Valve

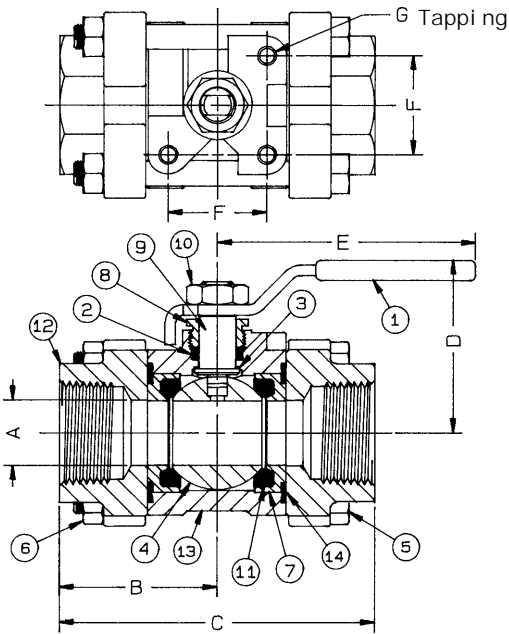
Threaded, 1500 psig WOG, Cold Non-Shock, 250 psig Saturated Steam.
 Vacuum Service to 29 inches Hg.
 Federal Specification: WW-V-35C, Type: II, Composition: CS, Style: 1.

FEATURES

- Multifill seats
- 316 SS ball and stem
- Investment Cast Components
- Blow-out-proof stem design
- Adjustable packing gland
- Actuator mounting pad (3/4" to 2")
- In-line repairable
- Multifill packing
- Nitride corrosion protection

STANDARD MATERIAL LIST

1. Lever and grip	CS, zinc plated w/vinyl	8. Gland nut	A108-CS
2. Stem packing	Multifill PTFE	9. Stem	A276-316
3. Stem bearing	RPTFE	10. Lever nut	18-8 SS
4. Ball	A276-316	11. Seat (2)	Multifill PTFE
5. Body bolt (4)	Steel, SAE grade 8 zinc plated	12. End cap (2)	A216-WCB
6. Hex nut (4)	Steel, SAE grade 8 zinc plated	13. Body	A216-WCB
7. Seat holder (2)	A108-CS	14. Body seal (2)	Graphite



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

CARBON STEEL 250 Lb. STEAM HIGH PRESSURE FULL PORT BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
83-541-64	1/4"	.43	1.50	3.00	1.93	3.87	N/A	N/A	1.21
83-542-64	3/8"	.50	1.50	3.00	1.93	3.87	N/A	N/A	1.22
83-543-64	1/2"	.62	1.69	3.38	2.00	4.81	N/A	N/A	1.90
83-544-64	3/4"	.81	1.93	3.87	2.18	4.81	1.25	1/4-20	2.56
83-545-64	1"	1.00	2.25	4.50	2.62	5.50	1.62	5/16-18	3.78
83-546-64	1-1/4"	1.25	2.43	4.87	2.87	5.50	1.62	5/16-18	5.24
83-547-64	1-1/2"	1.50	2.62	5.25	3.35	8.00	1.62	5/16-18	7.67
83-548-64	2"	2.00	3.12	6.25	3.75	8.00	1.62	5/16-18	15.60

For Pressure/Temperature Ratings, Refer to Page N-14, Graph No. 11

Apollo® 86-500-64 Series

Stainless Steel 250 Lb. Steam 3-Piece High Pressure Full Port Ball Valve

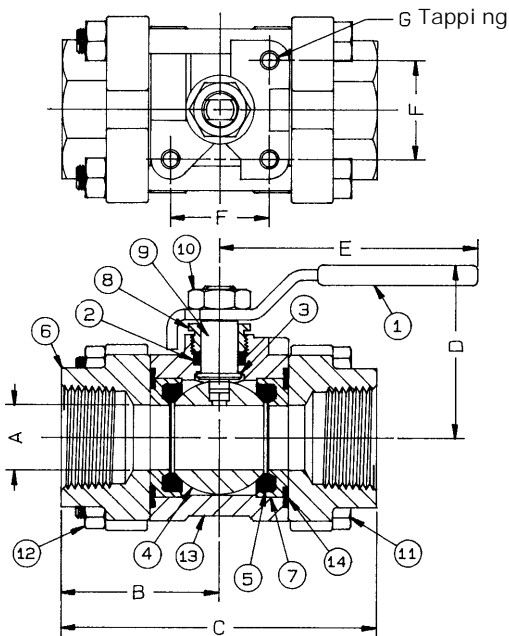
Threaded, 1500 psig WOG, Cold Non-Shock, 250 psig Saturated Steam.
 Vacuum Service to 29 inches Hg.
 Federal Specification: WW-V-35C, Type: II, Composition: SS, Style: 1.

FEATURES

- Multifill seats
- In-line repairable
- Investment Cast Components
- Meets NACE MR-01-75
- 316 SS ball and stem
- Actuator mounting pad (3/4" to 2")
- Blow-out-proof stem design
- Adjustable packing gland
- Multifill packing

STANDARD MATERIAL LIST

1. Lever and grip	304 SS w/vinyl	8. Gland nut	A276-316
2. Stem packing	Multifill PTFE	9. Stem	A276-316
3. Stem bearing	RPTFE	10. Lever nut	304 SS
4. Ball	A276-316	11. Body bolt (4)	18-8 SS
5. Seat (2)	Multifill PTFE	12. Hex nut (4)	18-8 SS
6. End cap (2)	A351-CF3M	13. Body	A351-CF8M
7. Seat holder (2)	A276-316	14. Body seal (2)	Graphite



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

STAINLESS STEEL 250 Lb. STEAM 3-PIECE
 HIGH PRESSURE FULL PORT BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
86-501-64	1/4"	.43	1.50	3.00	1.93	3.87	N/A	N/A	1.23
86-502-64	3/8"	.50	1.50	3.00	1.93	3.87	N/A	N/A	1.18
86-503-64	1/2"	.62	1.69	3.38	2.00	4.81	N/A	N/A	1.62
86-504-64	3/4"	.81	1.93	3.87	2.18	4.81	1.25	1/4-20	2.27
86-505-64	1"	1.00	2.25	4.50	2.62	5.50	1.62	5/16-18	3.54
86-506-64	1-1/4"	1.25	2.43	4.87	2.87	5.50	1.62	5/16-18	6.00
86-507-64	1-1/2"	1.50	2.62	5.25	3.35	8.00	1.62	5/16-18	8.84
86-508-64	2"	2.00	3.12	6.25	3.75	8.00	1.62	5/16-18	15.28

**For Pressure/Temperature Ratings,
 Refer to Page N-14, Graph No. 12**

Apollo® 89-140-64 Series

Carbon Steel 250 Lb. Steam Ball Valve

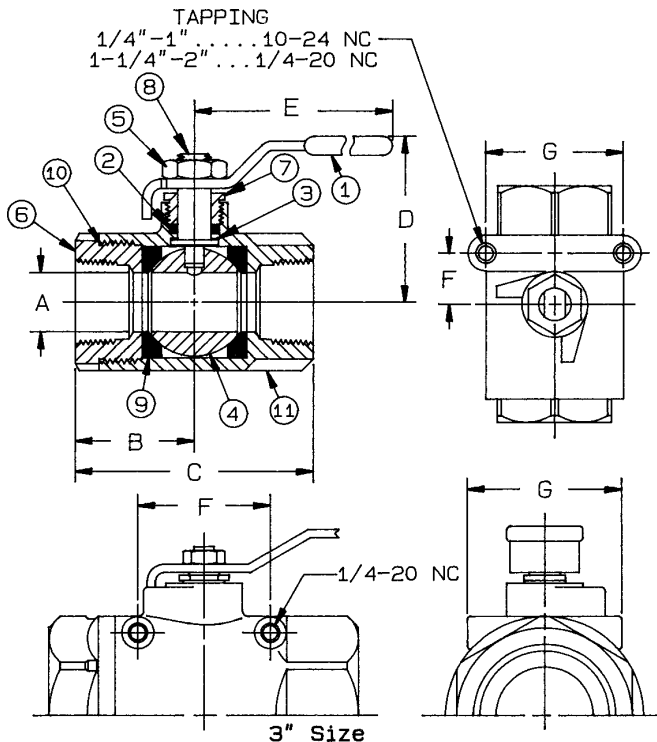
Threaded, 1/4" to 1" 2000 psig WOG; 1-1/4" to 2" 1500 psig WOG; 2-1/2" to 3" 1000 psig WOG
 Cold Non-Shock, 250 psig Saturated Steam, Vacuum Service to 29 inches Hg.
 Federal Specification: WW-V-35C, Type: II, Composition: CS, Style: 3.

FEATURES

- Investment cast components
- Multifill packing
- Mounting pad for easy actuator mounting
- 316 SS ball and stem
- Blow-out-proof stem design
- Adjustable packing gland
- Multifill seats
- Nitride corrosion protection

STANDARD MATERIAL LIST

1. Lever and grip	CS, zinc plated w/vinyl	7. Gland nut	A108-CS
2. Stem packing	Multifill PTFE	8. Stem	A276-316
3. Stem bearing	RPTFE	9. Seat (2)	Multifill PTFE
4. Ball	A276-316	10. Body seal	PTFE
5. Lever nut	CS, zinc plated	11. Body	A216-WCB
6. Retainer	A108-CS (1/4" to 1") A216-WCB (1-1/4" to 3")		



Valves with -64 trim feature a yellow vinyl grip with distinctive red lettering.

These valves are recommended for saturated steam to 250 psig. They are also recommended for services with fluids with widely varying temperatures and / or high thermal expansion rates.

CARBON STEEL 250 Lb. STEAM BALL VALVE

NUMBER	SIZE	A	B	C	D	E	F	G	Wt.
89-141-64	1/4"	.37	1.03	2.06	1.75	3.87	.50	1.12	.58
89-142-64	3/8"	.37	1.03	2.06	1.75	3.87	.50	1.12	.54
89-143-64	1/2"	.50	1.12	2.25	1.81	3.87	.50	1.12	.63
89-144-64	3/4"	.68	1.50	3.00	2.12	4.87	.87	1.37	1.27
89-145-64	1"	.87	1.68	3.37	2.25	4.87	.87	1.37	1.63
89-146-64	1-1/4"	1.00	2.00	4.00	2.62	5.50	.93	1.50	3.06
89-147-64	1-1/2"	1.25	2.18	4.37	3.05	8.00	.93	1.50	3.98
89-148-64	2"	1.50	2.75	5.50	3.24	8.00	.93	1.50	5.99
89-149-64	2-1/2"	2.50	3.37	6.75	4.05	8.00	2.75	3.37	15.57
89-140-64	3"	2.50	3.37	6.75	4.12	8.00	2.75	3.37	16.79

**For Pressure/Temperature Ratings,
 Refer to Page N-15, Graph No. 13
 (1/4" to 1")
 Refer to Page N-14, Graph No. 11
 (1-1/4" to 2")**

Apollo® 7M-140-64 Series

Bronze 250 lb. Steam Full Port Ball Valve with Drain

NPT Threaded with NPT threaded drain port. Drain port plug standard.
600 psig WOG, cold non-shock. 250 psig saturated steam.
Vacuum service to 29 inches of Hg.

FEATURES

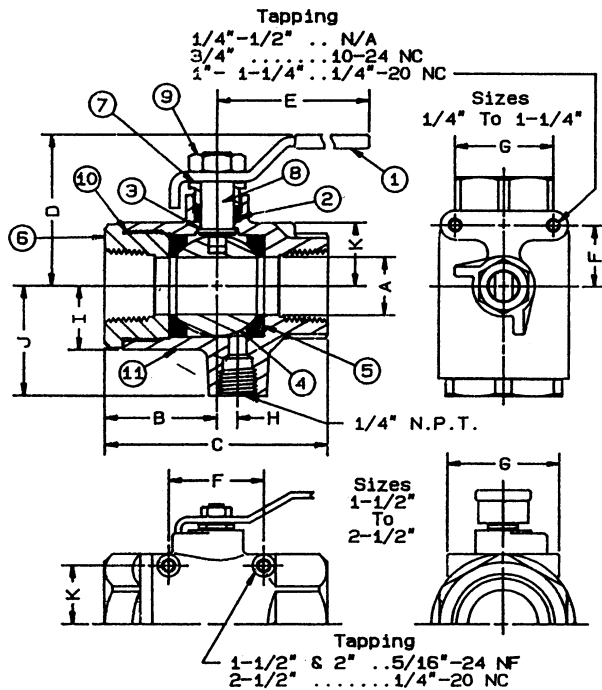
- Stainless steel ball & stem
- MPTFE seats and stuffing box ring
- Mounting pad for easy actuator mounting (3/4" to 2-1/2")
- Blow-out-proof stem design
- Adjustable packing gland
- Full port for full flow & min. pressure drop
- Use for draining systems

STANDARD MATERIAL LIST

1. Lever and grip	Steel, zinc plated w/vinyl	7. Gland nut	85-5-5-5
2. Stem packing	MPTFE	8. Stem	A276 - 316
3. Stem bearing	RPTFE	9. Lever nut	Steel, zinc plated
4. Ball	A276 - 316	10. Body seal (1-1/4" to 2")	PTFE
5. Seat (2)	MPTFE		(1-1/4" to 2-1/2")
6. Retainer	85-5-5-5 (1/4" to 1")	11. Body	B62 - C83600
	B62 - C83600 (1-1/4" to 2-1/2")	12. Pipe plug	85-5-5-5

OPTIONS AVAILABLE:

(SUFFIX)	OPTION	SIZES
-02-	Static Grounded	1/4" to 2-1/2"
-03-	1-1/4" Stem Extension	1/4" to 2-1/2"
-04-	2-1/4" Stem Extension	1/4" to 2-1/2"
-07-	Tee Handle	1/4" to 1-1/4"
-08-	90° Reversed Stem	1/4" to 2-1/2"
-10-	SS Lever & Nut	1/4" to 2-1/2"
-15-	Round Handle	1/4" to 1-1/4"
-16-	Vertical Chain Lever	3/4" to 2-1/2"
-17-	Rough Chrome Plating	1/4" to 2-1/2"
-18-	Plain Yellow Grip	1/4" to 2-1/2"
-24-	Graphite Stem Packing	1/4" to 2-1/2"
-27-	Latch Lock Lever	1/4" to 2-1/2"
-30-	CamLock Handle	1/4" to 2-1/2"
-32-	SS Tee Handle & Nut	1/4" to 2-1/2"
-40-	Cyl-Loc	1/4" to 1-1/4"
-45-	Less Lever & Nut	1/4" to 2-1/2"
-46-	Latch Lock Lever - Lock Close Only	1/4" to 2-1/2"
-47-	SS Latch-Lock Oval Handle	1/4" to 3/4"
-48-	SS Oval Handle	1/4" to 2"
-49-	Assembled Dry	1/4" to 2-1/2"
-50-	2-1/4" Locking Stem Extension	1/4" to 2-1/2"
-57-	Cleaned for Gaseous Oxygen	1/4" to 2-1/2"
-58-	Horizontal Chain Lever	3/4" to 2-1/2"
-60-	Static Grounded Ball & Stem	1/4" to 2-1/2"



BRONZE 250 LB. STEAM FULL PORT BALL VALVE WITH DRAIN

NUMBER	SIZE	A	B	C	D	E	F	G	H	I	J	K	Wt.
7M-141-01	1/4"	.37	1.03	2.06	1.75	3.87	N/A	N/A	.09	.53	1.18	N/A	.70
7M-142-01	3/8"	.37	1.03	2.06	1.75	3.87	N/A	N/A	.09	.53	1.18	N/A	.66
7M-143-01	1/2"	.50	1.10	2.19	1.75	3.87	N/A	N/A	.12	.59	1.25	N/A	.73
7M-144-01	3/4"	.81	1.56	3.12	2.12	4.78	.87	1.37	.29	.90	1.56	.90	1.93
7M-145-01	1"	1.00	1.80	3.61	2.62	5.50	.93	1.50	.31	1.12	1.78	1.12	3.42
7M-146-01	1-1/4"	1.25	2.12	4.25	2.87	5.50	.93	1.50	.37	1.37	2.03	1.37	5.15
7M-147-01	1-1/2"	1.50	2.37	4.74	3.30	7.78	2.08	3.06	.50	1.56	2.21	1.28	6.81
7M-148-01	2"	2.00	2.70	5.38	3.71	7.78	2.41	3.52	.62	2.03	2.68	1.56	11.85
7M-149-01	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	17.35