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<tr>
<td>51-GB0 Series, NPT x Flare Bronze (GB-11 Series)</td>
<td>H-39</td>
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</tbody>
</table>
Apollo® 7A-130-26 Series
Carbon Steel Dry Chlorine Ball Valve
With Ni-Cu Ball and Stem

Threaded. 400 psig WOG, Cold Non-Shock.
For Use With Dry Chlorine Gas and Dry Liquid.
Complies With Recommendations of Chlorine Institute Pamphlet No. 6.

FEATURES

- Chevron style stem packing
- Ni-Cu ball and stem
- Investment Cast Parts
- Nitride corrosion protection
- Blow-out-proof stem design
- Bolted, adjustable packing gland
- Vented ball

STANDARD MATERIAL LIST

1. Lever and grip 304 SS w/vinyl
2. Bolt (2) 18-8 SS
3. Gland plate 304 SS
4. Packing set PTFE, Chevron style
5. Body A216-WCB
6. Seats (2) RPTFE
7. Ball B164
8. Retainer A216-WCB
9. Body seal RPTFE
10. Stem bearing RPTFE
11. Stem B164
12. Packing gland A276-316
13. Lever nut 18-8 SS

NUMBER SIZE A B C D E Wt.
7A-131-26 1/4" .43 1.56 2.75 1.93 3.87 1.25
7A-132-26 3/8" .50 1.56 2.75 1.93 3.87 1.21
7A-133-26 1/2" .50 1.56 2.75 1.93 3.87 1.14
7A-134-26 3/4" .68 2.00 3.50 2.31 4.87 2.11
7A-135-26 1" .87 2.37 4.12 2.43 4.87 2.94
7A-136-26 1-1/4" 1.00 2.24 4.24 3.00 5.50 4.40
7A-137-26 1-1/2" 1.25 2.65 5.13 3.38 8.00 7.04
7A-138-26 2" 1.50 3.25 6.00 3.67 8.00 10.96

For Pressure/Temperature Ratings,
Refer to Page N-17, Graph No. 17
Apollo® 7B-100 Series
Bronze Full Port Hydro Ball Valve

Threaded, 400 psig WOG, Cold Non-Shock. 125 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES

- Chromium plated ball
- RPTFE packing
- PTFE seats
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

| 1. T-handle & grip | SS w/vinyl |
| 2. Stem packing    | RPTFE      |
| 3. Stem            | B16        |
| 4. Ball            | B16, Chrome plated |
| 5. Seat (2)        | PTFE       |
| 6. Gland nut       | B16        |
| 7. Lever nut       | 304 SS     |
| 8. Retainer        | B16        |
| 9. Body            | B584-C84400 |
| 10. Bearing        | PTFE       |

OPTIONS AVAILABLE:

<table>
<thead>
<tr>
<th>SUFFIX</th>
<th>OPTION SIZES</th>
</tr>
</thead>
<tbody>
<tr>
<td>-31</td>
<td>Side Outlet Not Drilled &amp; Tapped 1/4&quot; to 2&quot;</td>
</tr>
</tbody>
</table>

BRONZE FULL PORT HYDRO BALL VALVE

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3
Apollo® 7B-300 Series
Single Union End Bronze Full Port Hydro Ball Valve

NPT Threaded, 400 psig WOG, Cold Non-Shock. 125 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES

- Chromium plated ball
- Blow-out-proof stem design
- RPTFE packing
- Adjustable packing gland
- PTFE seats

STANDARD MATERIAL LIST

1. T-handle & grip SS w/vinyl
2. Stem packing RPTFE
3. Stem B16
4. Ball B16, chrome plated
5. Seat (2) PTFE
6. Gland nut B16
7. Lever nut 304 SS
8. Retainer B16
9. Body B584-C84400
10. O-Ring Fluorocarbon
11. Tailpiece B16
12. Union nut B16 (1/4" to 1")

OPTIONS AVAILABLE:

(SUFFIX) OPTION SIZES

-31 - Side Outlet Not Drilled & Tapped 1/4" to 2"

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3
Apollo® 7B-800 Series
Male x Female Bronze Full Port Hydro Ball Valve

Male x Female Threaded, 400 psig WOG, Cold Non-Shock, 125 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES

- Chromium plated ball
- RPTFE packing
- PTFE seats
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

1. T-handle & grip SS 6. Stem B16
2. Stem packing RPTFE 7. Gland screw B16
3. Stem bearing RPTFE 8. Lever nut 304 SS
4. Ball B16, chrome plated 9. Retainer B16
5. Seat (2) PTFE 10. Body B584-C84400

OPTIONS AVAILABLE:

(SUFFIX) OPTION SIZES
-31 - Side Outlet Not Drilled & Tapped 1/4" to 2"

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3
**Apollo® 7H-800 Series**

**M x F Stainless Steel Full Port Hydro Ball Valve**

Male x Female Threaded, 800 psig WOG, Cold Non-Shock, 125 psig Saturated Steam.

Vacuum Service to 29 inches Hg.


**FEATURES**

- 316 SS ball & stem
- RPTFE packing
- PTFE seats
- Blow-out-proof stem design
- Adjustable packing gland

**STANDARD MATERIAL LIST**

<table>
<thead>
<tr>
<th>Number</th>
<th>T-handle &amp; grip</th>
<th>Stem packing</th>
<th>Stem bearing</th>
<th>Ball</th>
<th>Seat (2)</th>
<th>Stem</th>
<th>Gland screw</th>
<th>Lever nut</th>
<th>Retainer</th>
<th>Body</th>
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<tbody>
<tr>
<td>7H-800-01</td>
<td>SS</td>
<td>RPTFE</td>
<td>RPTFE</td>
<td>A276-316</td>
<td>PTFE</td>
<td>A276-316</td>
<td>A276-316</td>
<td>304 SS</td>
<td>A276-316</td>
<td>A351-CF8M</td>
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</tbody>
</table>

**OPTIONS AVAILABLE:**

(SUFFIX) OPTION

-31 - Side Outlet Not Drilled & Tapped

**For Pressure/Temperature Ratings, Refer to Page N-19, Graph No. 21**

**MALE X FEMALE STAINLESS STEEL FULL PORT HYDRO BALL VALVE**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Wt.</th>
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<tbody>
<tr>
<td>7H-801-01</td>
<td>1/4&quot;</td>
<td>.37</td>
<td>1.47</td>
<td>2.46</td>
<td>1.39</td>
<td>2.56</td>
<td>.93</td>
<td>.53</td>
<td>1/8 NPT</td>
<td>.65</td>
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<tr>
<td>7H-802-01</td>
<td>3/8&quot;</td>
<td>.37</td>
<td>1.55</td>
<td>2.54</td>
<td>1.39</td>
<td>2.56</td>
<td>.93</td>
<td>.53</td>
<td>1/8 NPT</td>
<td>.62</td>
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<tr>
<td>7H-803-01</td>
<td>1/2&quot;</td>
<td>.50</td>
<td>1.79</td>
<td>2.83</td>
<td>1.45</td>
<td>2.56</td>
<td>1.00</td>
<td>.53</td>
<td>1/8 NPT</td>
<td>.73</td>
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<tr>
<td>7H-804-01</td>
<td>3/4&quot;</td>
<td>.75</td>
<td>2.01</td>
<td>3.42</td>
<td>2.08</td>
<td>3.25</td>
<td>1.01</td>
<td>.75</td>
<td>1/8 NPT</td>
<td>.86</td>
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<tr>
<td>7H-805-01</td>
<td>1&quot;</td>
<td>1.00</td>
<td>2.39</td>
<td>4.17</td>
<td>2.38</td>
<td>3.93</td>
<td>1.12</td>
<td>.94</td>
<td>1/8 NPT</td>
<td>1.65</td>
</tr>
</tbody>
</table>

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Apollo® 7K-100 Series
Bronze Full Port Ball Valve with Drain

NPT Threaded with NPT threaded drain port.
Recommended for water or air services.
Rated +50°F to 200°F, 0-125 psig.

FEATURES
- Chromium plated ball
- RPTFE 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
- Auto-drain / Auto-vent

STANDARD MATERIAL LIST

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

VARIATIONS AVAILABLE:

7K-150 Series (Original Balancing Stop)
7K-190 Series (Pinned Retainer)

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 1-1/4"
-32 - SS Tee Handle & Nut 1/4" to 1-1/4"
-35 - PTFE Trim 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 - Lock In Closed Position 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"
-56 - Multifill Seats 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"
-61 - Grounded Ball & Stem & Assembled Dry 1/4" to 2-1/2"
-63 - NPT x Solder Retainer 1/4" to 2-1/2"

BRONZE FULL PORT BALL VALVE WITH DRAIN

| NUMBER | SIZE  | A   | B   | C   | D   | E   | F   | G   | H   | I   | J   | K   | Wt. |
|--------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 7K-101-01 | 1/4" | .37 | 1.03 | 2.06 | 1.75 | 3.87 | N/A | .09 | .53 | 1.18 | N/A | .70 |
| 7K-102-01 | 3/8" | .37 | 1.03 | 2.06 | 1.75 | 3.87 | N/A | .09 | .53 | 1.18 | N/A | .66 |
| 7K-103-01 | 1/2" | .50 | 1.10 | 2.19 | 1.75 | 3.87 | N/A | .12 | .59 | 1.25 | N/A | .73 |
| 7K-104-01 | 3/4" | .81 | 1.56 | 3.12 | 2.12 | 4.78 | .87 | 1.37 | .29 | .90 | 1.56 | .90 | 1.93 |
| 7K-105-01 | 1"   | 1.00 | 1.80 | 3.61 | 2.62 | 5.50 | .93 | 1.50 | .31 | 1.12 | 1.78 | 1.12 | 3.42 |
| 7K-106-01 | 1-1/4"| 1.55 | 2.12 | 4.25 | 2.87 | 5.50 | .93 | 1.50 | .37 | 1.37 | 2.03 | 1.37 | 5.15 |
| 7K-107-01 | 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 |
| 7K-108-01 | 2"   | 2.00 | 2.70 | 5.38 | 3.71 | 7.78 | 2.41 | 3.52 | .62 | 2.03 | 2.68 | 1.56 | 11.85 |
| 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 | 17.35 |
Apollo® 71-500 Series

Bronze Ball Valve with "Deadman" Spring Return Handle

Threaded, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES

- Spring return to close (-01)
- Spring return to open (-08)
- All components of lever are SS
- Operating torque is approximately three times standard valve torque
- RPTFE seats and stuffing box ring
- Blow-out-proof stem design
- Adjustable packing gland
- Chromium plated ball

STANDARD MATERIAL LIST

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

VARIATIONS AVAILABLE:

- 71-540 Series (316 SS Ball & Stem)
- 71-590 Series (Pinned Retainer)

OPTIONS AVAILABLE:

- (SUFFIX) OPTION SIZES
  - -01 - 90° Reversed Stem (Spring Open) 1/4" to 2"
  - -14 - Vented Ball (see page J-2) 1/4" to 2"
  - -20 - Slot Vented Ball 1/4" to 2"
  - -21 - UHMWPE Seats (Non-PTFE) 1/4" to 2"
  - -24 - Graphite Stem Packing 1/4" to 2"
  - -35 - PTFE Trim 1/4" to 2"
  - -49 - Assembled Dry 1/4" to 2"
  - -57 - Cleaned for Gaseous Oxygen 1/4" to 2"
  - -P01 - BSPP (Parallel) Thread Connection 1/4" to 2"
  - -T01 - BSPT (Tapered) Thread Connection 1/4" to 2"

NUMBER SIZE A  B  C  D  Wt.
71-501-01 1/4"  .43  1.12  2.25  7.00  1.47
71-502-01 3/8"  .50  1.12  2.25  7.00  1.45
71-503-01 1/2"  .50  1.12  2.25  7.00  1.35
71-504-01 3/4"  .68  1.50  3.00  7.00  2.33
71-505-01 1"   .87  1.68  3.37  7.00  2.59
71-506-01 1-1/4" 1.00  2.00  4.00  9.00  4.18
71-507-01 1-1/2" 1.25  2.18  4.37  9.00  5.31
71-508-01 2"   1.50  2.34  4.68  9.00  6.41

For Pressure/Temperature Ratings,
Refer to Page N-10, Graph No. 4
**Apollo® 74-100 Series**

**Chemical Resistant Nickel Ball Valve**

Threaded, 800 psig WOG, Cold Non-Shock. 150 psig Saturated Steam. Vacuum Service to 29 inches Hg.

**FEATURES**

- Investment cast components
- PTFE seats and stuffing box ring
- SS lever and nut
- Blow-out-proof stem design
- Adjustable packing gland
- (-24) Certified to API 607 4th Edition

**STANDARD MATERIAL LIST**

1. Lever and grip
   - 304 SS w/vinyl
2. Stem packing
   - PTFE
3. Stem bearing
   - PTFE
4. Ball
   - Nickel 200, ASTM-B162
5. Seat (2)
   - PTFE
6. Retainer
   - Nickel 200, ASTM-B160 (1/2" to 1")
   - Nickel CZ100, ASTM-A494 (1-1/2" to 2")
7. Gland nut
   - A276-316
8. Stem
   - Nickel 200, ASTM-B160
9. Lever nut
   - 18-8 SS
10. Body seal
    - PTFE (1-1/2" & 2")
11. Body
    - Nickel CZ100, ASTM-A494

**OPTIONS AVAILABLE:**

(SUFFIX) | OPTION                                      | SIZES
---------|---------------------------------------------|------
-02      | Static Grounded                             | 1/2" to 2"
-03      | 1-1/4" Stem Extension                       | 1/2" to 2"
-04      | 2-1/4" Stem Extension                       | 1/2" to 2"
-07      | Tee Handle                                 | 1/2" to 2"
-14      | Vented Ball (see page J-2)                 | 1/2" to 2"
-15      | Round Handle                               | 1/2" to 2"
-16      | Vertical Chain Lever                       | 3/4" to 2"
-18      | Plain Yellow Grip                          | 1/2" to 2"
-21      | UHMWPE Seats (Non-PTFE)                    | 1/2" to 2"
-24      | Graphite Stem Packing                      | 1/2" to 2"
-27      | Latch Lock Lever                           | 1/2" to 2"
-30      | CamLock Handle                             | 1/2" to 2"
-32      | SS Tee Handle & Nut                        | 1/2" to 2"
-35      | PTFE Trim                                  | 1/2" to 2"
-45      | Less Lever & Nut                           | 1/2" to 2"
-46      | Latch Lock Lever - Lock Close Only         | 1/2" to 2"
-48      | SS Oval Handle                             | 1/2" to 2"
-49      | Assembled Dry                              | 1/2" to 2"
-50      | 2-1/4" Locking Stem Extension              | 1/2" to 2"
-56      | Multifill Seats                            | 1/2" to 2"
-58      | Horizontal Chain Lever                     | 3/4" to 2"
-60      | Static Grounded Ball & Stem                | 1/2" to 2"
-P01     | BSPP (Parallel) Thread Connection          | 1/2" to 2"
-T01     | BSPT (Tapered) Thread Connection           | 1/2" to 2"

**CHEMICAL RESISTANT NICKEL BALL VALVE**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
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<th>D</th>
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For Pressure/ Temperature Ratings, Refer to Page N-19, Graph No. 22
Apollo® 75-100 Series
Bronze Pad Locking Ball Valve


FEATURES

- Chromium plated ball
- RPTFE seats and stuffing box ring
- May be padlocked in open or closed position with no change of hardware
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

1. Lever and grip
2. Stem packing
3. Stem bearing
4. Ball
5. Seat (2)
6. Retainer

- Steel, zinc plated w/vinyl
- RPTFE
- B16, chrome plated
- B16 (1/4" to 1")
- B584-C84400 (1-1/4" to 2")
- RPTFE
- B16
- B16
- PTFE (1-1/4" & 2")
- Steel, zinc plated

7. Gland nut
8. Stem
9. Lever nut
10. Body seal
11. Body

B16
B16
PTFE (1-1/4" & 2")
B584-C84400

VARIATIONS AVAILABLE:

75-140 Series (316 SS Ball & Stem)
75-190 Series (Pinned Retainer)

OPTIONS AVAILABLE:

(SUFFIX) OPTION SIZES
-02 - Static Grounded 1/4" to 2"
-05 - Plain Ball 1/4" to 2"
-08 - 90° Reversed Stem 1/4" to 2"
-10 - SS Lever & Nut 1/4" to 2"
-14 - Vented Ball (see page J-2) 1/4" to 2"
-17 - Rough Chrome Plating 1/4" to 2"
-18 - Plain Yellow Grip 1/4" to 2"
-20 - Slot Vented Ball 1/4" to 2"
-24 - Graphite Stem Packing 1/4" to 2"
-41 - Automatic Drain 1/4" to 2"
-49 - Assembled Dry 1/4" to 2"
-57 - Cleaned for Gaseous Oxygen 1/4" to 2"
-60 - Static Grounded Ball & Stem 1/4" to 2"
-P01 - BSPP (Parallel) Thread Connection 1/4" to 2"
-T01 - BSPT (Tapered) Thread Connection 1/4" to 2"

BRONZE PAD LOCKING BALL VALVE

<table>
<thead>
<tr>
<th>NUMBER</th>
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For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4
Apollo® 76-500 Series
Stainless Steel Ball Valve with “Deadman” Spring Return Handle

Threaded, 1/4” to 1” 2000 psig WOG, 1-1/4” to 2” 1500 psig WOG
Cold Non-Shock. 150 psig Saturated Steam, Vacuum Service to 29 inches Hg.

FEATURES
- Spring return to close (-01)
- Spring return to open (-08)
- Blow-out-proof stem design
- RPTFE seats and stuffing box ring
- Adjustable packing gland
- All components of lever are stainless steel
- Meets NACE MR-01-75
- Operating torque is approximately three times standard valve torque

STANDARD MATERIAL LIST

1. “Deadman” handle SS w/vinyl
2. Stem packing Multifill PTFE
3. Stem bearing RPTFE
4. Ball A276-316
5. Seat (2) Multifill PTFE
6. Retainer A276-316 (1/4” to 1”)
7. Gland nut A276-316
8. Stem A276-316
9. Lever nut 18-8 SS
10. Body seal PTFE (1-1/4” to 2”)
11. Body A351-CF8M

OPTIONS AVAILABLE:

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<thead>
<tr>
<th>SUFFIX</th>
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<tr>
<td>-08</td>
<td>90° Reversed Stem (Spring Open) 1/4” to 2”</td>
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<td>-14</td>
<td>Vented Ball (see page J-2) 1/4” to 2”</td>
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<tr>
<td>-21</td>
<td>UHMWPE Seats (Non-PTFE) 1/4” to 2”</td>
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<td>-24</td>
<td>Graphite Stem Packing 1/4” to 2”</td>
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<tr>
<td>-35</td>
<td>PTFE Trim 1/4” to 2”</td>
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<tr>
<td>-49</td>
<td>Assembled Dry 1/4” to 2”</td>
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<tr>
<td>-57</td>
<td>Cleaned for Gaseous Oxygen 1/4” to 2”</td>
</tr>
<tr>
<td>-60</td>
<td>Static Grounded Ball &amp; Stem 1/4” to 2”</td>
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<tr>
<td>-P01</td>
<td>BSPP (Parallel) Thread Connection 1/4” to 2”</td>
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<tr>
<td>-T01</td>
<td>BSPT (Tapered) Thread Connection 1/4” to 2”</td>
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STAINLESS STEEL BALL VALVE WITH “DEADMAN” SPRING RETURN HANDLE

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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”)
Apollo® 78-100 Series
Bronze Ball Valve With Dust Cover and Chain
Threaded x 3/4" Hose Connection.

FEATURES
- Chromium plated ball
- RPTFE seats and stuffing box ring
- Securely attached dust cover with chain. (Dust cover cannot be used to contain pressure)
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Wt.</th>
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<tbody>
<tr>
<td>78-103-01</td>
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<td>1.96</td>
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<td>3.65</td>
<td>4.87</td>
<td>2.12</td>
<td>1.39</td>
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</table>
**Bronze 5-Port Fuel Selector Ball Valve**

**Threaded. 50 psig WOG.**

**FEATURES**

- SS lever and nut
- RPTFE bearing and packing
- Non-lubricated design
- Operation: Four selected inlets feed on common outlet - pointer on handle indicates the selected inlet

**STANDARD MATERIAL LIST**

1. Lever and grip 304 SS w/vinyl
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball B16, chrome plated
5. Seat (4) PTFE
6. Gland nut B16
7. Stem B16
8. Lever nut 304 SS
9. Retainer (3) B16
10. Body B584-C84400

**BRONZE 5-PORT FUEL SELECTOR BALL VALVE**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
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<th>B</th>
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<td>3.87</td>
<td>1.53</td>
<td>1/4-20</td>
<td>1.98</td>
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Apollo® 78-200 Series
Bronze Ball Valve With Dust Cover And Chain
Solder End x 3/4" Hose Connection.

FEATURES

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Securely attached dust cover with chain. *(Dust cover cannot be used to contain pressure)*
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

1. Lever and grip
   Steel, zinc plated w/ vinyl
2. Stem packing
   RPTFE
3. Stem bearing
   RPTFE
4. Ball
   B16, chrome plated
5. Seat (2)
   RPTFE
6. Retainer
   B16
7. Gland nut
   B16
8. Stem
   B16
9. Lever nut
   Steel, zinc plated
10. Dust cover
    Diecast
11. Body
    B584-C84400

The 78-200 is designed to be soft soldered into lines without disassembly. This allows a tested valve to be installed without disturbing the seats and seals in any way. Soldering temperature not to exceed 500°F.

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<th>BRONZE BALL VALVE WITH CAP AND CHAIN</th>
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Apollo® 78-200 Series

Bronze Threaded Surface Mount Ball Valve

NPT Threaded, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES

- Chromium plated ball
- Blow-out-proof stem design
- RPTFE seats and stuffing box ring
- Adjustable packing gland

STANDARD MATERIAL LIST

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<th>F</th>
<th>G</th>
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For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4
4" Bronze Ball Valve
4" Threaded. 150 psig WOG, Cold Non-Shock. 50 psig Saturated Steam.

FEATURES

- Chromium plated ball
- RPTFE stuffing box ring
- PTFE seats
- Blow-out-proof stem design
- Adjustable packing gland

STANDARD MATERIAL LIST

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

NOTE: Options Are Not Available For This Valve.

4" BRONZE BALL VALVE

<table>
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NOTE: Options Are Not Available For This Valve.
Apollo® 78-257/267 Series
Brass And Bronze Instrumentation Ball Valve
Male x Female Threaded. 400 psig WOG, Cold Non-Shock. Air & Liquid Service Rating.

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

STANDARD MATERIAL LIST
1. Lever and grip Steel, zinc plated w/ vinyl
2. Drive pin Steel, zinc plated
3. O-Ring Nitrile
4. Stem B16
5. Seat (2) PTFE
6. Stem boss B16
7. Ball* B16
8. Stem screw Steel, zinc plated
9. Retainer B16
10. Body B16 or B584-C84400

* Chrome Plated Ball In Bronze Valves.

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3

BRASS INSTRUMENTATION BALL VALVE

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<th>TEE HANDLE NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
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BRASS INSTRUMENTATION BALL VALVE

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<th>B</th>
<th>C</th>
<th>D</th>
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BRONZE INSTRUMENTATION BALL VALVE

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<th>B</th>
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BRONZE INSTRUMENTATION BALL VALVE

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<td>93</td>
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<td>5.5</td>
<td>.20</td>
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</tbody>
</table>

*The Cv factor is the gallons of water per minute that the valve will pass with a 1 psig pressure drop.
**Apollo® 78-621/625 Series**

**Bronze Irrigation Ball Valve**

Threaded. 600 psig Water, Cold Non-Shock.

**FEATURES**

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Temperature range: +50°F to +400°F
- Blow-out-proof stem design
- Adjustable packing gland

**STANDARD MATERIAL LIST**

1. Head adapter A351-CF8M
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball B16, chrome plated
5. Seat (2) RPTFE
6. Body seal PTFE (1-1/4" to 2")
7. Gland nut B16
8. Stem B16
9. Screw SS
10. Retainer B16 (3/4" to 1")
11. Body B584-C84400 (1-1/4" to 2")

**Caution:** Do not use where drained media could cause damage.

See options section (option -41) for description of Auto-Drain feature.

---

**BRONZE IRRIGATION BALL VALVE**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
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<th>D</th>
<th>E</th>
<th>Wt</th>
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<td>3.37</td>
<td>2.50</td>
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</tbody>
</table>

**FEATURES:**

- Automatic Draining in the Off Position
- SS Underground Curb Stop Handle

For Pressure/Temperature Ratings, Refer to Page J-8
Apollo® 78-664/78-962 Series
Bronze Ball Valve With Center Drain
Threaded, 600 psig WOG, Cold Non-Shock.

FEATURES

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Mounting pad with bonding screw
- Blow-out-proof stem design
- Adjustable packing gland
- Drainable ball cavity to prevent freeze damage

STANDARD MATERIAL LIST

1. Lever and grip
2. Stem packing
3. Stem bearing
4. Ball
5. Seat (2)
6. Retainer
7. Gland nut
8. Stem
9. Lever nut
10. Body seal
11. Body
12. Drain plug
13. Screw

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<td>5.72</td>
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For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4
**Apollo® 78-668**

**Bronze Purge And Drain Ball Valve**
Solder End Flow Port, Hose Connection Drain Port. 600 psig WOG, Cold Non-Shock.

**FEATURES**
- Chromium plated ball
- RPTFE seats and stuffing box ring
- Hose thread connection for disposal of drained media
- Blow-out-proof stem design
- Adjustable packing gland
- Furnished with dust cover* and chain

**STANDARD MATERIAL LIST**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>Wt.</th>
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<td>.90</td>
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</tbody>
</table>

The 78-668 is designed to be soft soldered into lines without disassembly. This allows a tested valve to be installed without disturbing the seats and seals in any way. Soldering temperature not to exceed 500°F.

* Dust cover cannot be used to contain pressure.
**Apollo® 89-500 Series**

**Carbon Steel Ball Valve With “Deadman” Spring Return Handle**

Threaded, 1/4” to 1” 2000 psig WOG, 1-1/4” to 2” 1500 psig WOG.
Cold Non-Shock, 150 psig Saturated Steam, Vacuum Service to 29 inches Hg.

**FEATURES**

- Spring return to close (-01)
- Spring return to open (-08)
- RPTFE stuffing box ring
- All components of lever are stainless steel
- Nitride corrosion protection
- Operating torque is approximately three times standard valve torque

**STANDARD MATERIAL LIST**

1. “Deadman” handle
2. Stem packing
3. Stem bearing
4. Ball
5. Seat (2)
6. Retainer
7. Gland nut
8. Stem
9. Lever nut
10. Body seal
11. Body

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
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<td></td>
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**VARIATIONS AVAILABLE:**

89-540 Series (316 SS Ball & Stem)

**OPTIONS AVAILABLE:**

-08 - 90º Reversed Stem (Spring Open) 1/4” to 2”
-14 - Vented Ball (see page J-2) 1/4” to 2”
-21 - UHMWPE Seats (Non-PTE) 1/4” to 2”
-24 - Graphite Stem Packing 1/4” to 2”
-35 - PTE Trim 1/4” to 2”
-P01- BSPP (Parallel) Thread Connection 1/4” to 2”
-T01- BSPT (Tapered) Thread Connection 1/4” to 2”

**NUMBER SIZE A B C D Wt.**

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<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
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<th>B</th>
<th>C</th>
<th>D</th>
<th>Wt.</th>
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<td>5.50</td>
<td>9.00</td>
<td>6.66</td>
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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”)

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

**For Pressure/Temperature Ratings, Refer to Page N-14, Graph No. 11 (1-1/4” to 2”)**
Apollo® 95-100 Series
Bronze Full Port Stop and Drain Ball Valve

Threaded, 400 psig WOG, Cold Non-Shock.

FEATURES
- Chromium plated ball
- RPTFE seats and stuffing box ring
- Drain cap designed to prevent loss
- Blow-out-proof stem design
- Adjustable packing gland
- Rugged construction

STANDARD MATERIAL LIST
1. Lever and grip Steel, zinc plated w/ vinyl
2. Gland screw B16
3. Lever nut Zinc plated steel
4. Seat (2) RPTFE
5. Stem packing RPTFE
6. Stem bearing RPTFE
7. Stem B16
8. Ball B16, chrome plated
9. Retainer B16
10. Body B584-C84400
11. Cap and seal B16 and EPR

VARIATIONS AVAILABLE:
95-120 Series (Adjustable Stop Lever)

OPTIONS AVAILABLE:

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<th>OPTION</th>
<th>SIZES</th>
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<td>-07</td>
<td>Tee Handle</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-08</td>
<td>90° Reversed Stem</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-10</td>
<td>SS Lever &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-14</td>
<td>Vented Ball (see page J-2)</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-15</td>
<td>Round Handle</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-18</td>
<td>Plain Yellow Grip</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-20</td>
<td>Slot Vented Ball</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-27</td>
<td>Latch Lock Lever</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-32</td>
<td>SS Tee Handle &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
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<td>-45</td>
<td>Less Lever &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
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<td>-46</td>
<td>Latch Lock Lever - Lock Close Only</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-48</td>
<td>SS Oval Handle</td>
<td>1/2&quot; to 1&quot;</td>
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<td>-69</td>
<td>Assembled Dry</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-63</td>
<td>Threaded x Solder Retainer</td>
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BRONZE FULL PORT STOP AND DRAIN BALL VALVE

<table>
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<th>SIZE</th>
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<th>B</th>
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</table>

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3

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**Apollo® 95-200 Series**

Bronze Solder End Full Port Stop and Drain Ball Valve

Solder End, 400 psig WOG, Cold Non-Shock.

**FEATURES**

- Chromium plated ball
- RPTFE seats and stuffing box ring
- Drain cap designed to prevent loss
- Blow-out-proof stem design
- Adjustable packing gland
- Rugged construction

**STANDARD MATERIAL LIST**

<table>
<thead>
<tr>
<th>Number</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>Wt.</th>
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**VARIATIONS AVAILABLE:**

95-220 Series (Adjustable Stop Lever)

**OPTIONS AVAILABLE:**

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<th>(SUFFIX)</th>
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<td>-07 -</td>
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<td>90º Reversed Stem</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-10 -</td>
<td>SS Lever &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-14 -</td>
<td>Vented Ball (see page J-2)</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-15 -</td>
<td>Round Handle</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-18 -</td>
<td>Plain Yellow Grip</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-20 -</td>
<td>Slot Vented Ball</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-24 -</td>
<td>Graphite Stem Packing</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-27 -</td>
<td>Latch Lock Lever</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-32 -</td>
<td>SS Tee Handle &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
<tr>
<td>-45 -</td>
<td>Less Lever &amp; Nut</td>
<td>1/2&quot; to 1&quot;</td>
</tr>
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<td>-46 -</td>
<td>Latch Lock Lever - Lock Close Only</td>
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<td>-48 -</td>
<td>SS Oval Handle</td>
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<tr>
<td>-49 -</td>
<td>Assembled Dry</td>
<td>1/2&quot; to 1&quot;</td>
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</tbody>
</table>

The 95-200 is designed to be soft soldered into lines without disassembly. This allows a tested valve to be installed without disturbing the seats and seals in any way. Soldering temperatures not to exceed 500°F.

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 3
Apollo 390-100 Series
Stainless Steel Full Port AAR Ball Valve

390-105-01 AAR Approval #E929027, 390-108-01 AAR Approval #E929028

NPT Threaded, 275 psig WOG, Cold Non-Shock, 150 psig Saturated Steam, Vacuum Service to 29 inches Hg.

FEATURES
• AAR Approved
• Investment cast body and retainer
• Adjustable packing gland
• Graphite body seal and packing
• Meets NACE MR-01-75
• Positive shut-off
• Corrosion resistant
• RPTFE seats
• Blow-out-proof stem design
• Field repairable
• Bolted body design
• Compact design

STANDARD MATERIAL LIST

1. Lever and grip 304 SS w/vinyl
2. Stem packing Graphite
3. Stem bearing RPTFE
4. Ball A276-316
5. Seat (2) RPTFE
6. Retainer A351-CF8M
7. Gland screw A276-316
8. Stem A276-316
9. Lever lock nut A194-GD8 SS
10. Body A351-CF8M
11. Body seal Graphite
12. Lock washer 410 SS
13. Body bolt A193-GDB8 SS
14. Body nut A194-GD8 SS
15. Ground spring SS
16. Lock washer 304 SS

STAINLESS STEEL FULL PORT AAR BALL VALVE

For Pressure/Temperature Ratings, Refer to Page N-9, Graph No. 2
Apollo® 87-205-B6
1" Stainless Steel Full Port Flange x NPT AAR Ball Valve
AAR Approval #E919013

ANSI Class 150 Flange x NPT Threaded Ends, 275 psig WOG, Cold Non-Shock 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES
- AAR Approved
- Investment cast body and retainer
- Adjustable packing gland
- Graphite body seal and packing
- Meets NACE MR-01-75
- Positive shut-off
- Corrosion resistant
- RPTFE seats
- Blow-out-proof stem design
- Field repairable
- Bolted body design
- Compact design

STANDARD MATERIAL LIST

1. Lever and grip 304 SS w/vinyl
2. Stem packing Graphite
3. Stem bearing RPTFE
4. Ball A276-316
5. Seat (2) RPTFE
6. Retainer A351-CF8M
7. Gland screw A276-316
8. Stem A276-316
9. Lever lock nut A194-GD8 SS
10. Body A351-CF8M
11. Body seal Graphite
12. Lock washer 410 SS
13. Body bolt A193-GDB8 SS
14. Body nut A194-GD8 SS
15. Ground spring SS
16. Lock washer 304 SS

For Pressure/Temperature Ratings, Refer to Page N-9, Graph No. 2

WEIGHT = 5.50 lbs
**Apollo® 87-208-A6**

2" Stainless Steel Full Port Flange x NPT AAR Ball Valve

AAR Approval #E919013

ANSI Class 150 Flange x NPT Threaded Ends, 275 psig WOG, Cold Non-Shock 150 psig Saturated Steam.

Vacuum Service to 29 inches Hg.


**FEATURES**

- AAR Approved
- Investment cast body and retainer
- Adjustable packing gland
- Blow-out-proof stem design
- Investment cast body seal and packing
- Positive shut-off
- Field repairable
- Corrosion resistant
- Bolted body design
- Reversed operation
- RPTFE seats

**STANDARD MATERIAL LIST**

1. Lever and grip 304 SS w/ vinyl
2. Stem packing Graphite
3. Stem bearing RPTFE
4. Ball A276-316
5. Seat (2) A276-316
6. Retainer A351-CF8M
7. Gland screw A276-316
8. Stem A276-316
9. Lever lock nut A194-GD8 SS
10. Body A351-CF8M
11. Body seal Graphite
12. Lock washer 410 SS
13. Body bolt A193-GDB8 SS
14. Body nut A194-GD8 SS
15. Ground spring SS
16. Lock washer 304 SS

For Pressure/Temperature Ratings, Refer to Page N-9, Graph No. 2

Note: This valve turns counter-clockwise to close.

WEIGHT = 20.50 lbs
Apollo® 87-200-A4 Series
3" Stainless Steel Full Port Flange x NPT AAR Ball Valve
AAR Approval #E9190114

ANSI Class 150 Flange x NPT Threaded Ends, 275 psig WOG, Cold Non-Shock 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES
• AAR Approved
• Graphite body seal and packing
• Blow-out-proof stem design
• Meets NACE MR-01-75
• Bolted body design
• Field repairable
• Adjustable packing gland
• Corrosion resistant
• Positive shut-off
• Investment cast lever

STANDARD MATERIAL LIST
1. Lever A351-CF8M
2. Stem packing Graphite
3. Stem bearing RPTFE
4. Ball A351-CF8M
5. Seat (2) RPTFE
6. Retainer A351-CF8M
7. Packing gland A276-316
8. Stem A276-316
9. Lever screw A193-GDB8M SS
10. Body A351-CF8M
11. Body seal Graphite
12. Gland plate 304 SS
13. Screw A193-GDB8 SS
14. Stop A276-316
15. Lock washer 410 SS
16. Body bolt A193-GDB8M SS
17. Body lock nut A194-GD8 SS
18. Lock washer 304 SS

For Pressure/Temperature Ratings, Refer to Page N-9, Graph No. 2

3" STAINLESS STEEL FULL PORT FLANGE X NPT AAR BALL VALVE

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<tr>
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<th>C</th>
<th>D</th>
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*With 6" Lever
Apollo®82-200 Series
Bronze 3-Piece Full Port Ball Valve With Male Brazed Extensions

Solder End, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.
Designed for soft solder or brazed installation without disassembly.

FEATURES

- Full port configuration
- Blow-out-proof stem design
- RPTFE seats and seals
- Adjustable packing gland
- In-line repairable
- Latch lock handle optional

STANDARD MATERIAL LIST

1. Lever and grip Steel, zinc plated w/vinyl
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball B16, chrome plated
5. Seat (2) RPTFE
6. End cap (2) B16 (3/8") B584-C84400 (1/2" to 2")
7. Gland B16
8. Stem B16
9. Lever nut Steel, zinc plated
10. Body bolt Steel, zinc plated
11. Hex nut Steel, zinc plated
12. Body B584-C84400
13. Extension Type K copper tubing
14. Brazing alloy Sil-Fos 5
15. Cap plugs (not shown)

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

BRONZE 3-PIECE FULL PORT BALL VALVE WITH MALE BRAZED EXTENSIONS

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<th>PART NUMBERS</th>
<th>PART NO. W/316 SS BALL &amp; STEM</th>
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<th>C</th>
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NOMINAL TUBING O.D.

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H-27
Apollo® 82-200 Series

Bronze 3-Piece Full Port Ball Valve With 6” Female Brazed Extensions

Solder End, 600 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.
Designed for soft solder or brazed installation without disassembly.

FEATURES
- Full port configuration
- Blow-out-proof stem design
- RPTFE seats & seals
- Adjustable packing gland
- In-line repairable
- Latch lock handle optional

STANDARD MATERIAL LIST

1. Lever and grip Steel, zinc plated w/ vinyl
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball B16, chrome plated
5. Seat (2) RPTFE
6. End cap (2) B16 (3/8”)
7. Gland B16
8. Stem B16
9. Lever nut Steel, zinc plated
10. Body bolt Steel, zinc plated
11. Hex nut Steel, zinc plated
12. Body B584-C84400
13. Extension Type K copper tubing
14. Brazing alloy Sil-Fos 5
15. Cap plugs (not shown)

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

BRONZE 3-PIECE FULL PORT BALL VALVE WITH FEMALE BRAZED EXTENSIONS

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<th>STANDARD NUMBERS</th>
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*NOMINAL TUBING O.D.
Apollo® 65-008 Series
Stainless Steel Tank Car Valve Adaptors
AAR Approved #E989075

Table:

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<th>NUMBER</th>
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</table>
Apollo® 73-300 Series
Carbon Steel Double Union End Ball Valve

Threaded, 3000 psig WOG, Cold Non-Shock, 150 psig Saturated Steam.
Vacuum Service to 29 inches Hg.

FEATURES
- Heavy duty quarter turn lever
- Blow-out-proof stem design
- RPTFE seats and seals
- Adjustable packing gland
- Steel barstock design
- Chromium plated ball
- Easy installation and maintenance
- Nitride corrosion protection

UL LISTING @ 250 PSIG MAX

Note: Listings apply ONLY to the standard -01 valves.

STANDARD MATERIAL LIST

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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VARIATIONS AVAILABLE:
73-340 Series (316 SS ball & Stem)

For Pressure/Temperature Ratings, Refer to Page N-16, Graph No. 15
**Apollo® 73-400 Series**

**Carbon Steel Double Union End Socket Weld Ball Valve**

Socket Weld End, 3000 psig WOG, Cold Non-Shock, 150 psig Saturated Steam.

Vacuum Service to 29 inches Hg.


**FEATURES**

- Heavy duty quarter turn lever
- Blow-out-proof stem design
- RPTFE seats and seals
- Adjustable packing gland
- Steel barstock design
- Chromium plated ball
- Easy installation and maintenance
- Nitride corrosion protection

**UL LISTING @ 250 PSIG MAX**


Note: Listings apply ONLY to the standard -01 valves.

**STANDARD MATERIAL LIST**

<table>
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<th>NUMBER</th>
<th>SIZE</th>
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<th>C</th>
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**VARIATIONS AVAILABLE:**

73-440 Series (316 SS Ball & Stem)

For Pressure/Temperature Ratings, Refer to Page N-16, Graph No. 15
Apollo® 79-700 Series
Full Port Forged Brass Refrigerant Ball Valve

FEATURES

- Bi-directional flow design
- PTFE seats and seals
- Chromium plated pressure equalizing ball
- Exclusive design rotation stops
- Copper extensions silver brazed to body allows use of Sil-Fos
- Capped, triple sealed stem with metal back up reduces leaks
- Blow-out-proof stem design
- Adjustable packing gland
- Hermetic welded assembly
- Full Port Design

UL LISTINGS

LISTED

STANDARD MATERIAL LIST

1. Cap B16
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball B16, Chrome plated
5. Seat (2) RPTFE
6. Packing gland B16
7. Stem B16
8. O-Ring Neoprene
9. Stop Plate Steel, Plated
10. Hex nut B16
11. Retainer B16
12. Tube extension Copper tubing
13. Body Forged brass

UL® LISTED

Guide SFJQ: Valves, Refrigerant

For Pressure/Temperature Ratings, Refer to Page N-16, Graph No. 16
Apollo® 80-100 Series
Bronze LP-Gas Ball Valve

Threaded, 600 psig WOG, Cold Non-Shock. 250 psig LP-Gas.
150 psig Saturated Steam. Vacuum Service to 29 inches Hg.

FEATURES
- UL Listed for LP-Gas, natural gas, flammable liquid and heated oil
- Large ports to reduce pressure drop
- RPTFE seats and seals
- Blow-out-proof stem design
- Optional tee handle available (-07)
- Quarter turn On-Off
- Adjustable packing gland
- One piece bronze body
- Chromium plated ball

UL LISTINGS
- Guide MHKZ: No. 6 oil at 250°F.

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

OPTIONS AVAILABLE:
(SUFFIX) OPTION SIZES
-27 - Latch Lock Lever 1/4" to 3"

BRONZE LP-GAS BALL VALVE

<table>
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For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4
Apollo® 81-100 Series
Bronze LP-Gas Ball Valve With Plain Ball

Threaded, 600 psig WOG, Cold Non-Shock. 250 psig LP-Gas.
150 psig Saturated Steam. Vacuum Service to 29 inches Hg.

FEATURES
- UL Listed for LP-Gas, natural gas, flammable liquid and heated oil
- Large ports to reduce pressure drop
- RPTFE seats and seals
- Blow-out-proof stem design
- Optional tee handle available (-07)
- Quarter turn On-Off
- Adjustable packing gland
- One piece bronze body
- Plain ball

UL LISTINGS
- Guide MHKZ: No. 6 oil at 250°F.

STANDARD MATERIAL LIST

<table>
<thead>
<tr>
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<th>SIZE</th>
<th>A</th>
<th>B</th>
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Note: 250 psig Max. UL Listing.

For Pressure/Temperature Ratings, Refer to Page N-10, Graph No. 4
**Saturn® 90-100 Series**
Bronze Uni-Body Saturn® Ball Valve

Threaded, 300 psig WOG, Cold Non-Shock. 150 psig Saturated Steam.

**FEATURES**
- UL Listed at 300 psig for fuel, inert gas and flammable liquids
- Valves with tee handles UL listed
- PTFE seats and seals
- Blow-out-proof stem design
- Adjustable packing gland
- One piece bronze body
- Chromium plated ball
- Compact

**UL LISTINGS**
- Guide YQNZ: Compressed gas shutoff valve for use with air, inert gases, hydrogen, oxygen and common refrigerants except ammonia.

**STANDARD MATERIAL LIST**

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**BRONZE UNI-BODY SATURN® BALL VALVE**

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For Pressure/Temperature Ratings, Refer to Page 10, Graph No. 3
Apollo® 489-100 Series
Carbon Steel LP-Gas Ball Valve

NPT 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 LP-Gas. 150 psig Saturated Steam. Vacuum Service to 29 in. Hg.

FEATURES
- UL Listed for LP-Gas, natural gas and flammable liquid to 250 psig
- RPTFE seats and stuffing box ring
- Mounting pad for easy actuator mounting
- Investment cast components
- Blow-out-proof stem design
- Adjustable packing gland
- Nitride corrosion protection

UL LISTINGS
- Guide MHKZ: No. 6 oil at 250°F.

STANDARD MATERIAL LIST
1. Lever and grip Steel, zinc plated w/vinyl
2. Stem packing RPTFE
3. Stem bearing RPTFE
4. Ball A108-12L14, chrome plated
5. Seat (2) RPTFE
6. Retainer A108-12L14 (1/4" to 1")
   A216-WCB (1-1/4" to 3")
7. Gland nut A108-12L14
8. Stem A108-12L14
9. Lever nut Steel, zinc plated
10. Body seal PTFE (1-1/4" to 3")
11. Body A216-WCB

VARIATIONS AVAILABLE:
489-140-01 Series with 316 SS Ball and Stem, UL Listed as noted above.

Note: 250 psig Max. UL Listing.

CARBON STEEL BALL VALVE

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For Pressure/Temperature Ratings, Refer to Page N-15, Graph No. 13
(1/4" to 1")
Refer to Page N-14, Graph No. 14
(1-1/4" to 2")
Apollo® 50-GB0 Series
Bronze Full Port Main Burner Gas Ball Valve
(GB-50 Series)

FEATURES

- Chromium plated ball
- RPTFE packing
- PTFE seats
- Pilot side tap
- Blow-out-proof stem design
- Adjustable packing gland
- Quarter turn On-Off
- Reversible handle

DESIGN CERTIFICATIONS

- UL LISTINGS
  - AGA 3-88
  - ANSI Z21.15
  - CGA 9.1
  - CLIR No. 35 & CR91-002

- Guide MHKZ: Gas shut-off valve for use with natural and manufactured gases.

STANDARD MATERIAL LIST

1. Lever and grip
2. Stem packing
3. Stem bearing
4. Ball
5. Seat (2)
6. Gland screw
7. Stem
8. Plug
9. Retainer
10. Hex Nut
11. Body

| UL ® LISTED |

<table>
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<th>NUMBER</th>
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</table>

OPTIONS AVAILABLE:

- SUFFIX | OPTION SIZES
- A1 - 1/4" NPT Side Tap 1" to 2"
- A7 - 1/4" NPT Side Tap & Tee Handle 1" to 2"
- A7 - 1/8" NPT Side Tap & Tee Handle 3/4" to 2"
- A7A - 1/4" NPT Dual Side Tap & Tee Handle 1" to 2"
**Apollo® 51-GB0 Series**

Bronze Main Burner Gas Ball Valve  
(GB-10 Series)

**FEATURES**
- Chromium plated ball
- RPTFE packing
- PTFE seats
- Available in three handle configurations
- Blow-out-proof stem design
- Adjustable packing gland
- Quarter turn On-Off

**DESIGN CERTIFICATIONS**
- AGA 3-88
- ANSI Z21.15
- CLIR No. 35 & CR91-002

**STANDARD MATERIAL LIST**

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**OPTIONS AVAILABLE:**
- **-L1**: Lever Handle W/ Vinyl  
  Sizes: 3/8" to 1"
- **-T1**: Tee Handle  
  Sizes: 3/8" to 1"

**BRONZE FULL PORT MAIN BURNER GAS BALL VALVE**
**Apollo® 51-GB0 Series**

Bronze Main Burner Gas Ball Valve

(GB-11 Series)

**FEATURES**

- Chromium plated ball
- RPTFE packing
- PTFE seats
- Available in three handle configurations
- Blow-out-proof stem design
- Adjustable packing gland
- Quarter turn On-Off

**DESIGN CERTIFICATIONS**

- AGA 3-88
- ANSI Z21.15
- CLIR No. 35 & CR91-002

**STANDARD MATERIAL LIST**

1. Handle  Yellow die-cast zinc
2. Stem packing  RPTFE
3. Stem bearing  PTFE
4. Ball  Brass ASTM B16, chrome plated
5. Seat (2)  PTFE
6. Gland screw  Brass ASTM B16
7. Stem  Brass ASTM B16
8. Retainer  Steel ASTM A563
9. Hex Nut  grade A, zinc plated
10. Body  Brass ASTM B584

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**OPTIONAL “LEVER” HANDLE**

- 3/8" GB-11 (51GB3L21)
- 1/2" GB-11 (51GBGL22)
- 5/8" GB-11 (51GB4L23)

**OPTIONAL “TEE” HANDLE**

- 3/8" GB-11 (51GB3T21)
- 1/2" GB-11 (51GB3T22)
- 5/8" GB-11 (51GB4T23)