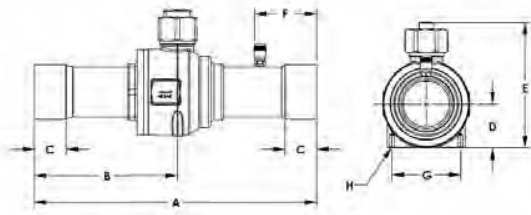
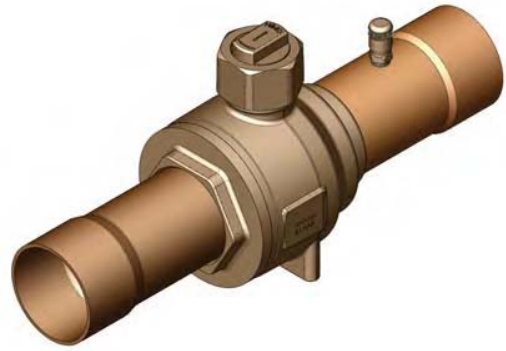


CYCLEMASTER® Ball Valves

Look for these Mueller advantages:

- Maximum working pressure (PS): 700 psig, 48 bar
- Working temperature range (TS): -40°F/300°F, -40°C/149°C
- Compatible with all CFC, HCFC and HFC refrigerants and oils
- UL/cUL Listed, CE Certified
- RoHS Compliant
- Full port construction to match line size ID
- Internally equalized ball design
- Rupture-proof encapsulated stem
- MCM™ Seal Technology



| Part No. | Size (in) | Cv | A (in) | B (in) | C (in) | D (in) | E (in) | F** (in) | G** (in) | Port Size | H** | Wt (lb) | Seal Cap Kit**** |
|------------|-----------|------|--------|---------|---------|---------|---------|----------|----------|-----------|----------|---------|------------------|
| A 17859• | 1/4 | 1.0 | 5 7/16 | 2 15/16 | 5/16 | 7/8 | 2 3/4 | NA | 14 | 1/2 | M4 X 0.7 | 0.70 | A 17842 |
| A 17860• | 3/8 | 4.3 | 5 1/2 | 3 | 5/16 | 7/8 | 2 3/4 | 15/16 | 14 | 1/2 | M4 X 0.7 | 0.69 | A 17842 |
| A 17861• | 1/2 | 6.2 | 6 3/8 | 3 7/16 | 3/8 | 7/8 | 2 3/4 | 1 3/16 | 14 | 1/2 | M4 X 0.7 | 0.69 | A 17842 |
| A 17862• | 5/8 | 11.2 | 6 3/8 | 3 7/16 | 1/2 | 7/8 | 2 3/4 | 1 3/8 | 14 | 1/2 | M4 X 0.7 | 0.73 | A 17842 |
| A 17863• | 3/4 | 19.0 | 7 7/16 | 3 7/8 | 5/8 | 1 1/4 | 3 1/2 | 1 1/2 | 20 | 3/4 | M4 X 0.7 | 1.15 | A 17843 |
| A 17864• | 7/8 | 29.3 | 7 7/16 | 3 7/8 | 3/4 | 1 1/4 | 3 1/2 | 1 5/8 | 20 | 3/4 | M4 X 0.7 | 1.53 | A 17843 |
| A 17865 | 1 1/8 | 59.6 | 8 7/16 | 4 5/16 | 7/8 | 1 9/16 | 3 13/16 | 1 3/4 | 25 | 1 | M4 X 0.7 | 2.92 | A 17844 |
| A 17866 | 1 3/8 | 84.6 | 10 | 5 | 1 | 1 1/2 | 4 3/16 | 2 1/16 | 30 | 1 1/4 | M6 X 1.0 | 3.48 | A 17844 |
| A 17867 | 1 5/8 | 225 | 11 | 5 1/2 | 1 1/8 | 1 11/16 | 4 7/8 | 2 1/4 | 34 | 1 1/2 | M6 X 1.0 | 5.02 | A 17845 |
| A 17868 | 2 1/8 | 292 | 12 | 6 | 1 3/8 | 2 1/8 | 5 9/16 | 2 17/20 | 34 | 2 | M6 X 1.0 | 8.60 | A 17845 |
| A 17869 | 2 5/8 | 423 | 13 1/2 | 6 13/16 | 1 1/2 | | | 3 23/50 | | 2-9/20 | | 9.20 | A 17846 |
| A 17870 | 3 1/8 | 553 | 16 | 8 | 1 3/8 | | | 3 1/8 | | 3 | | 11.00 | A 17846 |
| A 17871* | 2 5/8 | 230 | 12 | 6 | 1 3/8 | 2 1/8 | 5 5/8 | 2 3/8 | 34 | 2 | M6 X 1.0 | 14.00 | A 17845 |
| A 17872* | 3 1/8 | 143 | 12 | 6 | 1 11/16 | 2 1/8 | 5 5/8 | 3 1/16 | 34 | 2 | M6 X 1.0 | 23.50 | A 17845 |
| B 34909*** | 3 5/8*** | | | | | | | | | | | | |
| B 34910*** | 4 1/8*** | | | | | | | | | | | | |

| Part No. | Size (mm) | Kv | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F** (mm) | G** (mm) | Port Size | H** | Wt (kg) | Seal Cap Kit**** |
|------------|-----------|------|--------|--------|--------|--------|--------|----------|----------|-----------|----------|---------|------------------|
| A 17859• | 6 | 0.9 | 138 | 75 | 8 | 22 | 70 | NA | 356 | 13 | M4 X 0.7 | 0.32 | A 17842 |
| A 17860• | 10 | 3.7 | 140 | 76 | 8 | 22 | 70 | 24 | 356 | 13 | M4 X 0.7 | 0.31 | A 17842 |
| A 17861• | 13 | 5.3 | 162 | 87 | 10 | 22 | 70 | 30 | 356 | 13 | M4 X 0.7 | 0.31 | A 17842 |
| A 17862• | 16 | 9.6 | 162 | 87 | 13 | 22 | 70 | 35 | 356 | 13 | M4 X 0.7 | 0.33 | A 17842 |
| A 17863• | 19 | 16.2 | 189 | 98 | 16 | 32 | 89 | 38 | 508 | 19 | M4 X 0.7 | 0.52 | A 17843 |
| A 17864• | 22 | 25.0 | 189 | 98 | 19 | 32 | 89 | 41 | 508 | 19 | M4 X 0.7 | 0.69 | A 17843 |
| A 17865 | 29 | 50.8 | 214 | 110 | 22 | 40 | 97 | 44 | 635 | 25 | M4 X 0.7 | 1.32 | A 17844 |
| A 17866 | 35 | 72.1 | 254 | 127 | 25 | 38 | 106 | 52 | 762 | 32 | M6 X 1.0 | 1.58 | A 17844 |
| A 17867 | 41 | 192 | 279 | 140 | 29 | 43 | 124 | 57 | 864 | 38 | M6 X 1.0 | 2.28 | A 17845 |
| A 17868 | 54 | 249 | 305 | 152 | 35 | 54 | 141 | 72 | 864 | 51 | M6 X 1.0 | 3.90 | A 17845 |
| A 17869 | 67 | 361 | 305 | 152 | 35 | 54 | 143 | 60 | 864 | 51 | NA | 6.35 | A 17846 |
| A 17870 | 79 | 472 | 305 | 152 | 43 | 54 | 143 | 78 | 864 | 51 | NA | 10.66 | A 17846 |
| A 17871* | 67 | 196 | 343 | 173 | 38 | | | 88 | | 62 | M6 X 1.0 | 4.17 | A 17845 |
| A 17872* | 79 | 122 | 406 | 203 | 35 | | | 79 | | 76 | M6 X 1.0 | 4.99 | A 17845 |
| B 34909*** | 92*** | | | | | | | | | | | | |
| B 34910*** | 104*** | | | | | | | | | | | | |

- * Reduced port
- ** Where Applicable
- *** Consult factory for details
- **** Includes Seal Cap, Seal Cap Gasket, Anti-Friction Ring, Cap Nut
- Sizes not available in "Standard, A" or "Standard with Access, AC" options. Substitute "AP" for "A" and "AQ" for "AC".

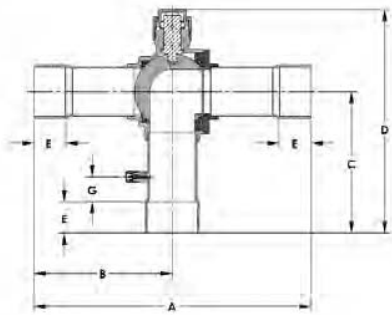
Prefixed for Ball Valve Options:

- A = Standard
- AC = Standard with access
- ACX = Standard with access and I-piece valox cap
- AP = Drilled & tapped
- APX = Drilled & tapped with I-piece valox cap
- AQ = Drilled & tapped with access
- AQX = Drilled & tapped with access & I-piece valox cap
- AU = 3-Way with access

CYCLEMASTER® 3-Way Ball Valves

Look for these Mueller advantages:

- Maximum working pressure (PS): 700 psig, 48 bar
- Working temperature range (TS): -40°F/300°F, -40°C/149°C
- Compatible with all CFC, HCFC and HFC refrigerants and oils
- UL/cUL Listed, CE Certified
- RoHS Compliant
- Full port construction to match line size ID
- Internally equalized ball design
- Rupture-proof encapsulated stem
- MCM™ Seal Technology



| Part No. | Size (in) | Cv | A (in) | B (in) | C (in) | D (in) | E (in) | F** (in) | G** (in) | Wt (lb) | Seal Cap Kit**** |
|----------|-----------|-------|---------|---------|---------|---------|---------|----------|----------|---------|------------------|
| AU17860 | 3/8 | 2.23 | 4 7/8 | 2 21/32 | 2 19/64 | 3 21/32 | 5/16 | 1/2 | 41/64 | 0.63 | A 17842 |
| AU17861 | 1/2 | 3.94 | 5 3/8 | 3 3/64 | 2 43/64 | 4 7/32 | 3/8 | 1/2 | 53/64 | 0.63 | A 17842 |
| AU17862 | 5/8 | 4.63 | 5 3/8 | 2 59/64 | 2 35/64 | 4 7/64 | 1/2 | 1/2 | 27/32 | 0.63 | A 17842 |
| AU17863 | 3/4 | 11.90 | 6 1/4 | 3 57/64 | 3 | 5 1/4 | 5/8 | 3/4 | 55/64 | 1.40 | A 17843 |
| AU17864 | 7/8 | 10.89 | 5 31/32 | 3 5/32 | 2 29/32 | 4 7/8 | 3/4 | 3/4 | 27/32 | 1.52 | A 17843 |
| AU17865 | 1 1/8 | 19.33 | 6 39/64 | 3 3/16 | 3 7/64 | 5 31/64 | 29/32 | 1 | 53/64 | 2.82 | A 17844 |
| A 17545 | 1 3/8 | 31.06 | 8 1/16 | 4 7/64 | 3 61/64 | 6 57/64 | 31/32 | 1 1/4 | 1 5/64 | 4.97 | A 17844 |
| A 17546 | 1 5/8 | 44.69 | 8 7/8 | 4 7/16 | 4 23/64 | 7 33/64 | 1 3/32 | 1 1/2 | 1 5/32 | 7.60 | A 17845 |
| AU17868 | 2 1/8 | 76.32 | 9 5/16 | 4 39/64 | 4 23/32 | 8 13/32 | 1 11/32 | 2 | 1 5/64 | 13.80 | A 17845 |
| AU17871* | 2 5/8 | 69.85 | 9 1/16 | 4 15/32 | 4 19/32 | 8 9/32 | 1 15/32 | 2 | 1 1/64 | 8.80 | A 17845 |
| AU17872* | 3 1/8 | 58.19 | 8 11/16 | 4 9/32 | 4 11/32 | 8 3/32 | 1 21/32 | 2 | 1 27/64 | 11.10 | A 17845 |

| Part No. | Size (mm) | Kv | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F** (mm) | G** (mm) | Wt (kg) | Seal Cap Kit**** |
|----------|-----------|----|--------|--------|--------|--------|--------|----------|----------|---------|------------------|
| AU17860 | 10 | 2 | 124 | 67 | 58 | 93 | 8 | 10 | 16 | 0.29 | A 17842 |
| AU17861 | 13 | 3 | 137 | 77 | 68 | 107 | 10 | 10 | 21 | 0.29 | A 17842 |
| AU17862 | 16 | 4 | 137 | 74 | 65 | 104 | 13 | 10 | 21 | 0.29 | A 17842 |
| AU17863 | 19 | 10 | 159 | 99 | 76 | 133 | 16 | 19 | 22 | 0.64 | A 17843 |
| AU17864 | 22 | 9 | 152 | 80 | 74 | 124 | 19 | 19 | 21 | 0.69 | A 17843 |
| AU17865 | 29 | 16 | 168 | 81 | 79 | 139 | 23 | 25 | 21 | 1.28 | A 17844 |
| A 17545 | 35 | 26 | 205 | 104 | 100 | 175 | 25 | 32 | 27 | 2.25 | A 17844 |
| A 17546 | 41 | 38 | 225 | 117 | 111 | 191 | 28 | 38 | 29 | 3.45 | A 17845 |
| AU17868 | 54 | 65 | 237 | 117 | 120 | 214 | 34 | 51 | 27 | 6.26 | A 17845 |
| AU17871* | 67 | 60 | 230 | 114 | 117 | 210 | 37 | 51 | 16 | 3.99 | A 17845 |
| AU17872* | 79 | 50 | 221 | 109 | 110 | 206 | 42 | 51 | 16 | 5.03 | A 17845 |

- * Reduced port
- ** Where Applicable
- *** Consult factory for details
- **** Includes Seal Cap, Seal Cap Gasket, Anti-Friction Ring, Cap Nut
- Sizes not available in "Standard, A" or "Standard with Access, AC" options.
Substitute "AP" for "A" and "AQ" for "AC".

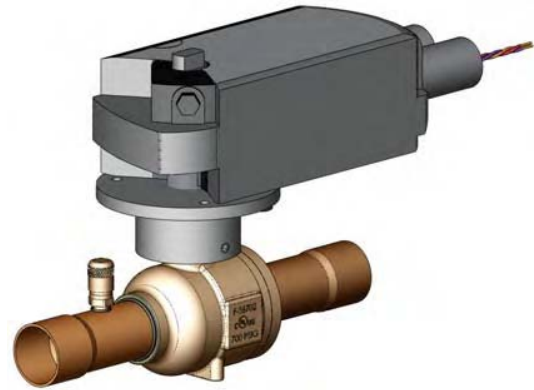
- Prefixed for Ball Valve Options:
- A = Standard
 - AC = Standard with access
 - ACX = Standard with access and 1-piece valox cap
 - AP = Drilled & tapped
 - APX = Drilled & tapped with 1-piece valox cap
 - AQ = Drilled & tapped with access
 - AQX = Drilled & tapped with access & 1-piece valox cap
 - AU = 3-Way with access



CYCLEMASTER® Actuated Ball Valves

Look for these Mueller advantages:

- Maximum working pressure (PS): 700 psig, 48 bar
- Power Supply: 24 VAC
- Ambient Temperature: -22°F to 130°F, -30°C to 54°C
- Compatible with all CFC, HCFC and HFC refrigerants and oils
- UL/cUL Listed, CE Certified
- RoHS Compliant
- Full Shutoff capability
- Gradual open/close stops line hammer
- Remote operating capability
- Removable actuator for quick change replacement
- Manual override and valve positioning
- Electronic overload protection
- Motor Specifications:



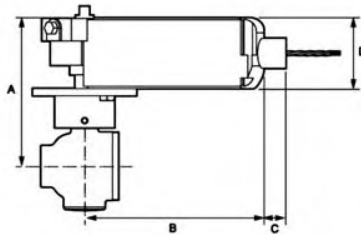
Warnings:

Motors not for use in wet or applications where moisture will condense on motor.

Heater assembly is required in low temperature applications.

| Motor Series | 1 | 2 | 3 | 4 |
|------------------------|-----|-----|-----|-----|
| Torque (in-lb) | 44 | 132 | 310 | 620 |
| Power Consumption (W) | 2.3 | 3.0 | 7 | 16 |
| Running time (seconds) | 90 | 125 | 125 | 125 |

Motor 4 consists of 2 stacked motors operating in tandem.



| Part No. | Size (in) | Cv | A (in) | B (in) | C (in) | D (in) | Wt. (lb) | Motor Series | Hub Design | Actuator Kits | Heater |
|----------|-----------|--------|---------|---------|--------|---------|----------|--------------|------------|---------------|---------|
| AW17861 | 1/2 | 6.20 | 4 1/20 | 3 22/31 | NA | 2 20/29 | 2.48 | 1 | A | A 18390 | — |
| AW17862 | 5/8 | 11.20 | 4 1/20 | 3 22/31 | NA | 2 20/29 | 2.38 | 1 | A | A 18390 | — |
| AW17863 | 3/4 | 18.95 | 4 9/25 | 3 22/31 | NA | 2 20/29 | 2.84 | 1 | B | A 18392 | — |
| AW17864 | 7/8 | 29.30 | 4 9/25 | 3 22/31 | NA | 2 20/29 | 3.22 | 1 | B | A 18392 | — |
| AW17865 | 1 1/8 | 56.55 | 4 8/9 | 5 3/4 | 13/20 | 3 9/50 | 6.42 | 2 | C | A 18394 | A 18366 |
| AW17866 | 1 3/8 | 84.58 | 5 3/25 | 5 3/4 | 13/20 | 3 9/50 | 6.81 | 2 | C | A 18394 | A 18366 |
| AW17867 | 1 5/8 | 225.04 | 5 21/25 | 5 3/4 | 13/20 | 3 9/50 | 9.66 | 2 | D | A 18396 | A 1836 |
| AW17868 | 2 1/8 | 291.59 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | 13.51 | 3 | D | A 18395 | A 18367 |
| AW17869 | 2 5/8 | 423.00 | 9 1/2 | 8 1/4 | 65/97 | 5 2/7 | 25.12 | 4 | E | A 18401 | A 18367 |
| AW17870 | 3 1/8 | 553.00 | 9 7/8 | 8 1/4 | 65/97 | 5 2/7 | 27.12 | 4 | E | A 18401 | A 18367 |
| AW17871* | 2 5/8 | 184.85 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | 14.02 | 3 | D | A 18395 | A 18367 |
| AW17872* | 3 1/8 | 128.00 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | NA | 3 | D | A 18395 | A 18367 |

| Part No. | Size (in) | Cv | A (in) | B (in) | C (in) | D (in) | Wt. (lb) | Motor Series | Hub Design | Actuator Kits | Heater |
|----------|-----------|--------|--------|--------|--------|--------|----------|--------------|------------|---------------|---------|
| AW17861 | 13 | 5.29 | 103 | 94 | NA | 68 | 1.12 | 1 | A | A 18390 | — |
| AW17862 | 16 | 9.55 | 103 | 94 | NA | 68 | 1.08 | 1 | A | A 18390 | — |
| AW17863 | 19 | 16.16 | 111 | 94 | NA | 68 | 1.29 | 1 | B | A 18392 | — |
| AW17864 | 22 | 24.99 | 111 | 94 | NA | 68 | 1.46 | 1 | B | A 18392 | — |
| AW17865 | 29 | 48.24 | 124 | 146 | 17 | 81 | 2.91 | 2 | C | A 18394 | A 18366 |
| AW17866 | 35 | 72.15 | 130 | 146 | 17 | 81 | 3.09 | 2 | C | A 18394 | A 18366 |
| AW17867 | 41 | 191.96 | 148 | 146 | 17 | 81 | 4.38 | 2 | D | A 18396 | A 18366 |
| AW17868 | 54 | 248.73 | 165 | 210 | 17 | 100 | 6.13 | 3 | D | A 18395 | A 18367 |
| AW17869 | 67 | 360.82 | 241 | 210 | 17 | 134 | 11.39 | 4 | E | A 18401 | A 18367 |
| AW17870 | 79 | 471.71 | 251 | 210 | 17 | 134 | 12.30 | 4 | E | A 18401 | A 18367 |
| AW17871* | 67 | 157.68 | 165 | 210 | 17 | 100 | 6.36 | 3 | D | A 18395 | A 18367 |
| AW17872* | 79 | 109.18 | 165 | 210 | 17 | 100 | NA | 3 | D | A 18395 | A 18367 |

* Reduced Port
 Prefixed for Actuator Options:
 AWS = Straight Actuated Ball Valve with Auxillary Switch
 AYS = 3 Way Actuated Ball Valve with Auxillary Switch
 AS = Actuator kit with Auxillary Switch

Hub References:

A = A 18389
 B = A 18391
 C = A 18393
 D = A 18368
 E = A 18400

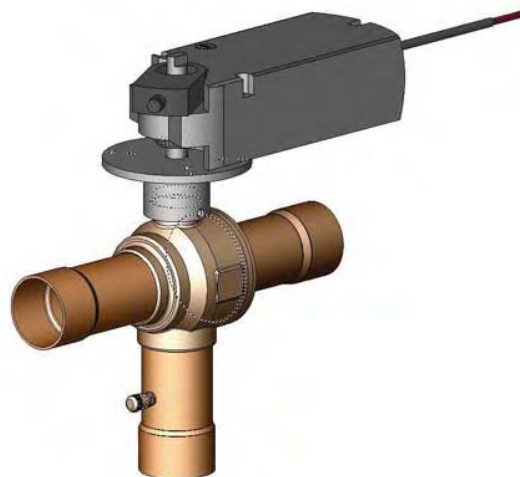
For tonnage calculations, see page 6.



CYCLEMASTER® 3-Way Actuated Ball Valves

Look for these Mueller advantages:

- Maximum working pressure (PS): 700 psig, 48 bar
- Power Supply: 24 VAC
- Ambient Temperature: -22°F to 130°F, -30°C to 54°C
- Compatible with all CFC, HCFC and HFC refrigerants and oils
- UL/cUL Listed, CE Certified
- RoHS Compliant
- Full Shutoff capability
- Gradual open/close stops line hammer
- Remote operating capability
- Removable actuator for quick change replacement
- Manual override and valve positioning
- Electronic overload protection
- Motor Specifications:



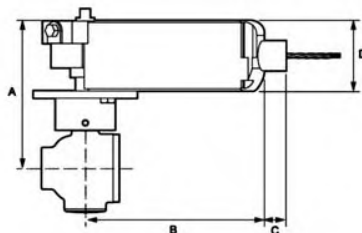
Warnings:

Motors not for use in wet or applications where moisture will condense on motor.

Heater assembly is required in low temperature applications.

| Motor Series | 1 | 2 | 3 | 4 |
|------------------------|-----|-----|-----|-----|
| Torque (in-lb) | 44 | 132 | 310 | 620 |
| Power Consumption (W) | 2.3 | 3.0 | 7 | 16 |
| Running time (seconds) | 90 | 125 | 125 | 125 |

Motor 4 consists of 2 stacked motors operating in tandem.



| Part No. | Size | Cv | A (in) | B (in) | C (in) | D (in) | Wt. (lb) | Motor Hub Series Design | Actuator Kits | Heater |
|----------|-------|------|--------|---------|--------|---------|----------|-------------------------|---------------|---------|
| AY17861 | 1/2 | 3.94 | 4 1/20 | 3 22/31 | NA | 2 20/29 | | 1 A | A 18390 | — |
| AY17862 | 5/8 | 4.63 | 4 1/20 | 3 22/31 | NA | 2 20/29 | 2.39 | 1 A | A 18390 | — |
| AY17863 | 3/4 | 11.9 | 4 9/25 | 3 22/31 | NA | 2 20/29 | | 1 B | A 18392 | — |
| AY17864 | 7/8 | 10.9 | 4 9/25 | 3 22/31 | NA | 2 20/29 | 3.25 | 1 B | A 18392 | — |
| AY17865 | 1 1/8 | 19.3 | 4 8/9 | 5 3/4 | 13/20 | 3 9/50 | 9.00 | 2 C | A 18394 | A 18366 |
| A 17810 | 1 3/8 | 31.1 | 5 7/10 | 5 3/4 | 13/20 | 3 9/50 | 11.00 | 2 D | A 18396 | A 18366 |
| A 17811 | 1 5/8 | 44.7 | 6 4/21 | 5 3/4 | 13/20 | 3 9/50 | 12.00 | 3 D | A 18396 | A 18367 |
| AY17868 | 2 1/8 | 76.3 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | 13.45 | 3 D | A 18395 | A 18367 |
| AY17871 | 2 5/8 | 69.9 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | 19.00 | 3 D | A 18395 | A 18367 |
| AY17872 | 3 1/8 | 58.2 | 6 1/2 | 8 1/4 | 65/97 | 3 40/43 | 15.00 | 3 D | A 18395 | A 18367 |

| Part No. | Size (mm) | Kv | A (mm) | B (mm) | C (mm) | D (mm) | Wt. (kg) | Motor Hub Series Design | Actuator Kits | Heater |
|----------|-----------|-------|--------|--------|--------|--------|----------|-------------------------|---------------|---------|
| AY17861 | 13 | 3.36 | 103 | 94 | NA | 68 | | 1 A | A 18390 | — |
| AY17862 | 16 | 3.95 | 103 | 94 | NA | 68 | 1.08 | 1 A | A 18390 | — |
| AY17863 | 19 | 10.15 | 111 | 94 | NA | 68 | | 1 B | A 18392 | — |
| AY17864 | 22 | 9.30 | 111 | 94 | NA | 68 | 1.47 | 1 B | A 18392 | — |
| AY17865 | 29 | 16.46 | 124 | 146 | 17 | 81 | 4.08 | 2 C | A 18394 | A 18366 |
| A 17810 | 35 | 26.53 | 145 | 146 | 17 | 81 | 4.99 | 2 D | A 18396 | A 18366 |
| A 17811 | 41 | 38.13 | 157 | 146 | 17 | 81 | 5.44 | 3 D | A 18396 | A 18367 |
| AY17868 | 54 | 65.08 | 165 | 210 | 17 | 100 | 6.10 | 3 D | A 18395 | A 18367 |
| AY17871 | 67 | 59.62 | 165 | 210 | 17 | 100 | 8.62 | 3 D | A 18395 | A 18367 |
| AY17872 | 79 | 49.64 | 165 | 210 | 17 | 100 | 6.80 | 3 D | A 18395 | A 18367 |

* Reduced Port
 Prefixed for Actuator Options:
 AWS = Straight Actuated Ball Valve with Auxillary Switch
 AYS = 3 Way Actuated Ball Valve with Auxillary Switch
 AS = Actuator kit with Auxillary Switch

Hub References:
 A = A 18389
 B = A 18391
 C = A 18393
 D = A 18368
 E = A 18400

For tonnage calculations, see page 6.



CYCLEMASTER® Actuated Ball Valve Tonnage

Tonnage Calculations are based on the following conditions:

Evaporator temperature: 10°F

Vapor temperature exiting evaporator: 10°F superheated

Liquid temperature entering evaporator: 100°F

Hot gas temperature: 140°F

Pressure drop across valve: 1 psig

CYCLEMASTER® Actuated Ball Valves

| Part No. | Nominal Liquid Capacity (tons) | | | Suction Vapor Capacity (tons) | | | Nominal Hot Gas Capacity (tons) | | |
|----------|--------------------------------|--------|--------|-------------------------------|-------|--------|---------------------------------|--------|--------|
| | R134a | R404a | R410a | R134a | R404a | R410a | R134a | R404a | R410a |
| AW17861 | 18.25 | 12.63 | 19.63 | 2.00 | 1.50 | 2.33 | 3.00 | 2.86 | 4.33 |
| AW17862 | 33.00 | 22.80 | 35.44 | 2.67 | 2.83 | 4.25 | 5.38 | 5.17 | 7.86 |
| AW17863 | 55.78 | 38.57 | 60.00 | 4.50 | 4.78 | 7.22 | 9.00 | 8.75 | 13.25 |
| AW17864 | 86.25 | 59.67 | 92.71 | 7.00 | 7.40 | 11.17 | 14.00 | 13.50 | 20.50 |
| AW17865 | 166.44 | 115.00 | 179.00 | 13.40 | 14.25 | 21.56 | 27.11 | 26.00 | 39.60 |
| AW17866 | 249.00 | 172.14 | 267.60 | 20.00 | 21.33 | 32.22 | 40.50 | 39.00 | 59.25 |
| AW17867 | 662.38 | 458.00 | 712.00 | 53.33 | 56.80 | 85.75 | 107.83 | 103.63 | 157.63 |
| AW17868 | 858.25 | 593.50 | 922.57 | 69.00 | 73.60 | 111.11 | 139.71 | 134.25 | 204.25 |
| AW17869 | | | | | | | | | |
| AW17870 | | | | | | | | | |
| AW17871 | 544.00 | 376.22 | 584.86 | 43.80 | 46.67 | 70.44 | 88.57 | 85.13 | 129.50 |
| AW17872 | 376.71 | 260.50 | 405.00 | 30.33 | 32.29 | 48.78 | 61.33 | 59.00 | 89.67 |

CYCLEMASTER® 3-Way Actuated Ball Valves

| Part No. | Nominal Liquid Capacity (tons) | | | Suction Vapor Capacity (tons) | | | Nominal Hot Gas Capacity (tons) | | |
|----------|--------------------------------|--------|--------|-------------------------------|-------|-------|---------------------------------|-------|-------|
| | R134a | R404a | R410a | R134a | R404a | R410a | R134a | R404a | R410a |
| AY17861 | 13.63 | 9.42 | 14.65 | 1.1 | 1.17 | 1.76 | 2.22 | 2.13 | 3.24 |
| AY17862 | 35.03 | 24.22 | 37.65 | 2.82 | 3 | 4.54 | 5.7 | 5.48 | 8.34 |
| AY17863 | 32.05 | 22.17 | 34.46 | 2.58 | 2.75 | 4.15 | 5.22 | 5.01 | 7.63 |
| AY17864 | 56.9 | 39.34 | 61.16 | 4.58 | 4.88 | 7.37 | 9.26 | 8.9 | 13.54 |
| AY17865 | 91.42 | 63.22 | 98.27 | 7.36 | 7.84 | 11.84 | 14.88 | 14.3 | 21.76 |
| AY17866 | 131.54 | 90.96 | 141.4 | 10.59 | 11.28 | 17.03 | 21.41 | 20.58 | 31.3 |
| AY17867 | 224.64 | 155.34 | 241.47 | 18.09 | 19.26 | 29.08 | 36.57 | 35.14 | 53.46 |
| AY17868 | 205.59 | 142.17 | 221 | 16.55 | 17.63 | 26.62 | 33.47 | 32.16 | 48.93 |
| AY17871 | 205.59 | 142.17 | 221 | 16.55 | 17.63 | 26.62 | 33.47 | 32.16 | 48.93 |
| AY17872 | 171.27 | 118.44 | 184.11 | 13.79 | 14.69 | 22.17 | 27.88 | 26.79 | 40.76 |

CYCLEMASTER® Ball Valve Cross Reference

CYCLEMASTER® BALL VALVES, STRAIGHT

| Current | | | |
|-------------|------------|-------------|-------|
| Part Number | BALLMASTER | CYCLEMASTER | Size |
| API17859 | A 17501 | A 17859 | 1/4 |
| API17860 | A 17260 | A 17860 | 3/8 |
| API17861 | A 17261 | A 17861 | 1/2 |
| API17862 | A 17262 | A 17862 | 5/8 |
| API17863 | A 17263 | A 17863 | 7/8 |
| A 17864 | A 17264 | | 7/8 |
| A 17865 | A 17265 | | 1 1/8 |
| A 17866 | A 17266 | | 1 3/8 |
| A 17867 | A 17267 | | 1 5/8 |
| A 17868 | A 17268 | | 2 1/8 |
| A 17871* | A 17269 | | 2 5/8 |
| A 17870 | | | 3 1/8 |
| A 17869 | A 17786 | | 2 5/8 |
| A 17872* | A 17270 | | 3 1/8 |

CYCLEMASTER® BALL VALVES, STRAIGHT WITH ACCESS

| Current | | | |
|-------------|------------|------------------|-------|
| Part Number | BALLMASTER | CYCLEMASTER | Size |
| AQ17860 | A 17460 | A 17563, AC17860 | 3/8 |
| AQ17861 | A 17461 | A 17564, AC17861 | 1/2 |
| AQ17862 | A 17464 | A 17565, AC17862 | 5/8 |
| AC17863 | A 17463 | | 3/4 |
| AC17864 | A 17464 | A 17567, AC17864 | 7/8 |
| AC17865 | A 17465 | A 17568 | 1 1/8 |
| AC17866 | A 17466 | A 17569 | 1 3/8 |
| AC17867 | A 17467 | A 17570 | 1 5/8 |
| AC17868 | A 17468 | A 17541 | 2 1/8 |
| AC17871* | A 17469 | A 17572 | 2 5/8 |
| AC17870 | | | 3 1/8 |
| AC17869 | A 17787 | | 2 5/8 |
| AC17872* | A 17470 | A 17573 | 3 1/8 |

CYCLEMASTER® BALL VALVES, 3-WAY WITH ACCESS

| Current | | | |
|-------------|------------|------------------|-------|
| Part Number | BALLMASTER | CYCLEMASTER | Size |
| AUI17860 | | A 17539 | 3/8 |
| AUI17861 | | A 17540 | 1/2 |
| AUI17862 | | A 17541 | 5/8 |
| AUI17863 | A 17464 | A 17567, AC17864 | 3/4 |
| AUI17864 | | A 17543 | 7/8 |
| AUI17865 | | A 17544 | 1 1/8 |
| AUI17866 | | A 17545 | 1 3/8 |
| AUI17867 | | A 17546 | 1 5/8 |
| AUI17868 | | A 17547 | 2 1/8 |
| AUI17871* | | A 17548 | 2 5/8 |
| AUI17872* | | A 17549 | 3 1/8 |

BALL VALVE SEAL CAP

| Size | Body Number | One-Piece Two-Piece Retrofit | | |
|--------|------------------------------------|------------------------------|---------|----------|
| | | | | Assembly |
| 1/4 | F 35222, F 36700, N 02351 | A 17965 | A 17842 | A 18351 |
| 3/8 | F 35222, F 36700, N 02351 | A 17965 | A 17842 | A 18351 |
| 1/2 | F 35222, F 36700, N 02351 | A 17965 | A 17842 | A 18351 |
| 5/8 | F 35222, F 36700, N 02351 | A 17965 | A 17842 | A 18351 |
| 3/4 | F 35223, F 36701, N 02352 | A 17866 | A 17843 | A 18352 |
| 7/8 | F 35223, F 36701, N 02352 | A 17866 | A 17843 | A 18352 |
| 1 1/8 | F 35224, F 36702, N 02353 | A 17967 | A 17844 | A 18353 |
| 1 3/8 | F 35162, N 02354 | A 17968 | A 17845 | A 18354 |
| 1 5/8 | F 35949, F 36703 | A 17967 | A 17844 | A 18353 |
| 2 1/8 | F 35160, F 35950, F 36704, N 02355 | A 17968 | A 17845 | A 18354 |
| 2 1/8 | F 35161, N 02356 | A 18399 | A 17846 | A 18355 |
| 2 1/8 | F 35951, F 36595, F 36705 | A 17968 | A 17845 | A 18354 |
| 2 5/8 | F 35755, F 36706 | A 18399 | A 17846 | A 18355 |
| 3 1/8 | F 35952, F 36707 | A 18399 | A 17846 | A 18355 |
| 2 5/8* | F 35161, N 02356 | A 18399 | A 17846 | A 18355 |
| 2 5/8* | F 35951, F 36595, F 36705 | A 17968 | A 17845 | A 18354 |
| 3 1/8* | F 35161, N 02356 | A 18399 | A 17846 | A 18355 |
| 3 1/8* | F 35951, F 36595, F 36705 | A 17968 | A 17845 | A 18354 |

* Reduced port

CYCLEMASTER® BALL VALVES, ACTUATED STRAIGHT

| Current | | | |
|-------------|------------|-------------|-------|
| Part Number | BALLMASTER | CYCLEMASTER | Size |
| AWI17861 | | A 17793 | 1/2 |
| AWI17862 | | A 17794 | 5/8 |
| AWI17863 | | A 17795 | 3/4 |
| AWI17864 | | A 17796 | 7/8 |
| AWI17865 | | A 17797 | 1 1/8 |
| AWI17866 | | A 17798 | 1 3/8 |
| AWI17867 | | A 17799 | 1 5/8 |
| AWI17868 | | A 17800 | 2 1/8 |
| AWI17871* | | A 17801 | 2 5/8 |
| AWI17872* | | A 17802 | 3 1/8 |

CYCLEMASTER® BALL VALVES, ACTUATED 3-WAY

| Current | | | |
|-------------|------------|-------------|-------|
| Part Number | BALLMASTER | CYCLEMASTER | Size |
| AY17861 | | A 17805 | 1/2 |
| AY17862 | | A 17806 | 5/8 |
| AY17863 | | A 17807 | 3/4 |
| AY17864 | | A 17808 | 7/8 |
| AY17865 | | A 17809 | 1 1/8 |
| AY17866 | | A 17810 | 1 3/8 |
| AY17867 | | A 17811 | 1 5/8 |
| AY17868 | | A 17812 | 2 1/8 |
| AY17871* | | A 17813 | 2 5/8 |
| AY17872* | | A 17814 | 3 1/8 |

CYCLEMASTER® BALL VALVES, ACTUATED KITS

| Current | Obsolete |
|-------------------|------------|
| Sealed Hub Design | Hub Design |
| A 18390 | B 34437 |
| A 18392 | B 34438 |
| A 18394 | B 34439 |
| A 18396 | B 34440 |
| A 18395 | B 34441 |
| A 18395 | B 34442 |

CYCLEMASTER® BALL VALVES, ACTUATED KITS

| Current | Obsolete |
|-------------------|------------|
| Sealed Hub Design | Hub Design |
| A 18390 | B 34437 |
| A 18392 | B 34438 |
| A 18394 | B 34439 |
| A 18396 | B 34440 |
| A 18395 | B 34441 |
| A 18395 | B 34442 |

ACTUATED BALL VALVE COMPONENT

| Size | Body Number | Motor Series | Hub Kit | Actuator Kit** |
|--------|-----------------------------------|--------------|---------|----------------|
| 1/2 | F 35222, F 36700, N 2351 | 1 | A 18389 | A 18390 |
| 5/8 | F 35222, F 36700, N 2351 | 1 | A 18389 | A 18390 |
| 3/4 | F 35223, F 36701, N 2352 | 1 | A 18391 | A 18392 |
| 7/8 | F 35223, F 36701, N 2352 | 1 | A 18391 | A 18392 |
| 1 1/8 | F 35224, F 36702, N 2353 | 2 | A 18393 | A 18394 |
| 1 3/8 | F 35162, N 2354 | 2 | A 18368 | A 18396 |
| 1 3/8 | F 35949, F 36703 | 2 | A 18393 | A 18394 |
| 1 5/8 | F 35160, F 35950, F 36704, N 2355 | 2 | A 18368 | A 18396 |
| 2 1/8 | F 35161, N 2356 | 3 | A 18402 | |
| 2 1/8 | F 35951, F 36595, F 36705 | 3 | A 18368 | A 18395 |
| 2 5/8 | F 35755, F 36706 | 4 | A 18400 | A 18401 |
| 3 1/8 | F 35952, F 36707 | 4 | A 18400 | A 18401 |
| 2 5/8* | F 35161, N 2356 | 3 | A 18402 | |
| 2 5/8* | F 35951, F 36705 | 3 | A 18368 | A 18395 |
| 3 1/8* | F 35161, N 2356 | 3 | A 18402 | |
| 3 1/8* | F35951, F 36595, F36705 | 3 | A 18368 | A 18395 |

* Reduced Port

**Actuator Kit includes motor and hub assembly

O-Ring Seal Kits***

| Size | Part Number |
|---------------|-------------|
| 1/2 - 7/8 | A 18403 |
| 1 1/8 - 3 1/8 | A 18404 |

***Not intended to be used on an old style hub assembly to seal off stem leaks.

