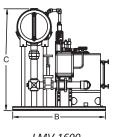
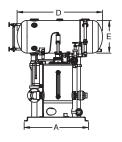
# **Packaged Systems**

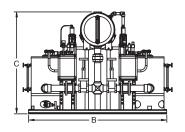
The Kadant Johnson packaged Liqui-Mover pump is a non-electric packaged pump that can handle fluid temperatures up to 365°F. There are no rotating seals or packing to leak. Cavitation is impossible. Steam, plant compressed air, or other inert gases are used to operate the pump.



LMV-1600 simplex pump



LMV-1600 simplex and duplex pump



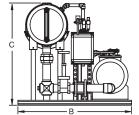
LMV-1600 duplex pump



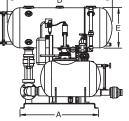
# **Features**



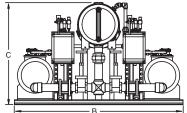
- Skid-mounted
- No rotating parts
- Single trade installation
- Custom engineered



LMHT-1600 simplex pump



LMHT-1600 simplex and duplex pump



LMHT-1600 duplex pump

## **Benefits**



- Quick installation
- Wear and corrosion resistant
- Greater reliability
- Reduced operating costs
- Operating flexibility

| Model            | A   | В   | С   | D   | E   | Receiver Capacity (gal.) |
|------------------|-----|-----|-----|-----|-----|--------------------------|
| LMV-16XX-LRSP-1  | 35" | 51" | 62" | 47" | 18" | 47                       |
| LMV-16XX-LRSP-2  | 35" | 76" | 62" | 47" | 18" | 47                       |
| LMHT-16XX-LRSP-1 | 35" | 51" | 52" | 47" | 18" | 47                       |
| LMHT-16XX-LRSP-2 | 35" | 76" | 52" | 47" | 18" | 47                       |

#### Note:

- 1. Dimension C based on 12" fill head.
- 2. Other multiple pump configurations available.

Note: Engineering drawings are available on request.

#### **LRSP Sizing Chart**

| Fill<br>Head  | Back<br>Pressure<br>(psig) | LMV-1610 | LMHT-1610 | LMV-1615 | LMHT-1615 | LMV-1620 | LMHT-1620 | LMV-1632     | LMHT-1632 |
|---------------|----------------------------|----------|-----------|----------|-----------|----------|-----------|--------------|-----------|
|               |                            | pph      | pph       | pph      | pph       | pph      | pph       | pph          | pph       |
|               | 10                         | 3,400    | 3,640     | 7,640    | 8,580     | 11,390   | 12,920    | 15,050       | 15,850    |
|               | 20                         | 3,370    | 3,610     | 7,510    | 8,470     | 11,120   | 12,620    | 14,520       | 15,340    |
|               | 30                         | 3,320    | 3,500     | 7,270    | 8,260     | 10,640   | 12,140    | 13,760       | 14,640    |
|               | 40                         | 3,220    | 3,420     | 6,800    | 7,840     | 9,720    | 11,290    | 12,320       | 13,500    |
| 12"           | 50                         | 3,040    | 3,280     | 6,040    | 7,130     | 8,280    | 9,950     | 10,260       | 11,740    |
| 12            | 60                         | 2,760    | 3,040     | 5,020    | 6,140     | 6,540    | 8,210     | 7,820        | 9,400     |
|               | 70                         | 2,410    | 2,720     | 3,950    | 5,020     | 4,870    | 6,340     | 5,590        | 7,060     |
|               | 80                         | 2,020    | 2,410     | 3,000    | 3,920     | 3,500    | 4,700     | 3,900        | 5,100     |
|               | 90                         | 1,640    | 2,020     | 2,230    | 2,980     | 2,500    | 3,420     | 2,700        | 3,620     |
|               | 100                        | 1,290    | 1,640     | 1,660    | 2,230     | 1,790    | 2,480     | 1,900        | 2,590     |
| Check valve s | ize – inlet                | 1"       | 1"        | 1.5"     | 1.5"      | 2"       | 3"        | 3″           | 3"        |
| Check valve s | ze – outlet                | 1"       | 1"        | 1.5"     | 1.5"      | 2"       | 3″        | 2"           | 2"        |
| Gallons pump  | ed per cycle               | 7.5      | 12.0      | 7.5      | 12.0      | 7.5      | 12.0      | 7 <b>.</b> 5 | 12.0      |

Note: Above based on steam as the motive pressure.

For multiple pumps, multiply above capacity by number of pumps to be used.

For Gallons per Minute, divide above capacities by 500.

 $Fill\ head\ is\ the\ distance\ between\ top\ of\ the\ pump\ tank\ to\ the\ bottom\ of\ the\ receiver/reservoir.$ 

Above based on motive pressure being 20 psig higher than total static back pressure.

Total static back pressure equals vertical lift plus return line pressure.

# **Capacity Conversion Factors for Other Fill Heads**

| Fill Head | LMV-1610 | LMHT-1610 | LMV-1615 | LMHT-1615 | LMV-1620 | LMHT-1620 | LMV-1632 | LMHT-1632 |
|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| 6"        | 0.91     | 0.91      | 0.93     | 0.92      | 0.95     | 0.94      | 0.93     | 0.93      |
| 12"       | 1.00     | 1.00      | 1.00     | 1.00      | 1.00     | 1.00      | 1.00     | 1.00      |
| 18"       | 1.07     | 1.07      | 1.06     | 1.06      | 1.04     | 1.04      | 1.03     | 1.04      |
| 24"       | 1.14     | 1.14      | 1.10     | 1.10      | 1.07     | 1.07      | 1.05     | 1.07      |
| 36"       | 1.14     | 1.14      | 1.13     | 1.10      | 1.09     | 1.10      | 1.09     | 1.10      |

## **Material of Construction**

| Part Description         | LMV-1600 Material  | LMHT-1600 Material   |
|--------------------------|--|--|
| Receiver Tank            | ASME code stamped 150 psig<br>Shell and heads – carbon steel SA-414 G  | ASME code stamped 150 psig<br>Shell and heads – carbon steel SA-414 G  |
| Pump Tank                | ASME code stamped 150 psig<br>Shell and bottom head — carbon steel SA-414G<br>Flat head top — carbon steel SA-516-70 | ASME code stamped 150 psig<br>Shell and heads – carbon steel SA-414 G<br>Flange ring – carbon steel SA-106 C |
| Float Free Level Control | Mounting flange – ductile iron SA-395  | Mounting flange – ductile iron SA-395  |
| Piping                   | Carbon steel A53 – schedule 40   | Carbon steel A53 – schedule 40   |
| Fittings                 | Malleable iron 150# threaded   | Malleable iron 150# threaded   |
| Isolation Valves         | Bronze B62   | Bronze B62   |
| Skid                     | Carbon steel AISI 1015   | Carbon steel AISI 1015   |
| 3-Way Valves             | Body – ductile iron<br>Valves and seats – stainless steel  | Body – ductile iron<br>Valves and seats – stainless steel  |
| Check Valves             | Stainless steel, spring-assisted non-slam  | Stainless steel, spring-assisted non-slam  |
| Gauge Glass              | Bronze valves with redline glass and brass guard rods  | Bronze valves with redline glass and brass guard rods  |