

## 1. ROTARY LOBE (RL) PUMP

### Constant Vacuum, Single Function Pump



Single Function Pump can ONLY be used for Wellpoint or Sock Drain (clean groundwater, no solids) Applications. Maximum Wellpoint Capabilities: RL-200 (8" Rotary Lobe Pump) is capable of being used on a 700' LF Wellpoint System & (175) 1.5" x 20' FT Wellpoints.


#### ADVANTAGES:

1. Rotary Lobe (RL) Pumps move a lot of air (CFM) and can often times compensate for leaky or inefficient (NOT TIGHT) Wellpoint Systems
2. Rotary Lobe (RL) Pumps also create and can maintain very high Vacuum (CONSTANT Vacuum)
3. Rotary Lobe (RL) Pumps can be used on 95% of the Wellpoint Systems (Size, Length & Depth) that Contractors typically perform
4. Rotary Lobe (RL) Pumps can run at various engine speeds (RPM) and Vacuum settings. This requires the operator or pump user to know and understand the appropriate Vacuum settings that the Pump should be running at on the Wellpoint System.
5. Rotary Lobe (RL) Pumps can handle large volumes of Groundwater (<1300 GPM for RL-200) which means RL Pumps typically create system drawl down faster than Double Diaphragm (DD) & Piston (PP) Pumps.

6. Rotary Lobe (RL) Pumps can create high vacuum at lower engine rpms (1100-1200 rpm). When operating RL Pumps at lower engine rpms you can still achieve high Vacuum and much better fuel consumption (@1200 rpm the fuel consumption is .50 gph x 24 hours = 12 gpd = 8 days of continuous run time)
7. MSP Rotary Lobe (RL) Pumps have two safety shutdown sensors (High Temperature & High/Low Vacuum) to protect the internal moving parts inside of the pump end
8. MSP Rotary Lobe (RL) Pumps have a 4 to 1 engine to pump end gear reduction (1200 engine rpm = 300 pump rpm). MSP RL Pumps can pull with very high Vacuum & CFM intensity at low engine rpms
9. Rotary Lobe (RL) Pumps are relatively quiet and don't produce a lot of noise (Mid 60's dba @ 28' ft range).
10. Rotary Lobe (RL) Pumps have much higher or greater discharge head capabilities, so they can discharge Groundwater much further away than Double Diaphragm (DD) or Piston (PP) Pumps (<600' LF)
11. Rotary Lobe (RL ) Pumps can discharge Groundwater at much higher elevations than their Suction point unlike Double Diaphragm (DD) or Piston (PP) Pumps (<130' FT TDH)

## DISADVANTAGES:

1. Rotary Lobe (RL) Pumps can only pass clean, groundwater water with no solids. This can be somewhat problematic because Wellpoint System are installed into the ground and ground soil can sometimes pass through the filter pack/filter sand and the Wellpoint screen. Which then can travel into the pumpend which can cause wear and tear over time on the lobes and other internal rotating pump parts.
2. Rotary Lobe (RL) Pumps require a very high skilled service technician to be able to work on, service and maintain this type of pump.
3. Rotary Lobe (RL) Pumps typically cannot be serviced or repaired in the field. The pump must be brought back to the shop for repairs and service work.
4. Rotary Lobe (RL) Pumps have a lot of rotating machinery inside of them. Which means more things can wear out and need replacement like lobes, wear plates, shafts, and mechanical seals.

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5. Rotary Lobe (RL) Pumps are typically manufactured as skid mounted pump packages and are not as portable around jobsites as trailer mounted pump packages.
  6. Rotary Lobe (RL) Pumps replacement parts for the pump end can cost as much as \$12,000 - \$14,000. Cost to maintain RL Pumps is typically the highest of the 4 different types of ground dewatering pumps.
  7. Rotary Lobe (RL) Pumps can only be used on Wellpoint & Sock Drain Dewatering systems they are not as versatile as Double Diaphragm (DD) & High CFM Centrifugal (HC) Pumps. RL pumps are a very application specific type of pump.
  8. Rotary Lobe (RL) Pumps run a high risk of being misapplied by the Customer/Contractor. The Customer/Contractor may use the RL pump for another type of pump application other than a Wellpoint or Sock Drain Application which could then cause major internal damage inside the pumpend leading to costly repairs.