



3. PISTON (PP) PUMP Pulsating Vacuum, Single Function Pump





A Single-Function Pump that can ONLY be used for Wellpoint or Sock Drain (clean, no solids, groundwater) applications. Maximum Wellpoint System Capabilities: Piston Pumps can do up to 200' LF & (50) 1.5" x 20' FT Wellpoints

ADVANTAGES:

- 1. Piston (PP) Pumps are extremely fuel efficient, only consuming about 5-6 gallons per day and capable of running 5-7 days continuously.
- 2. Piston (PP) Pumps are extremely quiet.
- 3. Piston (PP) Pumps are compact.
- 4. Piston (PP) Pumps are stackable.
- 5. Piston (PP) Pumps are easy to operate.
- 6. Piston (PP) Pumps create Pulsating (Pull/Push) Vacuum which might be the only type of Vacuum that will work for a Dewatering System in certain Soil Conditions









DISADVANTAGES:

- 1. Piston (PP) Pumps cannot be easily repaired or serviced in the field. Most repairs must be done in a shop.
- 2. Piston (PP) Pumps require a moderate to highly skilled service technician to work on this type of pump.
- 3. Piston (PP) Pumps only move 400 GPM and may take a little bit longer time to draw a wellpoint system down that an larger pump like a Rotary Lobe (RL) Pump or High CFM (HC) Centrifugal Pump.
- 4. Piston (PP) Pumps cannot overcompensate for leaking or inefficient (NOT TIGHT) Wellpoint Systems. Piston Pumps don't move enough air (CFM) to overcompensate for leaky or inefficient Wellpoint Systems. Wellpoint System must be efficient (TIGHT) for a Piston (PP) Pumps to work effectively and efficiently.
- 5. Piston (PP) Pumps don't produce very much discharge head pressure which can limit the distance (<400' LF) of layflat discharge hose that can be used with a Piston (PP) Pump.
- 6. Piston (PP) Pumps are not easily portable as trailer mounted pump packages. Most Piston (PP) Pumps are Skid Mounted Pump Packages.
- 7. Replacing normal Pumpend wear and tear parts like cups, springs, Valve seats, Piston bodies must be done at a shop and not easily possible in the field.
- 8. Piston (PP) Pumps cannot pass ANY solids or major damage will occur to internal parts inside the pump end.
- 9. Piston (PP) Pumps can be easily damaged if the customer put this type of pump on any other application other than a Wellpoint or Sock Drain System.
- 10. Piston (PP) Pumps cannot run dry indefinitely without causing harm or damage to the Pumps internal moving parts.



