850 Horizontal Filtrate Pump
Rugged in design and dependable in nature, the 850 is a proven performer in some of the earth’s toughest environments. Capable of operating in vacuum conditions up to 26” Hg, the 850 is well suited for vacuum filtration and dewatering systems with difficult suction conditions. A vent port allows pumping to resume even after short periods of interrupted flow, assuring continuous pumping, from a trickle to full capacity.

With a semi-open impeller and a variety of material choices ranging from duplex stainless steel to rubber lined, the 850 is ideal for abrasives and light slurry duty in the mining, power generation, and pulp and paper industries.

Specifically designed for filtration systems and abrasive fluid processes.

The 850 is available as either a close-coupled or frame-mounted unit with an option for a side-mounted motor with belt drive. By using either a belt drive or a variable frequency drive (VFD), performance can be fine-tuned to match most system requirements. The front and back pull-out design allows for easy maintenance. The pump comes standard with a packed stuffing box and flush water connections to ensure lubrication and eliminate vacuum or air leakage. A variety of shaft sealing options is available to meet the requirements of specific applications.
SUCTION FLANGE
ANSI flat face cast iron or stainless steel flanges for all sizes

SUCTION VENT PORT
Allows pumping to resume even after short periods of interrupted flow

DISCHARGE
Depending on size, the pumps come with NPT or Class 150 ANSI flanged discharge connections. All rubber-lined pumps have flanged discharge.

STUFFING BOX
Packed stuffing box as standard, mechanical seals are available as an option.

FRONT AND BACK PULL-OUT DESIGN
Allows removal of rotating elements and replacement of the shaft, impeller, or mechanical seal without disturbing system piping.

BEARING FRAME
Heavy duty, thick-walled frame supports the rotor, assuring less vibration, better alignment and longer life.

POSITIVELY LOCKED BEARINGS
Grease-lubricated ball bearings secured by locknuts eliminate axial movement at the impeller-to-casing clearances.

SHAFTS
Large diameter shafts with replaceable 316 SS shaft sleeves.
WHY AN 850?

- Rotational speed can be adjusted with a VFD or by proper sizing of the belt drive system, to fine tune performance to match most system requirements.
- Variety of mounting options reduces installation footprint.
- Rubber-lined option enhances abrasives handling.
- Semi-open impeller designed for filtrate and light slurry duty.

ALSO FOR THE FILTRATE MARKET

The tank-mounted 855 is specifically designed to meet the challenges of the filtrate pump user. Rugged in design and dependable in nature, the 855 is a workhorse in some of the toughest environments in the industry.

To learn more about our filtrate pumps, please ask your sales representative or email sales@carverpump.com.

HYDRAULICS
- Flows to 700 US GPM (159 m³/hr)
- Heads to 120 feet (36 m)
- Power to 50 HP (37 KW)
- Temperatures to 250° F (121° C)
- Speeds to 2,450 RPM

APPLICATIONS
- Minerals & Mining
- Power Generation
- Pulp & Paper
- Light Abrasives
- Condensate Systems

STANDARD MATERIALS

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
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<tbody>
<tr>
<td>Casing</td>
<td>Cast Iron, CD4MCuNi or Rubber-Lined</td>
</tr>
<tr>
<td>Impeller</td>
<td>Cast Iron, CD4MCuNi or Rubber-Lined</td>
</tr>
<tr>
<td>Shaft</td>
<td>Carbon Steel</td>
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<tr>
<td>Bearing Frame</td>
<td>Cast Iron</td>
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</tbody>
</table>

Other Materials Available Upon Request

MECHANICAL DATA

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Rotation</td>
<td>Clockwise from Coupling</td>
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<tr>
<td>Input Power</td>
<td>Up to 50 HP</td>
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<tr>
<td>Discharge Connection</td>
<td>Determined by Size</td>
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<tr>
<td>Bearings</td>
<td>Greased</td>
</tr>
</tbody>
</table>

Additional Information:
- Flows to 700 US GPM (159 m³/hr)
- Heads to 120 feet (36 m)
- Power to 50 HP (37 KW)
- Temperatures to 250° F (121° C)
- Speeds to 2,450 RPM

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Since we built our first pumps in 1938, Carver Pump has become recognized as one of the leading centrifugal pump companies, building pumps to the most demanding engineering specifications and military standards in the world.

We were one of the first American pump companies to attain ISO 9001 certification – the most recognized standard for quality in the world. This certification is your assurance that our commitment to quality includes not only our hardware, but also superior customer service, leading-edge R&D, and continuous improvement in everything we do.

So whether the job is refueling fighter jets on the deck of an aircraft carrier, supplying paint to an auto assembly line, or bringing water to the fountain in a city park, we put our reputation on the line everyday with every pump we build.

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