Filtrate Pump

855
Filtrate Pump
This model was originally developed for a large Original Equipment Manufacturer (OEM) of vacuum filtration equipment. Mounting the flange directly to the receiver tank eliminates suction piping and minimizes NPSH problems. The design allows pumping to resume even after short periods of interrupted flow. Capable of operating in vacuum conditions up to 26” Hg, the specially designed semi-open impeller assures pumping from a trickle to full capacity. Rugged in design and dependable in nature, the 855 is a workhorse in some of the toughest environments in the industry.

The 855 features an overhead v-belt drive arrangement as standard, with options for close-coupled units. By utilizing either belt drive or variable frequency drive, performance characteristics can be fine-tuned to match most system requirements. With a simple, vertically-split case design, the 855 may be disassembled to expose the entire wetted area. Standard features include a packed stuffing box with seal water connections provided, to ensure lubrication and eliminate vacuum/air leakage. Pumps come with discharge flanges machined for both Class 150 ANSI and DIN PN10 connections.

Corrosion-resistant shafts are used to eliminate the need for shaft sleeves. Impellers are keyed to the shaft, providing a secure fit and protection, should momentary reverse rotation occur. The swing-out mount is a popular optional feature allowing easy inspection of the pump and quick access to the tank interior.

Specifically designed to meet the needs of filtrate pump users.
MOUNTING
Flange mounting directly to the receiver tank eliminates suction piping and diminishes NPSH problems. The design allows pumping to resume even after short periods of interrupted flow.

IMPPELLERS
Semi-open impellers are keyed to the shaft for secure fit.

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

BEARINGS
Sealed-for-life ball bearings on both the inboard and outboard locations ensure a long, low-maintenance life. (Single, sealed-for-life ball bearings are used on 1” x 8” model)

SHAFTS
Stainless steel shafts for corrosion resistance

BELT DRIVE
System includes motor mounting plate, adjusting rods, belts, sheaves and guard
**WHY AN 855?**

- Handles challenging suction conditions.
- Optional swing-out mount allows for pump inspection and quick access to tank.
- Unit speed can be adjusted through a VFD or belt drive, to fine-tune performance to match system requirements.
- The casing is self-venting, to prevent airlock.

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**HYDRAULICS**

- Flows to 700 US GPM (159 m³/hr)
- Heads to 120 feet (36 m)
- Power to 20 HP (15 KW)
- Temperatures to 250° F (121° C)
- Speeds to 2,450 RPM

**APPLICATIONS**

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

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**STANDARD MATERIALS**

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing</td>
<td>Cast Iron, CD4MCuN, or Rubber-Lined</td>
</tr>
<tr>
<td>Impeller</td>
<td>Cast Iron, CD4MCuN, or Rubber-Lined</td>
</tr>
<tr>
<td>Shaft</td>
<td>Duplex SS or 17-4PH SS</td>
</tr>
<tr>
<td>Bearing Frame</td>
<td>Cast Iron</td>
</tr>
</tbody>
</table>

Other materials available upon request.

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**MECHANICAL DATA**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Rotation</td>
<td>Counter Clockwise</td>
</tr>
<tr>
<td>Input Power</td>
<td>Up to 20 HP</td>
</tr>
<tr>
<td>Discharge Connection</td>
<td>Flanged Class 150 ANSI and DIN PN10</td>
</tr>
<tr>
<td>Bearings</td>
<td>Greased for Life</td>
</tr>
</tbody>
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**ALSO FOR THE FILTRATE MARKET**

The 850 is specifically designed for filtration systems and abrasive fluid processes. It is available as either a close-coupled or frame-mounted unit, with an option for a side-mounted motor with belt drive.
Since we built our first pumps, Carver Pump has become recognized as one of the leading centrifugal pump companies, building 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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