Self-Priming Centrifugal Pumps

Proven Performers for Efficient, Reliable Service

Weinman offers a full line of self-priming centrifugal pump models in electric-drive configurations specially designed for sewage, wastewater, dewatering, and solids-handling applications. Each unit is designed with an exclusive, self-priming feature and is uniquely engineered for clog-free operation. When you specify a Weinman self-priming centrifugal pump, you receive the extra advantages of quality engineering... reliable performance... and continuous, trouble-free operation.
Mid-Whirl 2WC-2/2W-2
The Mid-Whirl 2WC-2 and 2W-2 are proven performers in industrial and agricultural process plants. WS models are non-self priming.
• Suction & discharge size: 2 in.
• Maximum solids size: 1 ⅛ in.
• Capacities to 250 gpm, heads to 78 ft.

Mid-Whirl 3W-2
Similar to the application capabilities of the Mid-Whirl Models 2WC-2 and 2W-2 pumps, the 3W-2 pump provides exceptional solids-handling capabilities with higher performance characteristics.
• Suction & discharge size: 3 in.
• Maximum solids size: 2 ⅞ in.
• Capacities to 420 gpm, heads to 75 ft.

Mid-Whirl 3WC-4/3W-4
The Mid-Whirl 3WC-4 and 3W-4 pumps are ideal for handling sewage, sludge, industrial waste, and trash-laden fluid pumping applications.
• Suction & discharge size: 3 in.
• Maximum solids size: 1 ¾ in.
• Capacities to 300 gpm, heads to 78 ft.

Mid-Whirl 4W-8
The large solids-handling capabilities and the high-flow capacities make the Mid-Whirl 4W-8 the preferred pump design for municipal sludge and industrial wastewater applications.
• Suction & discharge size: 4 in.
• Maximum solids size: 3 ¼ in.
• Capacities to 775 gpm, heads to 115 ft.

Mid-Whirl 6W-2
The Mid-Whirl 6W-2 offers the same dependable Weinman pump performance, but in a larger model ideally suited for demanding municipal and industrial solids applications.
• Suction & discharge size: 6 in.
• Maximum solids size: 4 ¼ in.
• Capacities to 1100 gpm, heads to 115 ft.

Note: Models 2WC-2/2W-2, 3W-2, 3WC-4/3W-4, 4W-8, and 6W-2 are available in non-self-priming and vertical configurations. (Consult factory.)
Performance Curves for Weinman Electric-Driven Pumps

Non-Self-Priming

Maximum Performance based on:
- 2WS-2 & 3WS-4 & 3WS-5 - 2600 RPM
- 4WS-3 & 4WS-VB-5 - 2000 RPM
- 4WS-4 & 6WS-VB-6 - 1750 RPM

Self-Priming

Maximum Performance based on:
- 2W-2 & 3W-4 - 2600 RPM
- 3W-2 - 2400 RPM
- 4W-8 & 6W-2 - 2000 RPM

Electric Motor Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>hp</th>
<th>Max. rpm(^1)</th>
<th>Drive(^1)</th>
<th>Model</th>
<th>hp</th>
<th>Max. rpm(^1)</th>
<th>Drive(^1)</th>
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<td>3</td>
<td>1750</td>
<td>Close-Coupled</td>
<td>3W-4</td>
<td>-</td>
<td>2600</td>
<td>Long-Coupled/Belt Drive</td>
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<td>1750</td>
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<td>Long-Coupled/Belt Drive</td>
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<td>2400</td>
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</table>

Models are available in various motor options (horsepower, speed, voltage and phase). Pumps can be equipped with close-coupled, long-coupled, or belt drives.

\(^1\)Long-coupled pump speed 1750/1150 rpm. Belt drive pump speeds to 2400 or 2600 rpm, depending on model.

NOTE: Available in non-self-priming and vertical configurations. (Consult factory.)
Features

**Cast-Iron Pump Case**
Close-grained, cast-iron ASTM Class 30 material case, designed without ridges or pockets, avoids collection of sludge or waste materials.

**Suction Check Valve**
Retains liquid in pump casing to effectively prime pump and prevent upstream liquid from draining back beyond suction port.

**“Free-Flow Clogless” Impeller**
Clogless recessed design creates vortex hydraulic action for efficient handling of solids and stringy materials. Available in close-grained cast iron or 316 stainless steel.

**Seal Plate and Stuffing Box**
Close-grained, cast-iron stuffing box accepts a variety of packing or single/double mechanical seals. Single mechanical seals only on 2” and 3” models. (3” models equipped with a seal housing adapter and wear plate.)

**Clean-Out Port**
An efficient maintenance and service feature for fast, easy access into pump interior to remove clogs and inspect pumping elements. Close-grained, cast-iron construction.

**Heavy-Duty Bearings**
Double-row, greased ball bearings provide maximum bearing life. Single-row bearings on 2” and 3” models; permanently lubed bearings on 3” models.

**Precision-Bored Bearing Housing**
Machined for close tolerances to provide mechanical support of rotating assembly. Close-grained, cast-iron construction. Fitted with removeable end caps (except on 2” and 3” models).

**How the Free-Flow Clogless Impeller Works...**
Weinman’s solids-handling, self-priming centrifugal pumps feature a fully recessed impeller for superior handling of trash-laden fluids and wastewater. The unique impeller design develops a powerful, swirling vortex action of incoming fluid. Material flows in front of the impeller, not through it, to effectively pump large suspended solids without clogging.

**High-Strength Shaft**
Available in SAE 1045 medium carbon or 316 stainless steel for maximum loads and minimum deflection.

**High-Quality Shaft Seals**
Mechanical seals with carbon, ceramic, Buna-N, and 316 stainless steel components. Optional seals and packings available.