

### Arranged by Discharge Size then Solid Size

Model	Discharge		Solids Size	Impeller		Mount Style	Floor Plate OD	Pump Opening Size	Shaft		Max HP 1750 RPM
	Size	Type		Nom	Type				Dia.	Max L	
1221	1 1/4	NPT	1/2	5 1/2	Semi-Open	B or C	14 or 20	12 or 18	3/4	80	1/2
1104	1 1/2	NPT	3/4	5 5/8	Semi-Open	B or C	14 or 20	12 or 18	3/4	80	3/4
1200	2	NPT	3/4	7	Semi-Open	B or C	14 or 20	12 or 18	3/4	81	1 1/2
1226	2	NPT	2	6	Semi-Open	B or C	14 or 20	12 or 18	3/4	83	1 1/2

B = Free Standing – Pump Legs sit on the wet well floor

C = Cover mount – Pump floor plate rests on the wet well cover

**NPT** National Pipe Taper. Discharge is female NPT for threaded pipe.

**L** Distance up from the bottom of the pump to the underside of pump floor plate

All models have bronze sleeve bearings and a ball thrust bearing.

The motor is connected to the pump shaft with a flexible coupling. Motors for all models are totally enclosed, fan cooled (TEFC), with ball bearings.

The end result is a rugged, quiet, long-lived, and easy to maintain pumping unit.

Pump opening size is the hole size in the wet well cover required for pump installation and removal.

A floor plate is used to mount the pump to the wet well cover.

Use any of these models as clean water removal pumps. Install in collection pits, wet wells, rainwater sumps, etc. A suction strainer is included on 1104, 1200, 1221, models.

Models with a 2 inch or larger solids-handling size can be used for unscreened wastewater, industrial waste, and surface drainage.

Install a single pump (simplex) or two pumps (duplex) depending on the job application. Select a level control device from on the following types:

### Level Controls

For cover mount or free-standing

#### Mechanical Lever

- Motor Mounted - Simplex      Option K7301
- Cover Mounted - Simplex      Models 8201, 8202
- Cover Mounted - Duplex      Models 8211, 8212, 8213

#### Pressure Diaphragm

Model 8220 series

#### Tethered

Model 8230 series

### Wet Well Capacities (Gallons)

Diameter or Length & Width	Gallons per foot of depth	
	Round Tank	Square Tank
18"	13	17
24"	24	30
30"	37	47
36"	53	67
48"	94	120
60"	147	187
72"	212	269

### Minimum Flow

(To prevent solids from settling out)

Discharge Pipe Size Diameter (inches)	Minimum Flow ( GPM)
1 1/4	10
1 1/2	15
2	25
3	50

**Pump** Dependable heavy-duty pumps for pumping wastewater and other unscreened liquids containing solids. Designed for:

- Residential
- Factories
- Professional Office Buildings
- Schools and Hospitals
- Banks
- Restaurants
- Truck Loading Docks

### Standard Construction Features

<b>Upper Bearing Housing</b>	Cast iron with bronze sleeve bearing, facilitates connection of pump to motor
<b>Thrust Bearing</b>	Permanently grease lubricated, ball type, over-sized for increased life and capacity. Sealed to protect from dirt and moisture.
<b>Lower Bearing Housing</b>	Cast iron with bronze sleeve bearing. All models are product lubricated
<b>Intermediate Bearing Housing (if required)</b>	Cast iron with bronze sleeve bearing, grease lubricated
<b>Leg(s)</b>	Galvanized steel – schedule 40
<b>Shaft</b>	416 Stainless steel, polished and ground. Sized to provide maximum safety and strength when pumping raw unscreened wastewater.
<b>Impeller</b>	Hydraulically and dynamically balanced. Trimmed to suit job conditions. <ul style="list-style-type: none"> <li>• Cast iron is standard on all models</li> <li>• Bronze is available as an option</li> </ul>
<b>Case</b>	Heavy-duty, close grain, high-density cast iron. All models have feet for floor mounting
<b>Strainer</b>	304 Stainless steel. Provided on 1104, 1200, and 1221
<b>Discharge Pipe</b>	Galvanized steel – schedule 40

### Options

<b>Sleeve Bearings</b>	<b>Graphite</b> – For chemical and high temperature applications
<b>Impeller</b>	<b>Bronze</b>
<b>Floor Plate</b>	14 or 20 inch split floor plate (plated steel)
<b>Adjustable Floor Plate Clamp</b>	Allows for pump to be raised for non-standard basin depths
<b>Motor Mounted Mechanical Lever Switch</b>	- Available in NEMA 1, 4, or 7 - Switch Bracket mounts to pump motor, rod travels thru a hole in the floor plate - Rod & Float are both stainless steel

**Motor** Vertical, solid shaft with NEMA-C mounting flange. The motor is connected to the pump with a flexible coupling. Stainless steel coupling guards safely protect from rotating parts.

Totally enclosed 60 Hz motors are standard  
1750 RPM – 1/2 to 1 1/2 horsepower

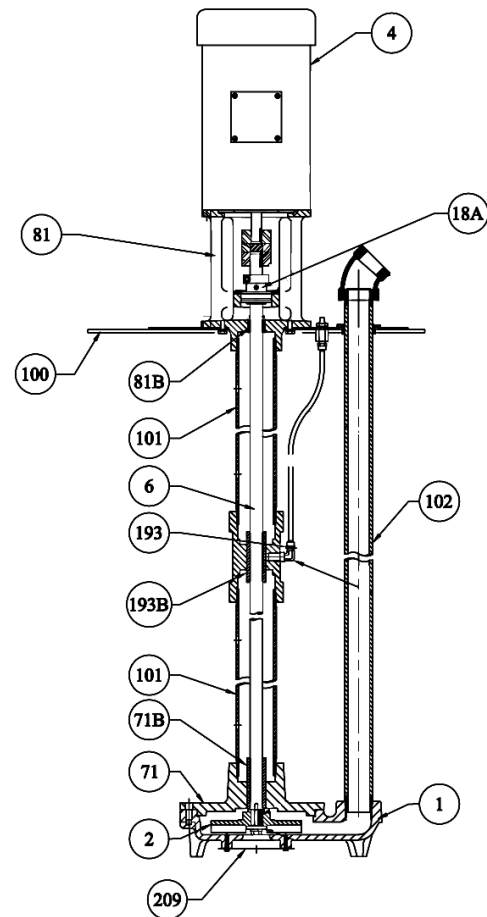
Single-phase motors are capacitor start induction run.

Single-phase voltages are 60 Hz, 115 or 208-230 volt

Three-phase voltages are 60 Hz, 208-230 or 460 volt.

Ⓢ Explosion-proof motors suitable for Class 1, Groups C and D hazardous atmospheres are available.

*Single and Three-phase 50 Hz models are available*



<b>1</b> Case	<b>81</b> Bearing Pedestal
<b>2</b> Impeller	<b>81B</b> Sleeve Bearing
<b>4</b> Motor	<b>100</b> Floor Plate (Optional)
<b>6</b> Shaft	<b>101</b> Pump Leg
<b>18A</b> Ball Bearing Thrust Assembly	<b>102</b> Discharge Pipe
<b>71</b> Lower Bearing Housing	<b>193</b> Intermediate Bearing Housing
<b>71B</b> Sleeve Bearing	<b>193B</b> Sleeve Bearing
	<b>209</b> Strainer