

4" WT SERIES SUBDRIVE SYSTEM



Constant "City-Like" Water Pressure

The Webtrol **WT** Series SubDrive System is an innovative drive system that solves what has plagued rural homeowners for years, getting city-like (constant) water pressure from their wells. People moving from municipal to private water well systems tend to be unaware of two things, the need for a large pressure tank and the inherent pressure cycling present in a conventional water well system. In conventional well systems, pressure tank cycling (generally between 30 and 50 psi) causes major variations in water pressure. The Webtrol **WT** Series SubDrive System is a submersible pump/motor designed to maintain constant water pressure using a standard 1.5 - 5 Hp Franklin Electric 3-phase motor, operating between 1800 RPM and 4800 RPM.

Webtrol's **WT** Series SubDrive System uses only four components:

- A) Standard pump/motor assembly.
- B) SubDrive controller.
- C) Pressure tank
- D) Franklin Electric pressure sensor.

The **WT** Series SubDrive System concept is really pretty simple. Standard water system motors are single speed. The SubDrive system is designed to vary the speed (rpm) of the motor to give you variable Hp from one motor. When you need more water, it runs faster. When you need less water, it runs at a slower speed while maintaining a constant water pressure.

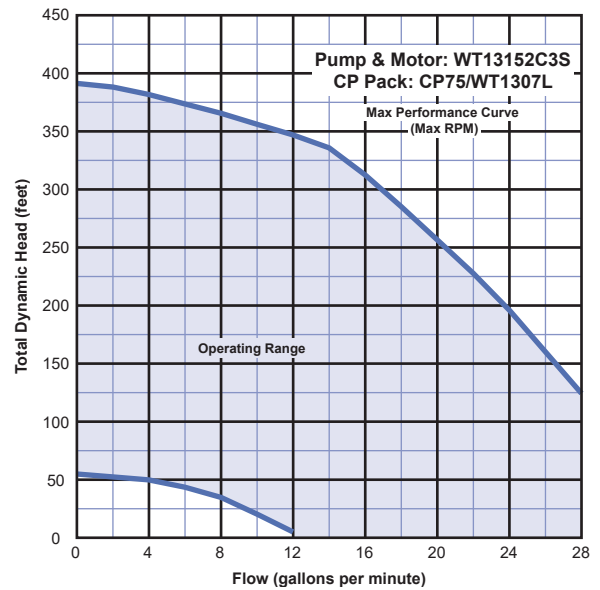
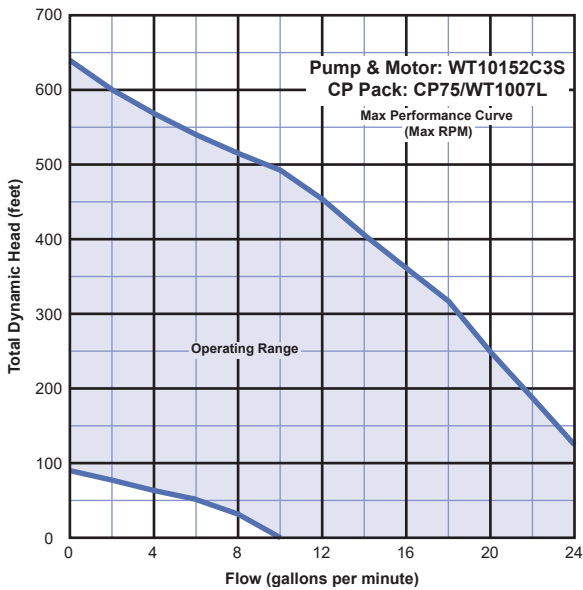
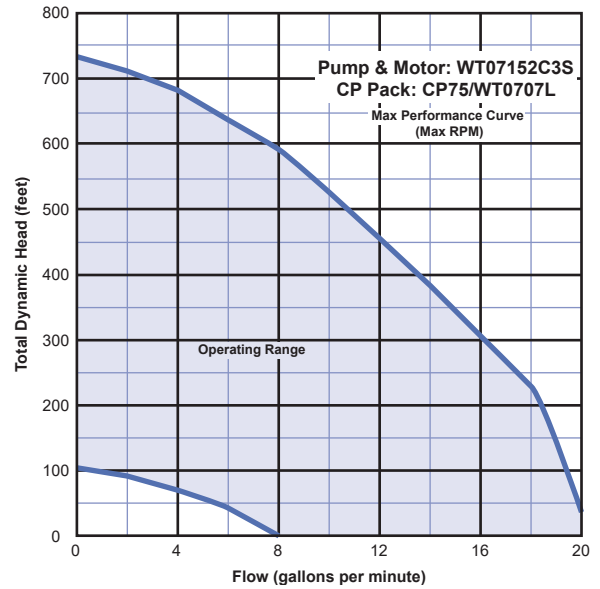
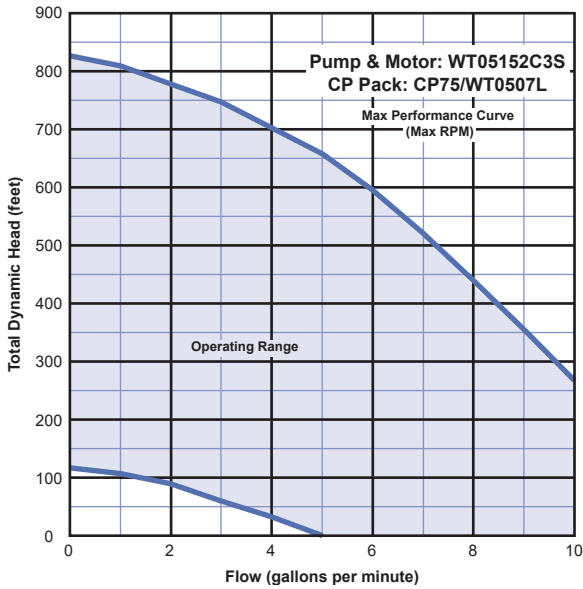


CP Pack
Get all the parts
in one box!

Powered By
 **Franklin Electric**

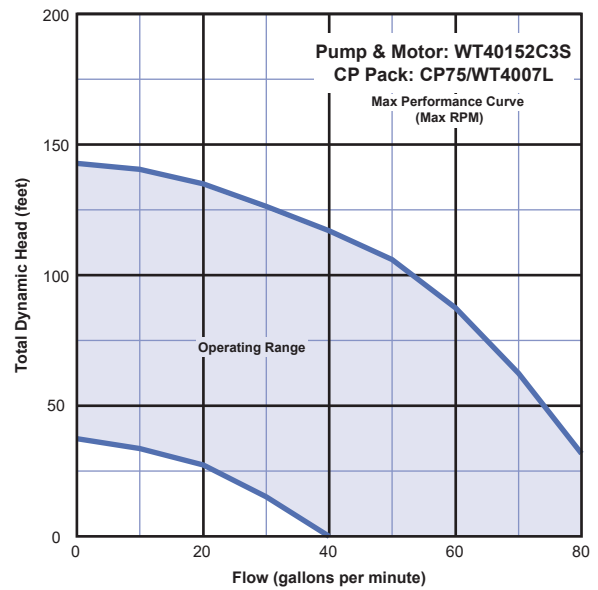
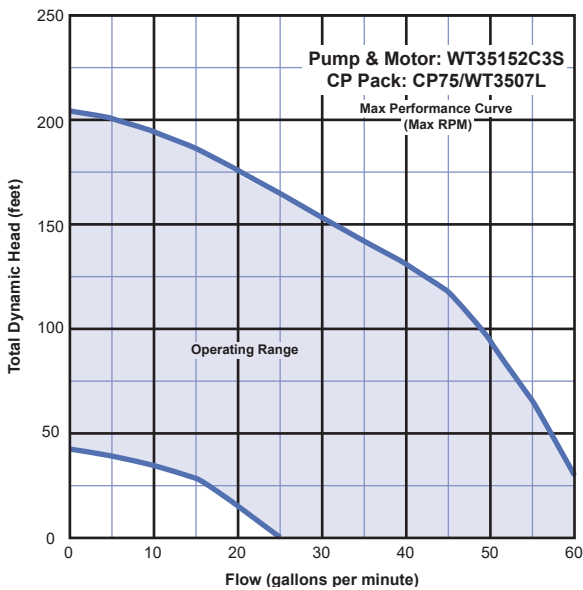
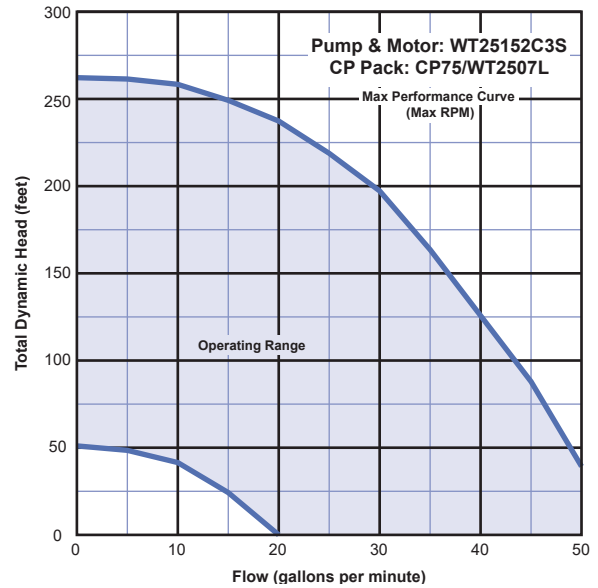
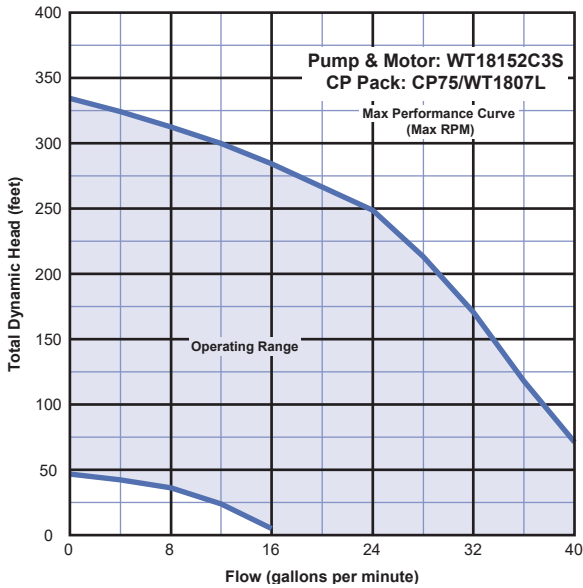


4" WT SERIES SUBDRIVE SYSTEM CURVES



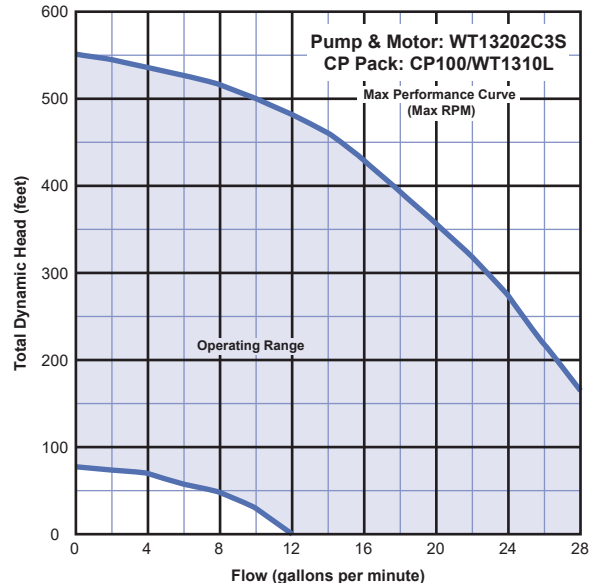
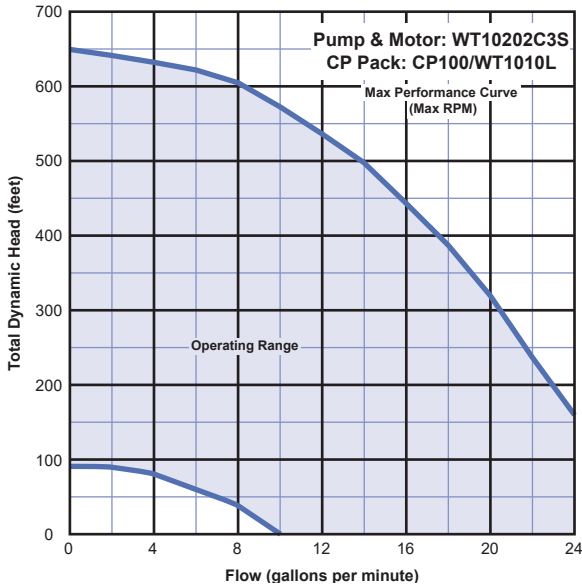
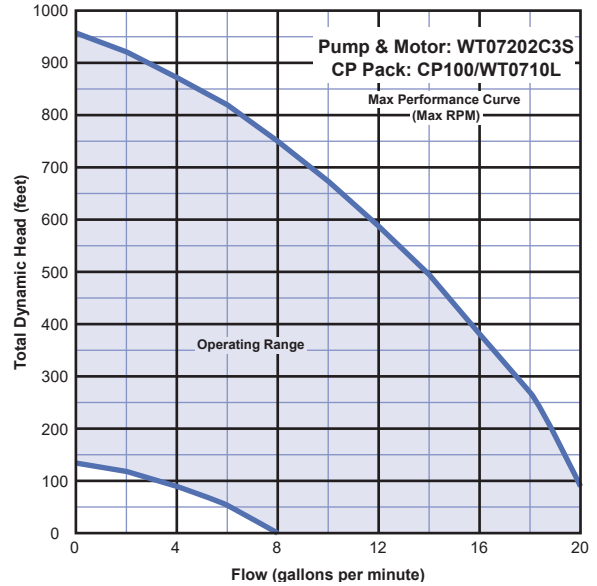
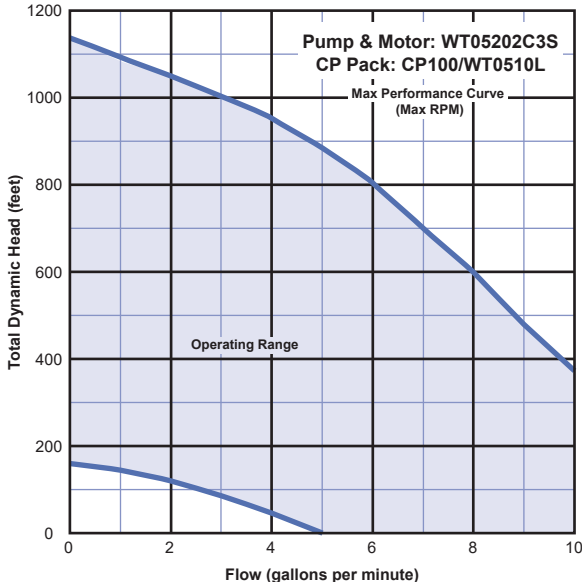
Total Dynamic Head is equal to vertical lift, maximum operating pressure and friction loss. These curves are for general guidance only, individual curves are available upon request. A certified curve may be requested for an additional cost. Webtrol will build pumps to fit your specific needs, contact factory for pricing.

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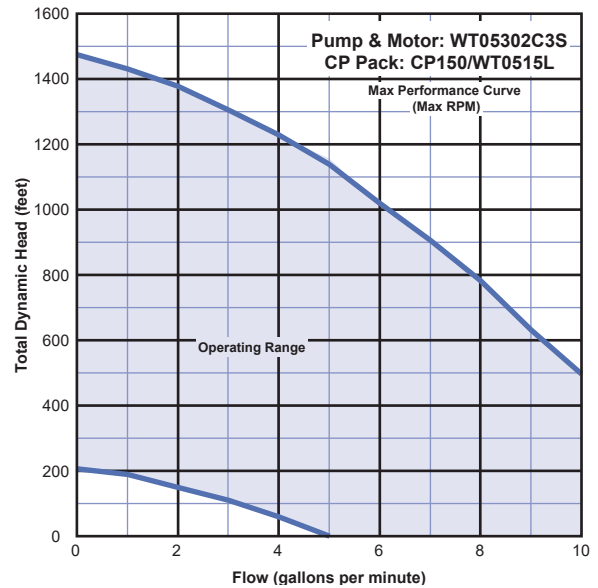
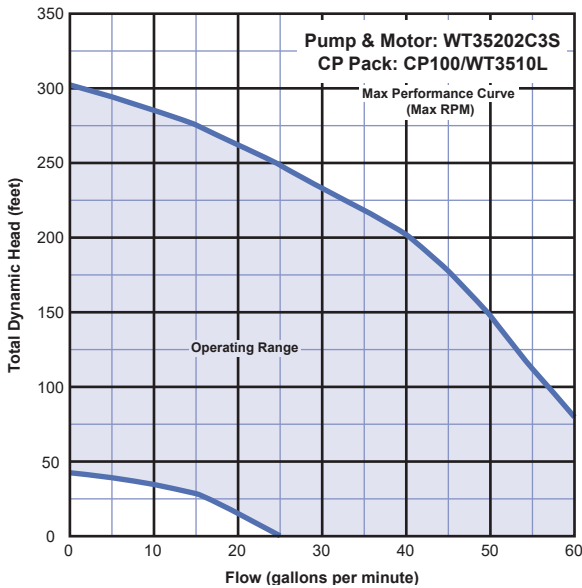
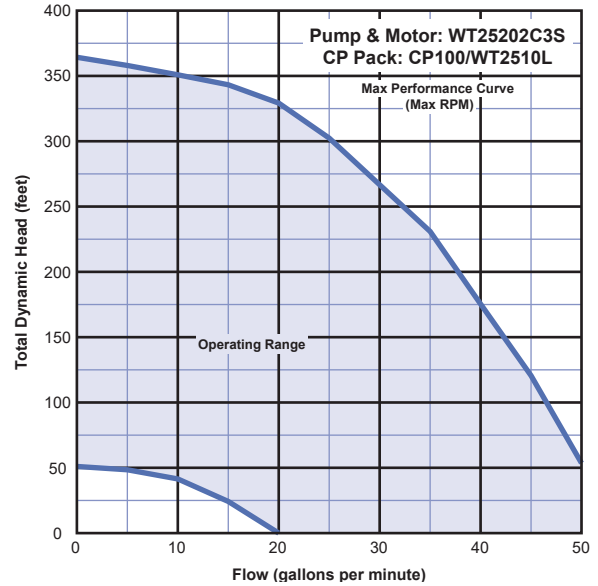
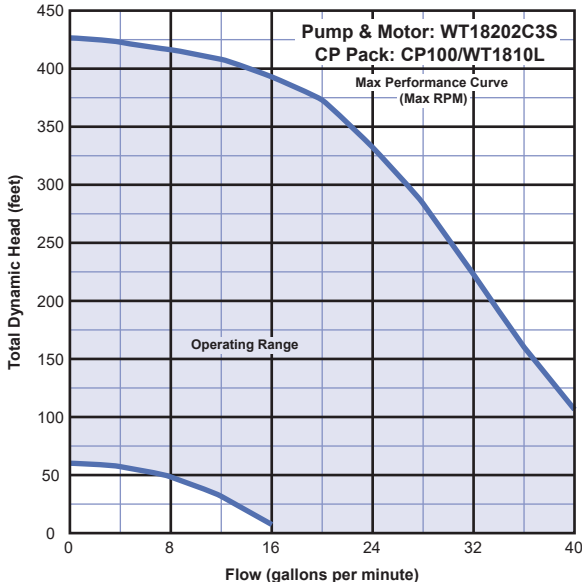
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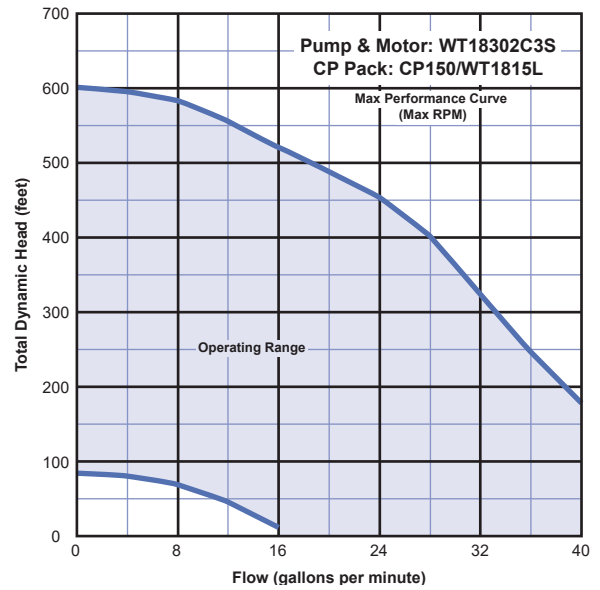
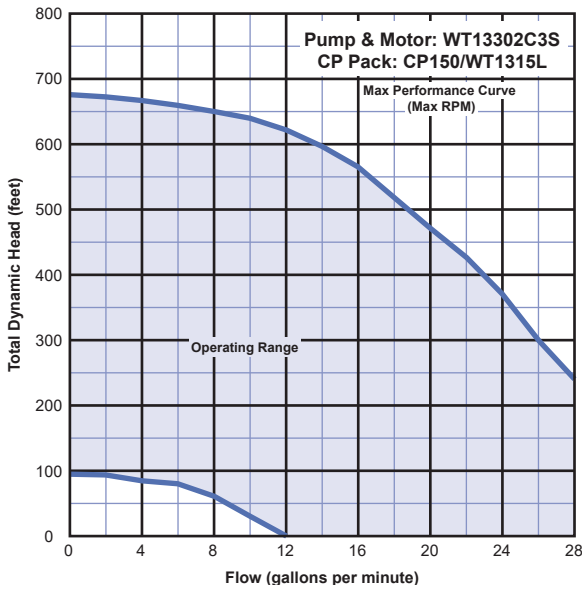
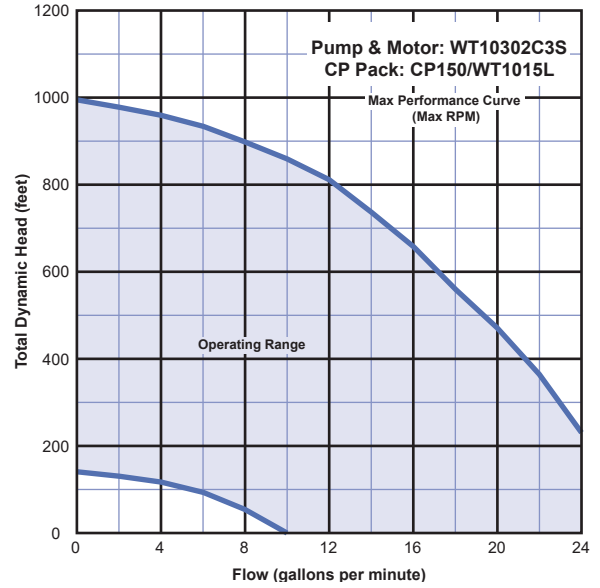
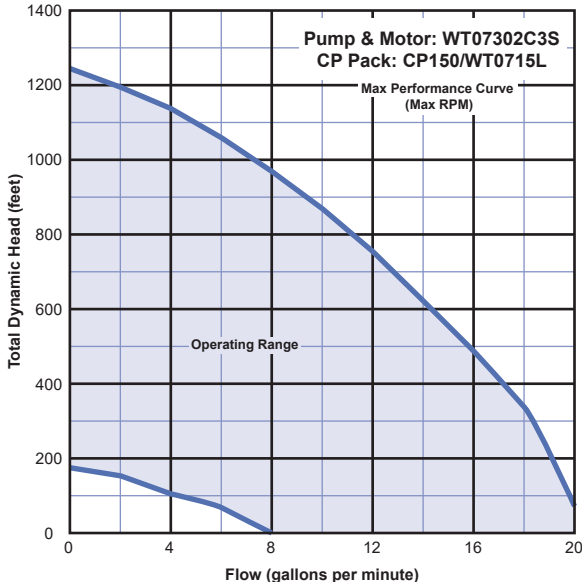
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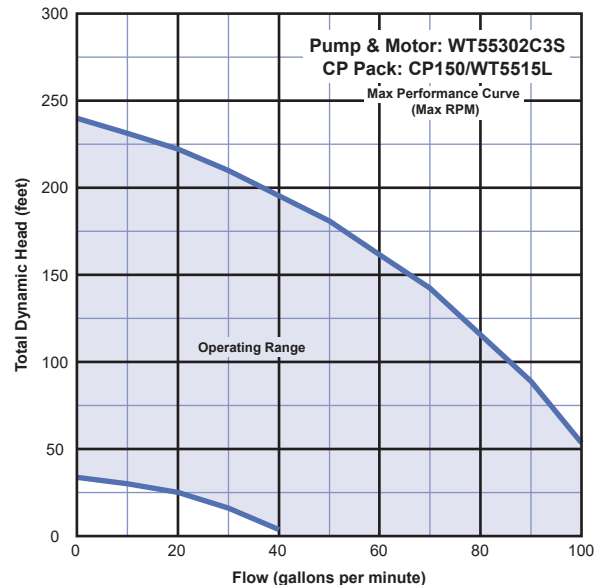
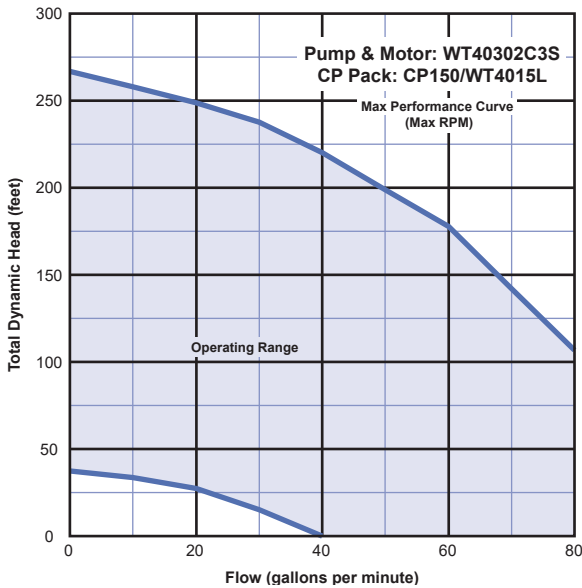
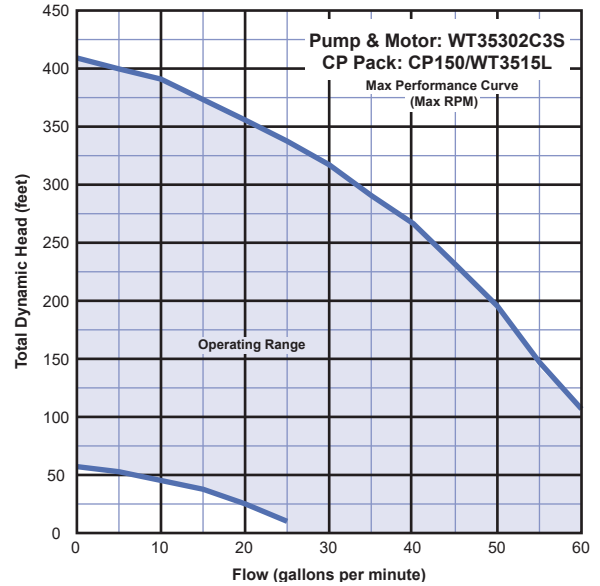
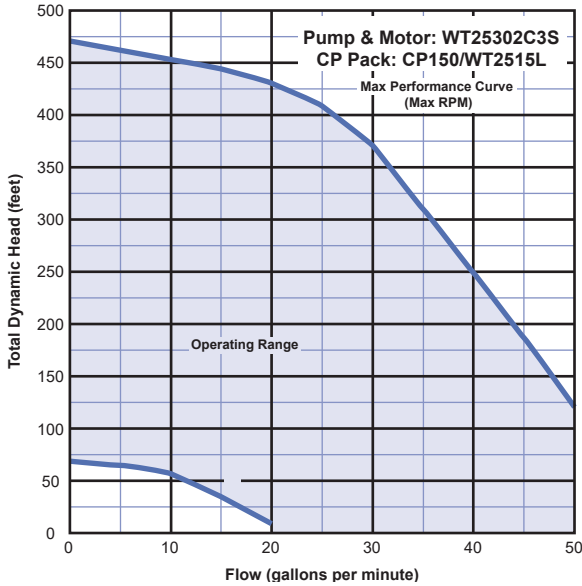
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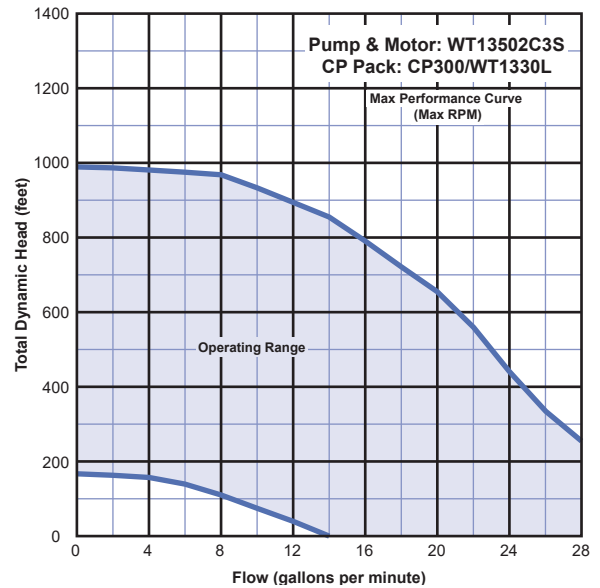
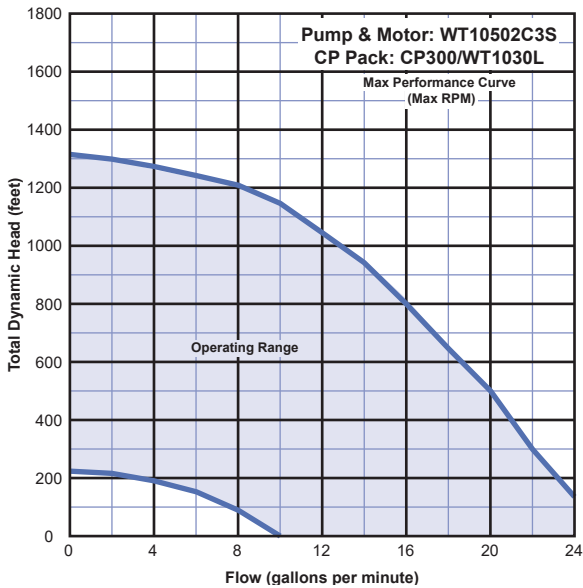
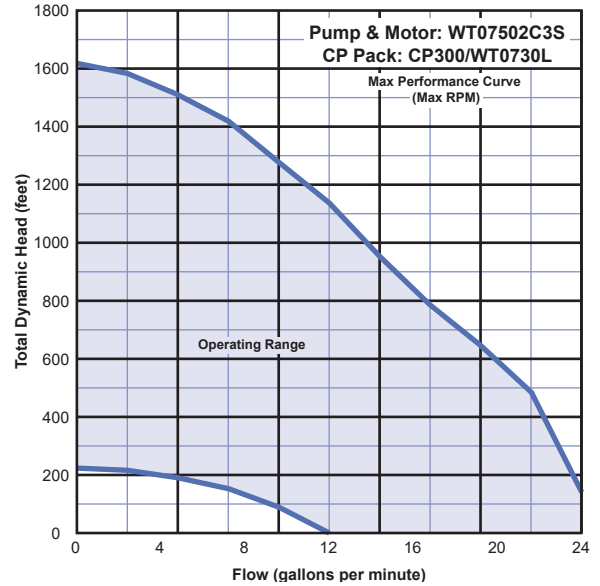
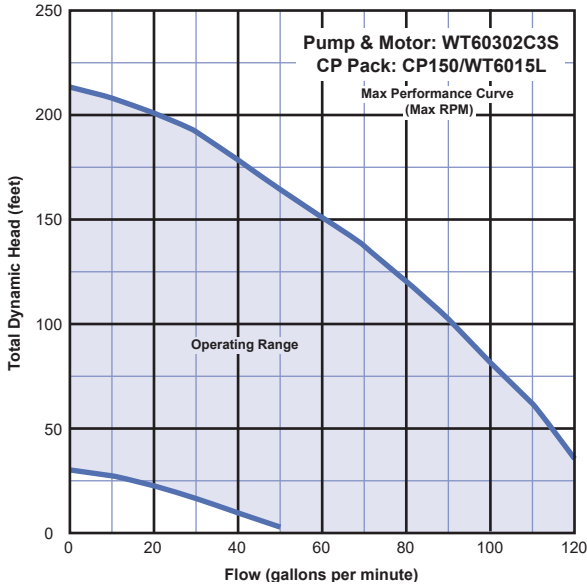
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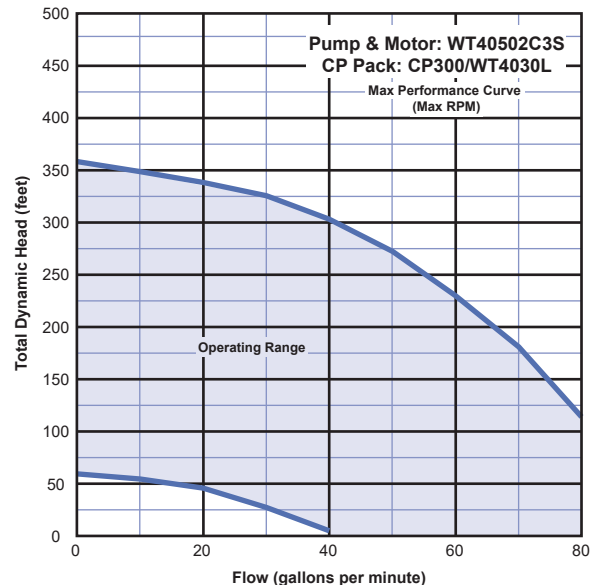
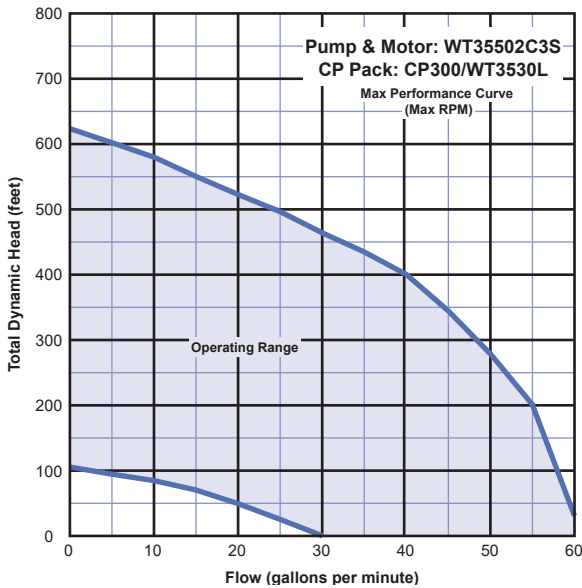
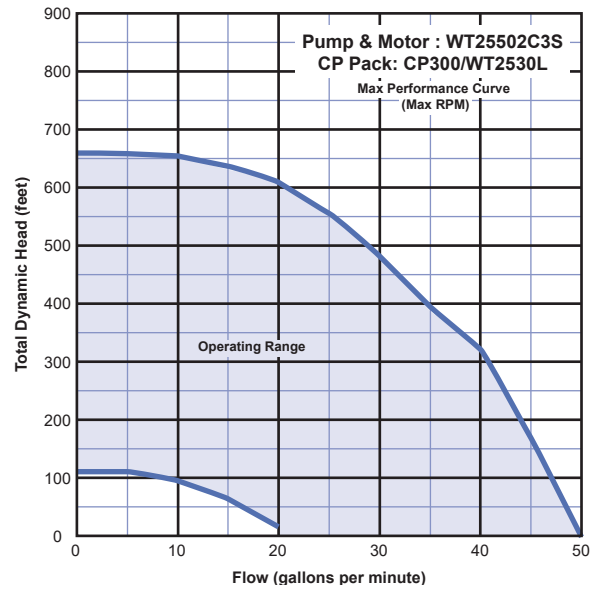
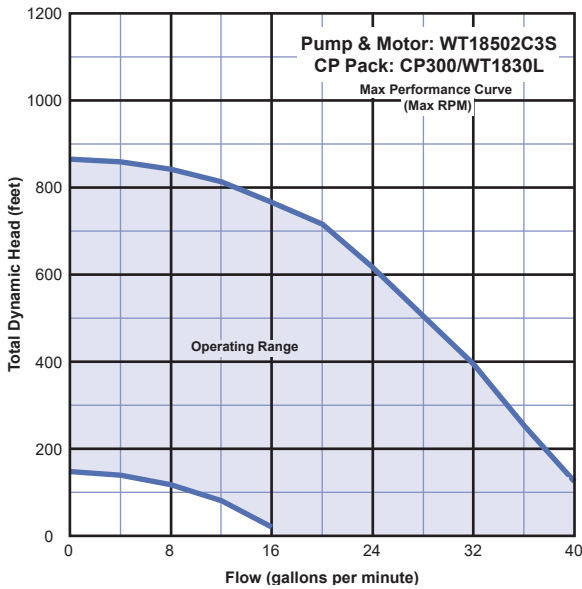
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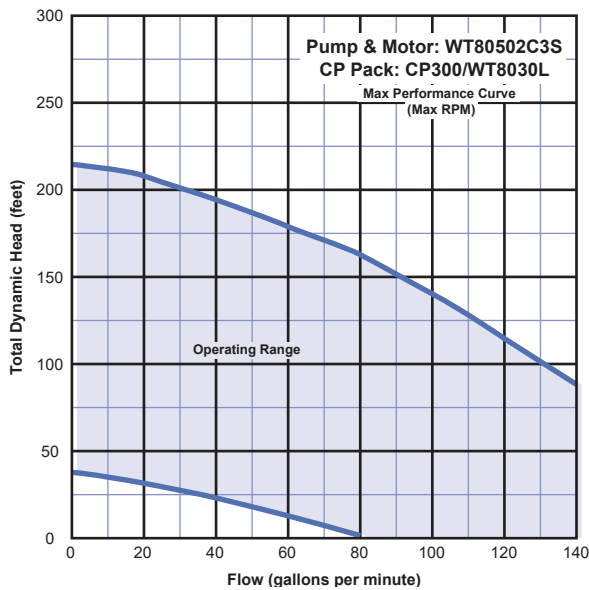
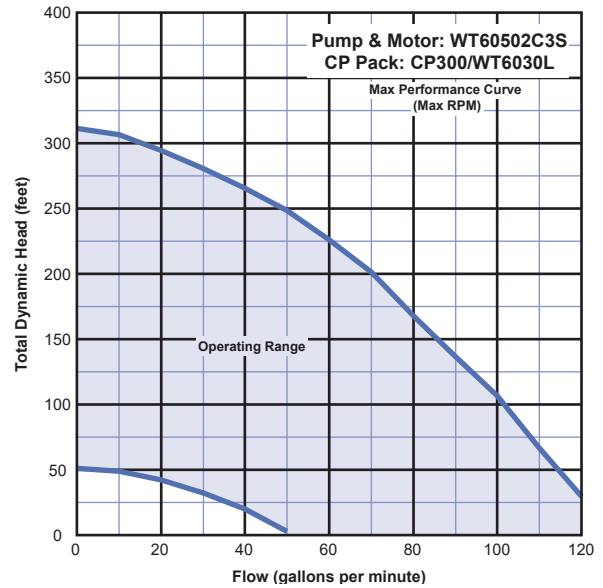
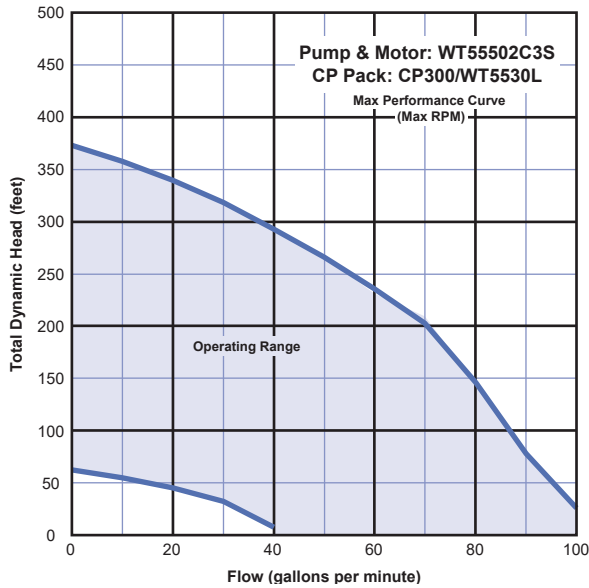
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System Features and Benefits

- Easy Installation
- Provides constant "City-Like" water pressure under varying demands.
- Controller replaces pressure switch and has no moving parts.
- Adjustable pressure 25-80 lbs.
- Controller minimizes pressure cycling during long-running applications.
- Soft start/stop prevents water hammering and no in-rush of electric current at start-up.
- Controller converts single-phase 230V to three phase power, providing smooth and efficient motor operation.
- Ideal for geothermal systems or lawn irrigation.

The Controller

The heart of the system is the SubDrive controller that provides constant pressure using hi-tech electronics to drive a standard 3-phase motor according to the pressure demands of a highly accurate and durable pressure sensor. Input voltage to the controller is normal household 230VAC single phase power. (2 power wires plus ground). The output voltage to the motor is 3 phase power (3 power wires plus ground).

Installation is as simple as a control box, it should be mounted to a sturdy supporting structure such as a wall or post. As the pressure sensor monitors the pressure to maintain the "set" pressure, it will send a signal to the controller that will "in turn" adjust the motor speed (1800-4800 RPM) to meet the ever-changing demand for water.

Two lights on the SubDrive controller provide "system status". The green "Power On" light is steady green anytime the unit is powered, and flashes when the pump / motor assembly is running. The red "Fault" light is used with the unit's built-in diagnostics. The "Fault" light indicates what the problem is by flashing a given number of times.

The system also has the ability to "soft-start". Soft starting totally eliminates the normal system in-rush current. This prevents the "dimming light" syndrome that occurs on some water systems.

A Typical Webtrol WT Series SubDrive System consists of only four components

- 1) Standard WT Series pump/3PH motor assembly.
- 2) SubDrive Controller.
- 3) Pressure Tank
- 4) Franklin Electric pressure sensor.

Minimum Pressure Tank Size (Total Capacity)		
Pump Flow Rating	Controller Model	Minimum Tank Size
Less than 12 GPM	SubDrive 75 / 15	2 gallons
	SubDrive 100 / 20	4 gallons
	SubDrive 150 / 30	4 gallons
	SubDrive 300	8 gallons
12 GPM or higher	SubDrive 75 / 15	4 gallons
	SubDrive 100 / 20	8 gallons
	SubDrive 150 / 30	8 gallons
	SubDrive 300	20 gallons

Note: The SubDrive controller is intended for indoor use and for operation in ambient temperature up to 104 degrees F. The electronics inside the controller are air cooled. As a result, there should be at least 6 inches of clearance on each side and below the unit to allow room for air flow.

