

## High Capacity Submersible Turbine Pumps

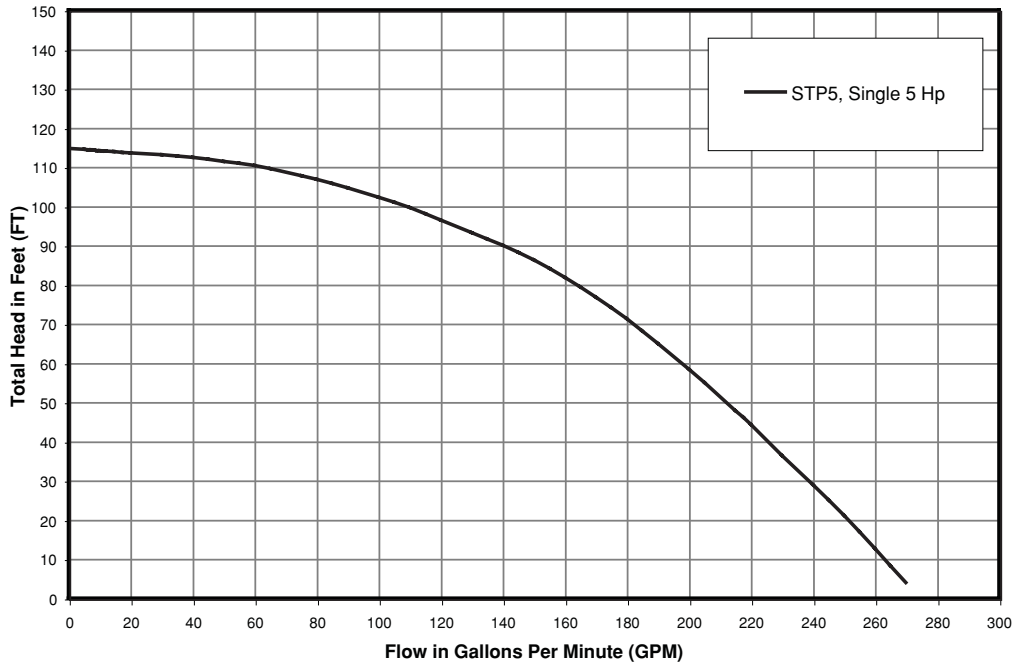
Available with either 3 or 5 horsepower, 50 or 60 hertz power, the FE Petro High Capacity Pump delivers efficient, reliable and quiet performance when high volumes or high speed deliveries of gasoline or diesel fuel are required.



### Features:

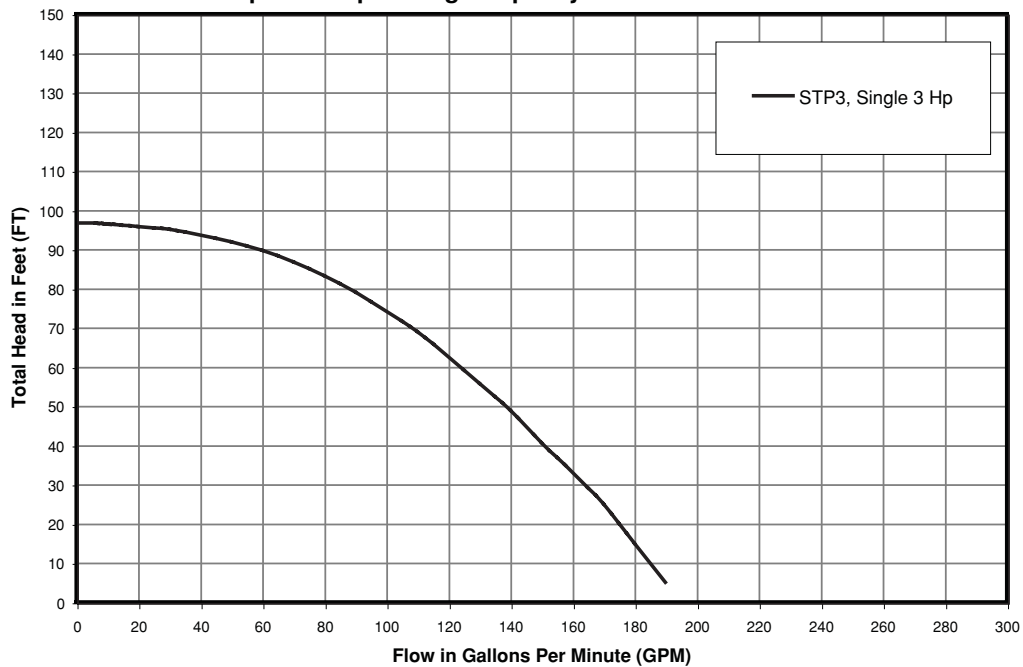
- **High Performance** - FE Petro's two-stage centrifugal pump design is coupled with a dependable Franklin Electric motor to provide higher heads, faster fuel delivery and lower cost operation. Motors are all three phase for smooth trouble-free operation, and are available in various voltages. Units come standard with 6" diameter riser pipe to mount the pump to the tank.
- **Ease of Maintenance** - If service is required, all FE Petro products are designed to put the operator back in business fast. Maintenance on the pump motor assembly, can be performed without having an electrician on site, because no wires are broken. Large diameter pins and sockets provide automatic open circuiting and disconnecting of the wiring when the extractable portion of the pump is removed. There is no difficult cam lock which has to be turned. Easily removed bolts provide the means to extract the unit. Properly spaced lifting eyes facilitate the removal of the unit without disturbing the discharge piping piping. The pump motor assembly is easily removed from the discharge head by removing four bolts and using standard pusher bolts. Replacement pump motor assemblies are available for comparably sized existing Tokheim and Red Jacket pumps.
- **Reliability** - Quality engineering and simplicity of design work hand in hand to insure years of reliable performance from every High Capacity unit. The continuous duty, three-phase Franklin motor with carbon bearings and stainless steel journals is the industry standard. The impellers, made of molded Delrin, and diffusers of hard coated aluminum with a stainless steel pump shaft assure trouble-free operation in motor fuels. Dual (180° opposed) 3" horizontal discharge ports provide easy installation, and two built-in line check valves reduce installation costs. Two line pressure relief valves protect the dispensers, meters, and piping from abnormal pressures from thermal expansion. The mesh screen on the pump inlet prevents large particles from entering the unit, and the FE Petro High Capacity unit is compatible with existing high capacity leak detector technology. New units are easily connected to field wiring without disassembly of the unit.
- **Satisfaction** - Every FE Petro pump undergoes rigorous testing and inspection before leaving our factory. Each and every High Capacity Pump is built to your tank and bury specifications and the complete assembly is performance tested to insure that your needs are met. All High Capacity Pumps are UL listed and meet the requirements of UL 79.

### 5 Hp Fixed Speed High Capacity Performance Chart

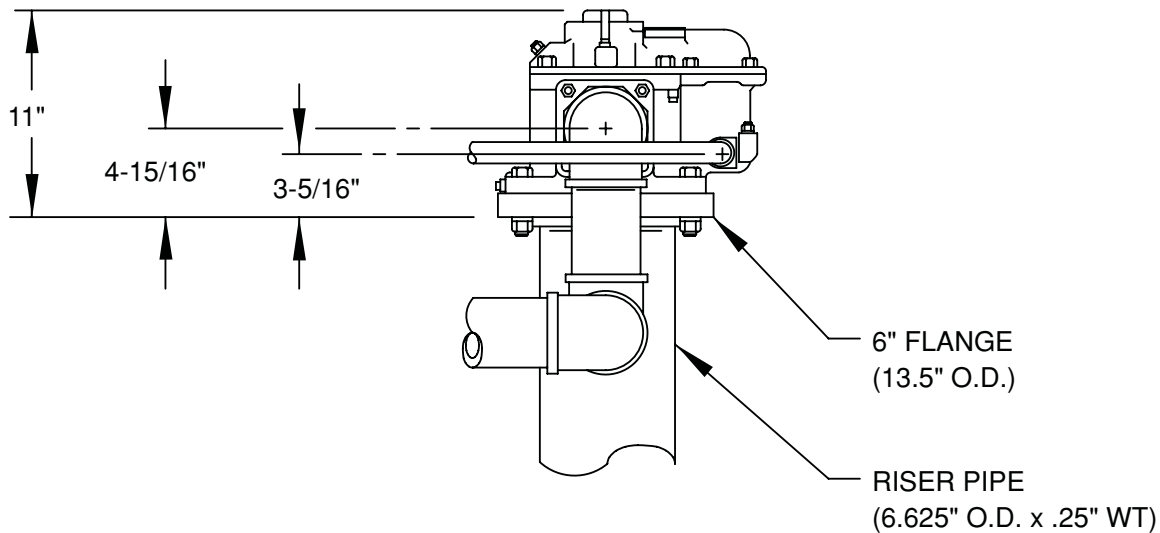
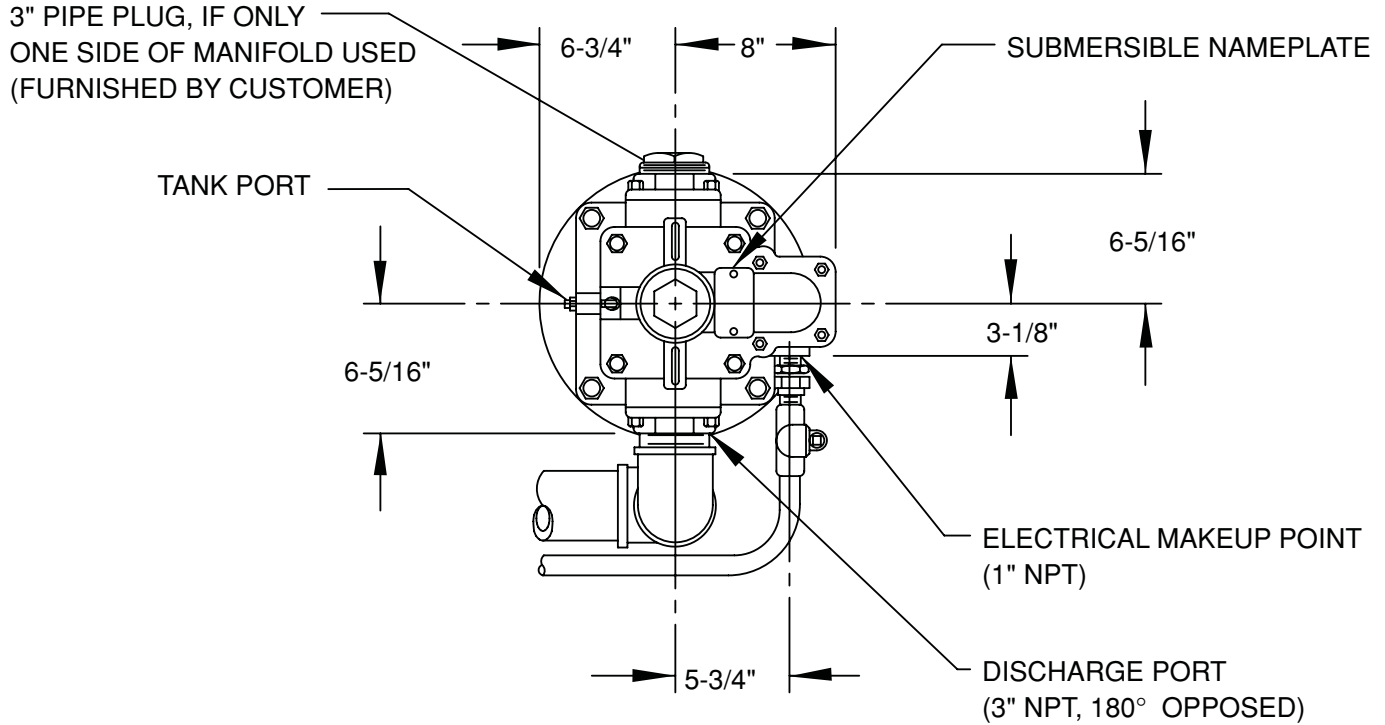


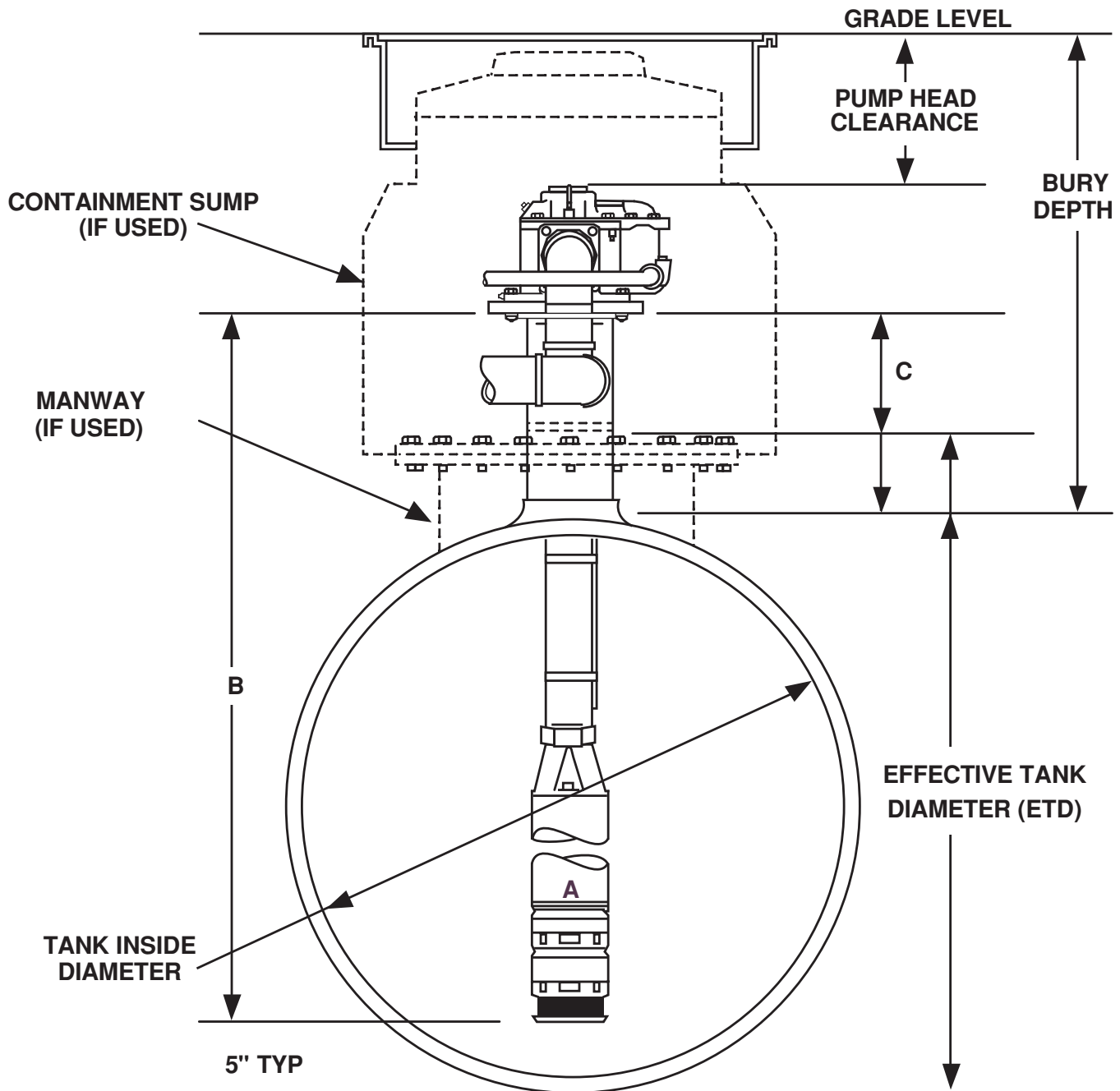
Notes: Performance based on pumping solvent (0.78 specific gravity). Pressure is taken at the manifold discharge outlet. STP 5 models are powered by a three phase, 60 Hertz, 208/230 Volt power supply.

### 3 Hp Fixed Speed High Capacity Performance Chart

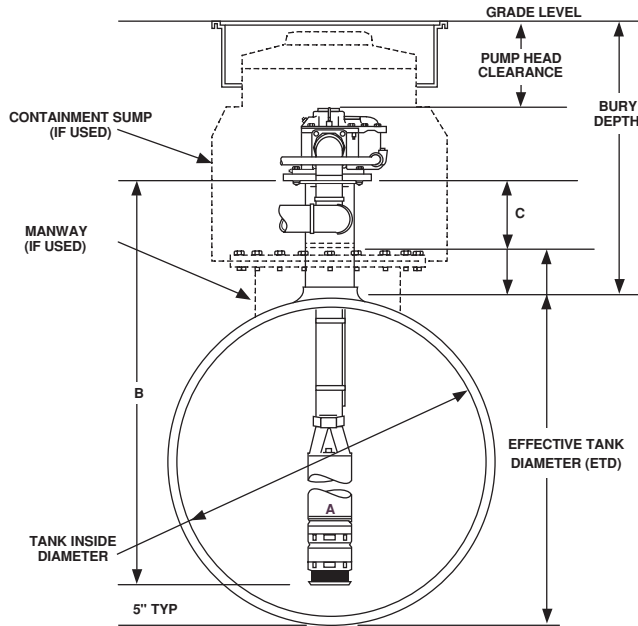


Notes: Performance based on pumping solvent (0.78 specific gravity). Pressure is taken at the manifold discharge outlet. STP 3 models are powered by a three phase, 60 Hertz, 208/230 Volt power supply.





NOTE: RISER LENGTH (C) = BURY DEPTH (TO TOP OF TANK) MINUS PUMP HEAD CLEARANCE MINUS TANK MANWAY AND/OR MINUS SUMP ADAPTER  
 NOTE: EFFECTIVE TANK DIAMETER (ETD) = INSIDE TANK DIAMETER (TO TOP OF 6" BUNG), INCLUDING TANK MANWAY AND/OR MINUS SUMP ADAPTER.  
 NOTE: MODEL LENGTH (B) = ETD PLUS RISER LENGTH MINUS BOTTOM CLEARANCE MINUS THREAD ENGAGEMENT (ONE INCH).



NOTE: RISER LENGTH (C) = BURY DEPTH (TO TOP OF TANK) MINUS PUMP HEAD CLEARANCE MINUS TANK MANWAY AND/OR MINUS SUMP ADAPTER  
 NOTE: EFFECTIVE TANK DIAMETER (ETD) = INSIDE TANK DIAMETER (TO TOP OF 6" BUNG), INCLUDING TANK MANWAY AND/OR MINUS SUMP ADAPTER.  
 NOTE: MODEL LENGTH (B) = ETD PLUS RISER LENGTH MINUS BOTTOM CLEARANCE MINUS THREAD ENGAGEMENT (ONE INCH).

### Fixed Length, Fixed Speed Model Designation System

A typical turbine model designation has up to five components to define the pump being supplied as follows:

**STP YYYYY A - B - C**

**STP** = Basic Model Designation

**YYYYY** = Factory Installed Options

Model designations may include one or more of the following characters in alphabetical order:

- AG = Alcohol-Gasoline Compatible (100% Ethanol or Methanol capable) Note: Standard models 0% to 15% Ethanol or Methanol capable
- F = Floating Suction Adapter (3" NPT Male adapter)
- \*R = Model R Check Valve (24 psi relief / 22 psi reset for PLLD)

\*Note: If not otherwise specified, all HCP models are supplied with Standard Model Check Valve (40 psi relief / 35 psi reset for MLD and LS300)

**A** = Pump Motor Horsepower/Electrical Rating

- 3 = 3 Hp Fixed Speed, 208-230 VAC
- 5 = 5 Hp Fixed Speed, 208-230 VAC
- 5H = 5 Hp Fixed Speed, 460 VAC
- 5G = 5 Hp Fixed Speed, 575 VAC

**B** = Model Length\*\*

Model Length is expressed as three numeric characters that indicate the length of the HCP from the Turbine Manifold bottom to the Pump Motor inlet in inches, maximum 170" (add'l charge for models 132" and longer)

**C** = Riser Pipe Length

Note: Riser Pipe Length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser Pipes are available from 6" to 60" in three inch increments (add'l charge and lead time for risers 33" or longer)

### Fixed Length, Fixed Speed Turbine Specifications

#### Power Requirements

- High Capacity Pump models require three phase, 60 Hertz incoming power
- High Capacity Pump models are available as 208-230 VAC, 460VAC, or 575 VAC versions
- High Capacity Pump models are available in 3 Hp & 5 Hp versions
- STP-SCIII Three Phase Smart Controllers and STP-CB3/5 Three Phase Control Boxes are available for High Capacity Pump control

#### Pump Motor

- Fixed Speed, 3450 rpm, multi-stage centrifugal type pump motor with built-in, automatic, thermal overload protection
- High Capacity Pump 60 Hz models are all available as 2 stage versions only

#### Liquid Compatibility

- Max liquid viscosity: 70 SSU @ 60° F (15° C)
- STP (Non-AG) models are UL and cUL listed for fuel mixtures containing up to 15% Ethanol or Methanol, and 20% MTBE, 20% ETBE, or 17% TAME with gasoline.
- STP AG (Alcohol-Gasoline) models are UL and cUL listed for fuel mixtures containing up to 100% Ethanol or Methanol, and 20% MTBE, 20% ETBE, or 17% TAME with gasoline.
- HCP models can also be used with Diesel Fuels, Fuel Oils, Kerosene, Avgas, and Jet Fuels in a non-gelled pourable state.
- All wetted elastomers are made of a high grade, fluorocarbon viton compound.

#### Standard Features

- Pressure Relief Valve: cartridge design available in two pressure relief settings, external to Check Valve. Standard Model relieves at 40 psi and resets above 35 psi.
- Syphon: external venturi type syphon primer supplied with as submersible accessory.
- Air Eliminator: every submersible includes tank return path to provide active air elimination

#### Approvals

- HCP models are UL and cUL listed
- Consult factory for other applicable approvals

#### Quality Certification

- Franklin Fueling Systems is an ISO 9001 Certified Manufacturer

## 6" High Capacity Turbine Pumps

| Model  | Description                         |
|--------|-------------------------------------|
| STP 3  | 3 hp 6" STP 208-230V, 60Hz, 3 phase |
| STP 5  | 5 hp 6" STP 208-230V, 60Hz, 3 phase |
| STP5H* | 5hp 6" STP 460V, 60Hz, 3 phase      |
| STP5G* | 5hp 6" STP 575 V, 60Hz, 3 phase     |

\*Please call Customer Service for Lead Time on this item.

\*\*For riser pipe lengths 33" to 60", adder charge applies. Contact Customer Service for lead times.

## Alcohol-Gasoline Units

| Model      | Description  |
|------------|--|
| STP AG3    | 3hp 6" AG Compatible 208-230V, 60Hz, 3 phase Submerged Turbine |
| STP AG5    | 5hp 6" AG Compatible 208-230V, 60Hz, 3 phase Submerged Turbine |
| STP AG 5H* | 5 hp 6" AG Compatible 460V, 60Hz, 3 phase Submerged Turbine    |
| STP AG 5G* | 5 hp 6" AG Compatible 575V, 60Hz, 3 phase Submerged Turbine    |

\*Please call Customer Service for Lead Time on this item

\*\*For riser pipe lengths 33" to 60", adder charge applies. Contact Customer Service for lead times.

## Length Adder

| Model     | Description  |
|-----------|--|
| 401190911 | Additional charge for pump lengths "B" from 132" to 170" |
| 401190914 | Additional charge for pump lengths "B" from 170" to 200" |

Note: Dimension "B" is defined on page 17 "How to Order" diagram. Dimension "B" can be a minimum of 60" to a maximum of 200".

## Factory Installed Options

| Model     | Description   |
|-----------|---|
| 401165905 | Syphon System (when purchased with STP)                                 |
| R         | Model R relief valve factory installed (for Veeder Root PLLD Line Leak) |
| 401227001 | Floating Suction Adapter-3" Male NPT - Must be ordered with STP         |

## Field Installed Options

| Model     | Description   |
|-----------|---|
| STP-CB3   | Motor Starter, 3 hp 208-230V, 60Hz, 3 phase (120V Coil)                         |
| STP-CB5   | Motor Starter, 5 hp 208-230V, 60Hz, 3 phase (120V Coil)                         |
| STP-CB5G  | Motor Starter, 5 hp 460V, 60Hz, 3 phase (120V Coil)                             |
| STP-CBB5H | Motor Starter, 5 hp 575V, 60Hz, 3 phase (220V Coil)                             |
| STP-SCIII | 3 Phase Smart Controller, 120V coil - When ordered with a 6" High Capacity STP* |
| STP-SCIII | When purchased without a 6" High Capacity STP                                   |

Note: 3 Phase Smart Controller is compatible with FE Petro 208/230 volt 3 & 5 HP High Capacity STPs and like competitive makes. (Not available for 460 or 575 volt models.)

\*When purchasing STP-SCIII in equal quantities of Fixed Speed 6 inch STP's, the STP-SCIII will be invoiced at special discount pricing.

## 6" STP Extractable (less manifold, riser & PMA)

| Model           | Description                               |
|-----------------|---|
| HCPEXT-XXX-XX   | 6" Fixed Length Extractable               |
| HCPAGEXT-XXX-XX | AG Compatible 6" Fixed Length Extractable |