

Submersible Pumping Systems Price- and order list 2020

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petro systems

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Variable Speed Submersible Turbine Pump Model Designation System

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

STP XXXXX Y-A-B

STP = Basic Model Designation

Note: Standard models up to 10% ethanol capable.

XXXXX = Factory Installed Options

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

F = Floating suction adapter (1 1/2" NPT female adapter)

K = Intake filter screen (IFS, factory installed to PMA)

M = Magshell™ (flow enhancing, expanded PMA shell)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating

VS2 = 2 hp variable speed

VS4 = 4 hp variable speed

A = Model Length

VL1 = Variable length range #1

VL2 = Variable length range #2

VL3 = Variable length range #3

Note: VL2 models fit 94% of all known installation

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).





Variable Speed Submersible Turbine Pumps (variable speed, variable length)

Model	Description	Range Length	Model Length *	Without Riser	With Riser **
STPVS2-VL1	2 hp variable speed	VL1	1486mm - 2228mm	USP 1,930.00	USP 2,005.00
STPVS2-VL2	2 hp variable speed	VL2	2274mm - 3835mm	USP 1,930.00	USP 2,005.00
STPVS2-VL3	2 hp variable speed	VL3	3087mm - 5429mm	USP 2,035.00	USP 2,110.00
STPVS4-VL1	4 hp variable speed	VL1	1613mm - 2355mm	USP 2,506.00	USP 2,581.00
STPVS4-VL2	4 hp variable speed	VL2	2401mm - 3962mm	USP 2,506.00	USP 2,581.00
STPVS4-VL3	4 hp variable speed	VL3	3214mm - 5556mm	USP 2,611.00	USP 2,686.00

Notes:

- 1. All above models are listed for fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. 4 hp models require EcoVFC with three-phase incoming power supply, 2 hp models can be operated with MagVFC or EcoVFC.
- 4. 4" riser pipe, if supplied locally, must be 4 % " OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$75 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

Factory Installed Options (specified in model number at time of STP order)

Model	Description	List
F	Floating suction adapter, 1½" NPT female, must be factory installed	USP 125.00
К	IFS (intake filter screen) factory assembled to pump motor assembly	USP 165.00
М	Magshell™ (flow enhancing, expanded PMA shell)	no adder
R	Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder

Veeder-Root™ is a trademark of Danaher Corporation.

Field Installed Options (intelligent submersible turbine pump specific accessories)

Model	Description	List
5874202800	MagVFC™, 200-250 VAC, 50-60 Hz, one required per STP VS2 or VS4	USP 1,294.00
5874202900	EcoVFC™, 380-415 VAC, 50-60 Hz, one required per STP VS2 or VS4	USP 1,494.00
400137937	Syphon check valve	USP 78.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphons are required for one STP)	USP 173.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00





Intelligent Submersible Turbine Pump Model Designation System

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

IST XXXXX Y-A-B

IST = Basic Model Designation **

Note: All IST models include alcohol-gasoline compatibility (up to 85% ethanol, up to 20% biodiesel, or 100% biodiesel), variable speed and variable length as part of the base model.

XXXXX = Factory Installed Options

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

F = Floating suction adapter (1 1/2" NPT female adapter)

K = Intake filter screen (IFS, factory installed to PMA)

M = Magshell™ (flow enhancing, expanded PMA shell)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating**

VS4 = 4 hp variable speed

**Note: If not otherwise specified, 2 hp variable speed is implied.

A = Model Length

1 = 2 hp variable length, 1486mm - 2228mm

2 = 2 hp variable length, 2274mm - 3835mm

3 = 2 hp variable length, 3087mm - 5429mm

VL1 = 4 hp variable length, 1613mm - 2355mm

VL2 = 4 hp variable length, 2401mm - 3962mm

VL3 = 4 hp variable length, 3214mm - 5556mm

Note: IST-2 and ISTVS4-VL2 models fit 94% of all known installations

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).





Intelligent Submersible Turbine Pumps (variable speed, variable length, AG compatible)

Model	Description	Range Length	Model Length *	Without Riser	With Riser **
IST 1	2 hp AG variable speed	VL1	1486mm - 2228mm	USP 2,325.00	USP 2,400.00
IST 2	2 hp AG variable speed	VL2	2274mm - 3835mm	USP 2,325.00	USP 2,400.00
IST 3	2 hp AG variable speed	VL3	3087mm - 5429mm	USP 2,430.00	USP 2,505.00
ISTVS4-VL1	4 hp AG variable speed	VL1	1613mm - 2355mm	USP 2,901.00	USP 2,976.00
ISTVS4-VL2	4 hp AG variable speed	VL2	2401mm - 3962mm	USP 2,901.00	USP 2,976.00
ISTVS4-VL3	4 hp AG variable speed	VL3	3214mm - 5556mm	USP 3,006.00	USP 3,081.00

Notes:

- 1. All above models are listed for compatibility with fuel mixtures containing diesel fuels with up to 20% biodiesel, 100% biodiesel, up to 85% ethanol with gasoline, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. 4 hp models require EcoVFC with three-phase incoming power supply, 2 hp models can be operated with MagVFC or EcoVFC.
- 4. 4" riser pipe, if supplied locally, must be $4\frac{1}{2}$ " OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$75 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

Factory Installed Options (specified in model number at time of STP order)

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Model	Description	List
F	Floating suction adapter, 1½" NPT female, must be factory installed	USP 125.00
K	IFS (intake filter screen) factory assembled to pump motor assembly	USP 165.00
M	Magshell™ (flow enhancing, expanded PMA shell)	no adder
R	Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder

Veeder-Root™ is a trademark of Danaher Corporation.

Field Installed Options (intelligent submersible turbine pump specific accessories)

Model	Description	List
5874202800	MagVFC™, 200-250 VAC, 50-60 Hz, one required per IST	USP 1,294.00
5874202900	EcoVFC™, 380-415 VAC, 50-60 Hz, one required per IST	USP 1,494.00
400137937	Syphon check valve	USP 78.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphons are required for one IST)	USP 173.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00





2 hp Fixed Speed Submersible Turbine Pump Model Designation System

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

STP XXXXX Y-A-B

STP = Basic Model Designation

XXXXX = Factory Installed Options

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

AG = Alcohol-gasoline compatible (up to 85% ethanol, up to 20% biodiesel, or 100% biodiesel)

Note: Standard models up to 10% ethanol capable.

F = Floating suction adapter (1 1/2" NPT female adapter)

H = High pressure (3.1 bar deadhead output)

K = Intake filter screen (IFS, factory installed to PMA)

M = Magshell™ (flow enhancing, expanded PMA shell)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating

200B = 2 hp fixed speed, 50 Hz, 1-phase

200C = 2 hp fixed speed, 50 Hz, 3-phase

A = Model Length

VL1 = Variable length range #1

VL2 = Variable length range #2

VL3 = Variable length range #3

Note: VL2 models fit 94% of all known installation

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).





2 HP Fixed Speed Submersible Turbine Pumps

Model	Description	Range Length	Model Length *	Without Riser	With Riser **
STP200B-VL1	2 hp fixed speed, single phase	VL1	1632mm - 2374mm	USP 2,697.00	USP 2,772.00
STP200B-VL2	2 hp fixed speed, single phase	VL2	2420mm - 3981mm	USP 2,697.00	USP 2,772.00
STP200B-VL3	2 hp fixed speed, single phase	VL3	3233mm - 5575mm	USP 2,802.00	USP 2,877.00
STP200C-VL1	2 hp fixed speed, three phase	VL1	1575mm - 2317mm	USP 2,859.00	USP 2,934.00
STP200C-VL2	2 hp fixed speed, three phase	VL2	2363mm - 3924mm	USP 2,859.00	USP 2,934.00
STP200C-VL3	2 hp fixed speed, three phase	VL3	3175mm - 5518mm	USP 2,964.00	USP 3,039.00
STPAG200B-VL1	2 hp AG fixed speed, single phase	VL1	1632mm - 2374mm	USP 3,092.00	USP 3,167.00
STPAG200B-VL2	2 hp AG fixed speed, single phase	VL2	2420mm - 3981mm	USP 3,092.00	USP 3,167.00
STPAG200B-VL3	2 hp AG fixed speed, single phase	VL3	3233mm - 5575mm	USP 3,197.00	USP 3,272.00
STPAG200C-VL1	2 hp AG fixed speed, three phase	VL1	1575mm - 2317mm	USP 3,254.00	USP 3,329.00
STPAG200C-VL2	2 hp AG fixed speed, three phase	VL2	2363mm - 3924mm	USP 3,254.00	USP 3,329.00
STPAG200C-VL3	2 hp AG fixed speed, three phase	VL3	3175mm - 5518mm	USP 3,359.00	USP 3,434.00

Notes:

- 1. STP models are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE or 17% TAME with gasoline. STPAG models are listed for compatibility with fuel mixtures containing diesel fuel with up to 20% biodiesel, 100% biodiesel, up to 85% ethanol with gasoline, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. All 200B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 200C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 4. 4" riser pipe, if supplied locally, must be $4 \frac{1}{2}$ " OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$75 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

Factory Installed Options (specified in model number at time of STP order)

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Model	Description	List
F	Floating suction adapter, 11/2" NPT female, must be factory installed	USP 125.00
Н	High Pressure (3.1 bar deadhead output, adds 12mm to the Model Length*)	USP 75.00
K	IFS (intake filter screen), factory assembled to pump motor assembly	USP 165.00
M	Magshell™ (flow enhancing, expanded PMA shell)	no adder
R	Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder

Veeder-Root™ is a trademark of Danaher Corporation.





Field Installed Options (2 hp fixed speed specific accessories)

Model	Description	List
400137937	Syphon check valve	USP 78.00
5800100215	STP-SCI, single-phase smart controller	USP 454.00
400818922	STP-CBBS, single-phase control box with lockout switch, 240 Volt coil	USP 173.00
402312922	STP-DHIB-SCI, combo DHIB with factory wired STP-SCI	USP 829.00
402313922	STP-DHIB-CBBS, combo DHIB with factory wired STP-CBBS	USP 556.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphon primes are required for one STP)	USP 173.00
401220965	STP-CBB3C, three-phase 380-415 VAC magnetic starter	USP 579.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00

Veeder-Root™ is a trademark of Danaher Corporation.

2 HP Fixed Speed Submersible Turbine Pumps Kits

Model	Description	Without Riser (sold separately)
STP200B KIT	2 hp fixed speed, fixed length kit components - single phase	USP 2,297.00
STP200C KIT	2 hp fixed speed, fixed length kit components - three phase	USP 2,459.00
STPAG200B KIT	2 hp AG fixed speed, fixed length kit components - single phase	USP 2,692.00
STPAG200C KIT	2 hp AG fixed speed, fixed length kit components - three phase	USP 2,854.00

Kit Program Definition and Guidelines

- 1. All models are supplied with a standard check valve unless factory option "R" is specified.
- 2. All 200B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 200C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 3. 4" riser pipe, if supplied locally, must be 4½" OD by 3/16" WT tubing. Schedule 40 Riser material will not provide proper clearance for future servicing of the pump motor assembly with MagShell™ option.
- 4. Pumps supplied in KIT form are shipped less the 1 1/2" NPT column pipe, 1/2" NPT conduit pipe, and 3/8" vapor return tube (supplied locally).
- 5. Pumps supplied in KIT form are supplied as two components, factory assembled/tested manifold assembly (with conduit adapter) and pump motor assembly (with discharge head and lead assembly).
- 6. Pumps supplied in KIT form requires final assembly (performed locally by factory authorized personnel) of the manifold assembly to the pump motor assembly and then air tested to ensure integrity of the final assembly (per factory specifications).





1 1/2 hp Fixed Speed Submersible Turbine Pump Model Designation System

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

STP XXXXX Y-A-B

STP = Basic Model Designation

XXXXX = Factory Installed Options

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

AG = Alcohol-gasoline compatible (up to 85% ethanol, up to 20% biodiesel, or 100% biodiesel)

Note: Standard models up to 10% ethanol capable.

F = Floating suction adapter (1 1/2" NPT female adapter)

H = High pressure (3.1 bar deadhead output)

K = Intake filter screen (IFS, factory installed to PMA)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating

150B = 1 1/2 hp fixed speed, 50 Hz, 1-phase

150C = 1 1/2 hp fixed speed, 50 Hz, 3-phase

A = Model Length

VL1 = Variable length range #1

VL2 = Variable length range #2

VL3 = Variable length range #3

Note: VL2 models fit 94% of all known installation

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).





1 1/2 HP Fixed Speed Submersible Turbine Pumps

Model	Description	Range Length	Model Length *	Without Riser	With Riser **
STP150B-VL1	1 1/2 hp fixed speed, single phase	VL1	1556mm - 2298mm	USP 2,309.00	USP 2,384.00
STP150B-VL2	1 1/2 hp fixed speed, single phase	VL2	2344mm - 3905mm	USP 2,309.00	USP 2,384.00
STP150B-VL3	1 1/2 hp fixed speed, single phase	VL3	3156mm - 5499mm	USP 2,414.00	USP 2,489.00
STP150C-VL1	1 1/2 hp fixed speed, three phase	VL1	1531mm - 2273mm	USP 2,473.00	USP 2,548.00
STP150C-VL2	1 1/2 hp fixed speed, three phase	VL2	2318mm - 3879mm	USP 2,473.00	USP 2,548.00
STP150C-VL3	1 1/2 hp fixed speed, three phase	VL3	3131mm - 5473mm	USP 2,578.00	USP 2,653.00
STPAG150B-VL1	1 1/2 hp AG fixed speed, single phase	VL1	1556mm - 2298mm	USP 2,704.00	USP 2,779.00
STPAG150B-VL2	1 1/2 hp AG fixed speed, single phase	VL2	2344mm - 3905mm	USP 2,704.00	USP 2,779.00
STPAG150B-VL3	1 1/2 hp AG fixed speed, single phase	VL3	3156mm - 5499mm	USP 2,809.00	USP 2,884.00
STPAG150C-VL1	1 1/2 hp AG fixed speed, three phase	VL1	1531mm - 2273mm	USP 2,868.00	USP 2,943.00
STPAG150C-VL2	1 1/2 hp AG fixed speed, three phase	VL2	2318mm - 3879mm	USP 2,868.00	USP 2,943.00
STPAG150C-VL3	1 1/2 hp AG fixed speed, three phase	VL3	3131mm - 5473mm	USP 2,973.00	USP 3,048.00

Notes:

- 1. STP models are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE or 17% TAME with gasoline. STPAG models are listed for compatibility with fuel mixtures containing diesel fuel with up to 20% biodiesel, 100% biodiesel, up to 85% ethanol with gasoline, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. All 150B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 150C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 4. 4" riser pipe, if supplied locally, must be $4\frac{1}{2}$ " OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$75 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

Factory Installed Options (specified in model number at time of STP order)

Model	Description	
F	Floating suction adapter, 11/2" NPT female, must be factory installed	USP 125.00
Н	High Pressure (3.1 bar deadhead output, adds 6mm to the Model Length*)	USP 75.00
K	IFS (intake filter screen), factory assembled to pump motor assembly	USP 165.00
R	Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder

Veeder-Root[™] is a trademark of Danaher Corporation.





Field Installed Options (1 1/2 hp fixed speed specific accessories)

Model	Description	List
400137937	Syphon check valve	USP 78.00
5800100215	STP-SCI, single-phase smart controller	USP 454.00
400818922	STP-CBBS, single-phase control box with lockout switch, 240 Volt coil	USP 173.00
402312922	STP-DHIB-SCI, combo DHIB with factory wired STP-SCI	USP 829.00
402313922	STP-DHIB-CBBS, combo DHIB with factory wired STP-CBBS	USP 556.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphon primes are required for one STP)	USP 173.00
5800103300	STP-SCIIIC, three-phase 380-415 VAC smart controller	USP 704.00
401220965	STP-CBB3C, three-phase 380-415 VAC magnetic starter	USP 579.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00

Veeder-Root™ is a trademark of Danaher Corporation.

1 1/2 HP Fixed Speed Submersible Turbine Pumps Kits

Model	Description	Without Riser (sold separately)
STP150B KIT	1 1/2 hp fixed speed, fixed length kit components - single phase	USP 1,909.00
STP150C KIT	1 1/2 hp fixed speed, fixed length kit components - three phase	USP 2,073.00
STPAG150B KIT	1 1/2 hp AG fixed speed, fixed length kit components - single phase	USP 2,304.00
STPAG150C KIT	1 1/2 hp Ag fixed speed, fixed length kit components - three phase	USP 2,468.00

Kit Program Definition and Guidelines

- 1. All models are supplied with a standard check valve unless factory option "R" is specified.
- 2. All 150B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 150C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 3. 4" riser pipe, if supplied locally, must be 4½" OD by 3/16" WT tubing. Schedule 40 Riser material will not provide proper clearance for future servicing of the pump motor assembly with MagShell™ option.
- 4. Pumps supplied in KIT form are shipped less the 1 1/2" NPT column pipe, 1/2" NPT conduit pipe, and 3/8" vapor return tube (supplied locally).
- 5. Pumps supplied in KIT form are supplied as two components, factory assembled/tested manifold assembly (with conduit adapter) and pump motor assembly (with discharge head and lead assembly).
- 6. Pumps supplied in KIT form requires final assembly (performed locally by factory authorized personnel) of the manifold assembly to the pump motor assembly and then air tested to ensure integrity of the final assembly (per factory specifications).





3/4 hp Fixed Speed Submersible Turbine Pump Model Designation System

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

STP XXXXX Y-A-B

STP = Basic Model Designation

XXXXX = Factory Installed Options

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

AG = Alcohol-gasoline compatible (up to 85% ethanol, up to 20% biodiesel, or 100% biodiesel)

Note: Standard models up to 10% ethanol capable.

F = Floating suction adapter (1 1/2" NPT female adapter)

K = Intake filter screen (IFS, factory installed to PMA)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating

75B = 3/4 hp fixed speed, 50 Hz, 1-phase

75C = 3/4 hp fixed speed, 50 Hz, 3-phase

A = Model Length

VL1 = Variable length range #1

VL2 = Variable length range #2

VL3 = Variable length range #3

Note: VL2 models fit 94% of all known installation

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).





3/4 HP Fixed Speed Submersible Turbine Pumps

Model	Description	Range Length	Model Length *	Without Riser	With Riser **
STP75B-VL1	3/4 hp fixed speed, single phase	VL1	1499mm - 2241mm	USP 2,115.00	USP 2,190.00
STP75B-VL2	3/4 hp fixed speed, single phase	VL2	2286mm - 3848mm	USP 2,115.00	USP 2,190.00
STP75B-VL3	3/4 hp fixed speed, single phase	VL3	3099mm - 5441mm	USP 2,220.00	USP 2,295.00
STP75C-VL1	3/4 hp fixed speed, three phase	VL1	1480mm - 2222mm	USP 2,341.00	USP 2,416.00
STP75C-VL2	3/4 hp fixed speed, three phase	VL2	2267mm - 3829mm	USP 2,341.00	USP 2,416.00
STP75C-VL3	3/4 hp fixed speed, three phase	VL3	3080mm - 5422mm	USP 2,446.00	USP 2,521.00
STPAG75B-VL1	3/4 hp AG fixed speed, single phase	VL1	1499mm - 2241mm	USP 2,510.00	USP 2,585.00
STPAG75B-VL2	3/4 hp AG fixed speed, single phase	VL2	2286mm - 3848mm	USP 2,510.00	USP 2,585.00
STPAG75B-VL3	3/4 hp AG fixed speed, single phase	VL3	3099mm - 5441mm	USP 2,615.00	USP 2,690.00
STPAG75C-VL1	3/4 hp AG fixed speed, three phase	VL1	1480mm - 2222mm	USP 2,736.00	USP 2,811.00
STPAG75C-VL2	3/4 hp AG fixed speed, three phase	VL2	2267mm - 3829mm	USP 2,736.00	USP 2,811.00
STPAG75C-VL3	3/4 hp AG fixed speed, three phase	VL3	3080mm - 5422mm	USP 2,841.00	USP 2,916.00

Notes:

- 1. STP models are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE or 17% TAME with gasoline. STPAG models are listed for compatibility with fuel mixtures containing diesel fuel with up to 20% biodiesel, 100% biodiesel, up to 85% ethanol with gasoline, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. All 75B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 75C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 4. 4" riser pipe, if supplied locally, must be 4½" OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$75 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

Factory Installed Options (specified in model number at time of STP order)

Model	Description	
F	Floating suction adapter, 1½" NPT female, must be factory installed	USP 125.00
K	IFS (intake filter screen), factory assembled to pump motor assembly	USP 165.00
R	Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder

Veeder-Root™ is a trademark of Danaher Corporation.





Field Installed Options (3/4 hp fixed speed specific accessories)

Model	Description	List
400137937	Syphon check valve	USP 78.00
5800100215	STP-SCI, single-phase smart controller	USP 454.00
400818922	STP-CBBS, single-phase control box with lockout switch, 240 Volt coil	USP 173.00
402312922	STP-DHIB-SCI, combo DHIB with factory wired STP-SCI	USP 829.00
402313922	STP-DHIB-CBBS, combo DHIB with factory wired STP-CBBS	USP 556.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphon primes are required for one STP)	USP 173.00
5800103300	STP-SCIIIC, three-phase 380-415 VAC smart controller	USP 704.00
401220965	STP-CBB3C, three-phase 380-415 VAC magnetic starter	USP 579.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00

Veeder-Root™ is a trademark of Danaher Corporation.

3/4 HP Fixed Speed Submersible Turbine Pumps Kits

Model	Description	Without Riser (sold separately)
STP75B KIT	3/4 hp fixed speed, fixed length kit components - single phase	USP 1,715.00
STP75C KIT	3/4 hp fixed speed, fixed length kit components - three phase	USP 1,941.00
STPAG75B KIT	3/4 hp AG fixed speed, fixed length kit components - single phase	USP 2,110.00
STPAG75C KIT	3/4 hp AG fixed speed, fixed length kit components - three phase	USP 2,336.00

Kit Program Definition and Guidelines

- 1. All models are supplied with a standard check valve unless factory option "R" is specified.
- 2. All 75B models require single-phase, 200-250 VAC, 50 Hz incoming power. All 75C models require three-phase, 380-415 VAC, 50 Hz incoming power.
- 3. 4" riser pipe, if supplied locally, must be 4½" OD by 3/16" WT tubing. Schedule 40 Riser material will not provide proper clearance for future servicing of the pump motor assembly with MagShell™ option.
- 4. Pumps supplied in KIT form are shipped less the 1 1/2" NPT column pipe, 1/2" NPT conduit pipe, and 3/8" vapor return tube (supplied locally).
- 5. Pumps supplied in KIT form are supplied as two components, factory assembled/tested manifold assembly (with conduit adapter) and pump motor assembly (with discharge head and lead assembly).
- 6. Pumps supplied in KIT form requires final assembly (performed locally by factory authorized personnel) of the manifold assembly to the pump motor assembly and then air tested to ensure integrity of the final assembly (per factory specifications)





Advanced Protection Submersible Turbine Pump Model Designation System

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

STPAP XXXXX Y-A-B or ISTAP XXXXX Y-A-B

STPAP or ISTAP = Basic Model Designation (IST for variable speed models)

AP = Advanced Protection with coated exterior cast surfaces, stainless steel fasteners and piping, alcohol-gasoline compatible

XXXXX = Factory Installed Options

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

F = Floating suction adapter (1 1/2" NPT female adapter)

H = High pressure (3.1 bar deadhead output - 150 and 200 models only)

K = Intake filter screen (IFS, factory installed to PMA)

M = Magshell™ (flow enhancing, expanded PMA shell - 200 and IST models only)

* R = Model R check valve (1.65 bar relief/1.52 bar reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 bar relief/2.41 bar reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower Rating

75B = 3/4 hp fixed speed, 50 Hz, 1-phase $150B = 1 \frac{1}{2}$ hp fixed speed, 50 Hz, 1-phase

200B = 2 hp fixed speed, 50 Hz, 1-phase

VS2 = 2 hp variable speed**

A = Model Length

VL1 = Variable length range #1

VL2 = Variable length range #2

VL3 = Variable length range #3

Note: VL2 models fit 94% of all known installation

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 178mm to 1524mm in 25.4mm increments (additional charge for risers 787mm or longer).

Ph.: +49 9128 4000217

Notes

75C = 3/4 hp fixed speed, 50 Hz, 3-phase 150C = 1 1/2 hp fixed speed, 50 Hz, 3-phase

200C = 2 hp fixed speed, 50 Hz, 3-phase

VS4 = 4 hp variable speed***

info@tad-bavaria.com

^{**} Implied on IST models unless VS4 is specified

^{***} IST model only





Advanced Protection Speed Submersible Turbine Pumps (please call Customer Service for lead times)

Advanced Protection Speed Submersible Turbine Pumps (pi						
Model	Description	Range Length	Model Length *	Without Riser	With Riser **	
ISTAPVS4-VL1	4 hp AP variable speed	VL1	1613mm - 2355mm	USP 3,376.00	USP 3,526.00	
ISTAPVS4-VL2	4 hp AP variable speed	VL2	2401mm - 3962mm	USP 3,376.00	USP 3,526.00	
ISTAPVS4-VL3	4 hp AP variable speed	VL3	3214mm - 5556mm	USP 3,481.00	USP 3,631.00	
ISTAP 1	2 hp AP variable speed	VL1	1486mm - 2228mm	USP 2,800.00	USP 2,950.00	
ISTAP 2	2 hp AP variable speed	VL2	2274mm - 3835mm	USP 2,800.00	USP 2,950.00	
ISTAP 3	2 hp AP variable speed	VL3	3087mm - 5429mm	USP 2,905.00	USP 3,055.00	
STPAP200B-VL1	2 hp AP fixed speed, single phase	VL1	1632mm - 2374mm	USP 3,567.00	USP 3,717.00	
STPAP200B-VL2	2 hp AP fixed speed, single phase	VL2	2420mm - 3981mm	USP 3,567.00	USP 3,717.00	
STPAP200B-VL3	2 hp AP fixed speed, single phase	VL3	3233mm - 5575mm	USP 3,672.00	USP 3,822.00	
STPAP200C-VL1	2 hp AP fixed speed, three phase	VL1	1575mm - 2317mm	USP 3,729.00	USP 3,879.00	
STPAP200C-VL2	2 hp AP fixed speed, three phase	VL2	2363mm - 3924mm	USP 3,729.00	USP 3,879.00	
STPAP200C-VL3	2 hp AP fixed speed, three phase	VL3	3175mm - 5518mm	USP 3,834.00	USP 3,984.00	
STPAP150B-VL1	1-1/2 hp AP fixed speed, single phase	VL1	1556mm - 2298mm	USP 3,179.00	USP 3,329.00	
STPAP150B-VL2	1-1/2 hp AP fixed speed, single phase	VL2	2344mm - 3905mm	USP 3,179.00	USP 3,329.00	
STPAP150B-VL3	1-1/2 hp AP fixed speed, single phase	VL3	3156mm - 5499mm	USP 3,284.00	USP 3,434.00	
STPAP150C-VL1	1-1/2 hp AP fixed speed, three phase	VL1	1531mm - 2273mm	USP 3,343.00	USP 3,493.00	
STPAP150C-VL2	1-1/2 hp AP fixed speed, three phase	VL2	2318mm - 3879mm	USP 3,343.00	USP 3,493.00	
STPAP150C-VL3	1-1/2 hp AP fixed speed, three phase	VL3	3131mm - 5473mm	USP 3,448.00	USP 3,598.00	
STPAP75B-VL1	3/4 hp AP fixed speed, single phase	VL1	1499mm - 2241mm	USP 2,985.00	USP 3,135.00	
STPAP75B-VL2	3/4 hp AP fixed speed, single phase	VL2	2286mm - 3848mm	USP 2,985.00	USP 3,135.00	
STPAP75B-VL3	3/4 hp AP fixed speed, single phase	VL3	3099mm - 5441mm	USP 3,090.00	USP 3,240.00	
STPAP75C-VL1	3/4 hp AP fixed speed, three phase	VL1	1480mm - 2222mm	USP 3,211.00	USP 3,361.00	
STPAP75C-VL2	3/4 hp AP fixed speed, three phase	VL2	2267mm - 3829mm	USP 3,211.00	USP 3,361.00	
STPAP75C-VL3	3/4 hp AP fixed speed, three phase	VL3	3080mm - 5422mm	USP 3,316.00	USP 3,466.00	

Notes:

- 1. STPAP/ISTAP models are listed for compatibility with fuel mixtures containing diesel fuel with up to 20% biodiesel, 100% biodiesel, up to 85% ethanol with gasoline, and 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. All above ISTAPVS4 4 hp models can only be powered by an EcoVFC™ with three-phase, 50 Hz incoming power supply. All above ISTAP 2 hp models can be powered by a MagVFC™ with single-phase, 50 Hz incoming power or an EcoVFC™ with three-phase, 50 Hz incoming power.
- 4. All above STPAP single phase models (75B, 150B, 200B) require single-phase, 200-250 VAC, 50 Hz incoming power. All above STPAP three phase models (75C, 150C, 200C) require three-phase, 380-415 VAC, 50 Hz incoming power.
- 5. 4" riser pipe, if supplied locally, must be 41/2" OD by 3/16" WT tubing.
- * Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet.
- ** For riser pipe lengths 787mm to 1524mm, \$150 adder charge applies (call for lead times)

Factory Installed Approvals (may specify one in model number at time of STP order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	USP 60.00
(RT)	STP with ROSTEST approval for Eastern European markets	USP 60.00

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.





Factory Installed Options (specified in model number at time of STP order)

ractory installed Options (specified in model number at time of 517 order)		
Description	List	
Floating suction adapter, 11/2" NPT female, must be factory installed	USP 125.00	
High Pressure (3.1 bar deadhead output -150 & 200 models only, adds 12mm to the Model Length)		
	USP 75.00	
IFS (intake filter screen), factory assembled to pump motor assembly	USP 165.00	
Magshell™ (flow enhancing, expanded PMA shell - 200 & IST models only)	no adder	
Model R check valve, factory installed, for Veeder-Root™ PLLD Line Leak	no adder	
	Description Floating suction adapter, 1½" NPT female, must be factory installed High Pressure (3.1 bar deadhead output -150 & 200 models only, adds 12mm to the Model Length) IFS (intake filter screen), factory assembled to pump motor assembly Magshell™ (flow enhancing, expanded PMA shell - 200 & IST models only)	

Veeder-Root™ is a trademark of Danaher Corporation.

Field Installed Options

Model	Description	List
400137937	Syphon check valve	USP 78.00
5874202800	MagVFC™, 200-250 VAC, 50-60 Hz, one required per ISTAP	USP 1,294.00
5874202900	EcoVFC™, 380-415 VAC, 50 Hz, one required per ISTAP or ISTAPVS4	USP 1,494.00
5800100215	STP-SCI, single-phase smart controller	USP 454.00
400818922	STP-CBBS, single-phase control box with lockout switch, 240 Volt coil (one per 75B, 150B, or 200B models)	USP 173.00
402312922	STP-DHIB-SCI, combo DHIB with factory wired STP-SCI	USP 829.00
402313922	STP-DHIB-CBBS, combo DHIB with factory wired STP-CBBS	USP 556.00
402459931	Model 65 psi (4.5 bar) check valve (AG compatible, for slave of manifolded STPs with Veeder-Root™ PLLD)	USP 156.00
402507930	Secondary syphon kit (when two syphon primes are required for one STPAP)	USP 173.00
5800103300	STP-SCIIIC, three-phase 380-415 VAC smart controller (one per 75C or 150C models)	USP 704.00
401220965	STP-CBB3C, three-phase 380-415 VAC magnetic starter (one per 75C, 150C, or 200C models)	USP 579.00
5800300200	STP-DHIB, dispenser hook isolation for 240 Volt dispenser handle switches, up to eight each	USP 409.00





MLD+ Mechanical Line Leak Detector (for use with 4" STPs) *

Standard Fuel Models

Model	Description	List
403168901	STP-MLD+G for gas, single pack (blue cover, copper vent tube, brass fittings)	USP 462.00
403168903	STP-MLD+G for gas, three pack	USP 1,280.00
403170901	STP-MLD+D for diesel, single pack (gold cover, copper vent tube, brass fittings)	USP 462.00
403170903	STP-MLD+D for diesel, three pack	USP 1,280.00

Biofuel Models

Model	Description	List
403169901	STP-MLD+AG for alcohol-gas, single pack (blue cover, stainless steel tube and fittings)	USP 510.00
403169903	STP-MLD+AG for alcohol-gas, three pack	USP 1,414.00
403171901	STP-MLD+BD for biodiesel, single pack (gold cover, stainless steel tube and fittings)	USP 510.00
403171903	STP-MLD+BD for biodiesel, three pack	USP 1,414.00

Notes:

- 1. MLD+G are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE, or 17% TAME with gasoline.
- 2. MLD+D models are listed for compatibility with diesel fuels with up to 5% biodiesel and kerosene applications only.
- 3. MLD+AG models are listed for fuel mixtures containing up to 85% ethanol with gasoline and 20% MTBE, 20% ETBE, or 17% TAME with gasoline as well as diesel fuels, fuel oils, kerosene, Avgas and jet fuels.
- 4. MLD+BD models are listed for diesel with up to 20% biodiesel or 100% biodiesel and kerosene applications only.
- 5. All above models will only mount in the 2" NPT leak detector port of a 4" submersible turbine, including competitive
- 6. MLD+ models are listed for use with rigid pipelines up to 625 liter capacity, with flexible pipelines up to 416 liter capacity, and with combination rigid/flexible pipelines up to 1041 liter capacity.

MLD+ Repair Parts and Accessories

Model	Description	List
400440101	Vent tube (for use with MLD+G and MLD+D)	USP 10.00
400449903	Hardware pack (fittings and documentation for MLD+G and MLD+D)	USP 20.00
403123001	Vent tube, stainless steel (for use with MLD+AG and MLD+BD)	USP 15.50
400449904	Hardware pack (fittings and documentation for MLD+AG and MLD+BD)	USP 67.00
400518001	Leak detector adapter tee	USP 98.00

^{*} Refer to STP-MLD+ installation manual for complete compatibility specifications.





Variable Speed Conversion Kits

Model	Description	List
400693911	Kit with 2 hp variable speed non-MagShell™ (PMA VS2) & EcoVFC™	USP 2,480.00
400693901	Kit with 2 hp variable speed non-MagShell™ (PMA VS2) & MagVFC™	USP 2,280.00
402671911	Kit with 4 hp variable speed non-MagShell™ (PMA VS4) & EcoVFC™	USP 2,930.00
402671901	Kit with 4 hp variable speed non-MagShell™ (PMA VS4) & MagVFC™	USP 2,730.00

Notes:

- 1. Kits include variable speed pump motor assembly, variable frequency controller, four-wire contractor's plug and installation instructions.
- 2. For upgrade of competitive 4" submersible turbine pumps, additional competitive parts may be required.

STP-SCI Single-Phase Smart Controller

Model	Description	List
402312922	STP-DHIB-SCI, combo DHIB with factory wired STP-SCI	USP 829.00
5800100215	STP-SCI, single-phase smart controller	USP 454.00

Notes:

- 1. SCI models are compatible with all single-phase FE Petro submersibles and competitive makes.
- 2. One SCI required per submersible. Relay rated for 30 Amps (up to 2 hp).
- 3. SCI models are not compatible for use in master/slave configurations with STP-SC models.

STP-DHIB Dispenser Hook Isolation

Model	Description	List
402312922	STP-DHIB-SCI combo DHIB with factory-wired STP-SCI	USP 829.00
402313922	STP-DHIB-CBBS, combo DHIB with factory-wired STP-CBBS single-phase control box	USP 556.00
5800300200	STP-DHIB, isolates up to eight, 240 Volt dispenser handles	USP 409.00

Notes:

- 1. DHIB models are compatible with FE Petro submersible pump controllers and competitive pump controller makes accepting 240 Volt dispenser hook signal.
- 2. DHIB models can be connected together for products with more than eight dispenser handle inputs.

DHIB Repair Parts and Accessories

Model	Description	List
223243103	DHI fast-acting fuse, 250 VAC, 1 Amp	USP 6.50
223885931	DHIB circuit board, 240 Volt dispenser hook signal	USP 403.00





Single-Phase Control Box

Model	Description	List
400818922	STP-CBBS, single-phase control box, with switch and lockout, 240 Volt coil	USP 173.00
402313922	STP-DHIB-CBBS, combo dispenser hook isolation with factory wired STP-CBBS	USP 556.00

Notes:

- 1. CBBS models are compatible for use on all single-phase FE Petro submersibles and competitive makes.
- 2. One CBBS required per submersible, relay rated for 30 Amps up to 2 hp.
- 3. Incorporates pump "ON" indicator light.
- 4. Relay rated for 240 Volt pumps up to 2 hp, 30 Amps.

STP-CBBS Repair Parts and Accessories

Model	Description	List
403274001	Item #1 - Power switch (replaces 400575001)	USP 46.00
400574001	Item #2 - Power switch bracket	USP 11.00
400158002	Item #3 - Light assembly, 240 Volt (without terminals)	USP 24.00
400215933	Item #4 - Relay, 30A, 240 Volt coil	USP 90.00
400278006	Item #5 - Six position terminal strip	USP 16.00
402410002	Item #6 - CBBS terminal strip label	USP 4.50
400817901	Item #7 - Cover and enclosure	USP 49.00
400819002	Item #8 - CBBS wiring diagram	USP 5.00





Intake Filter Screen (mounts to FE Petro or competitive 4" Pump Motors, adds about 25mm)

Model	Description	List
400660901	Intake filter screen (single pack)	USP 283.00
400660912	Intake filter screen (12 pack carton)	USP 3,096.00

Model 65 PSI (4.5 bar) Relief Check Valve

Model	Description	List
402459931	Model 65 PSI relief check valve (AG Compatible, for slave 4" STP in manifolded applications only)	USP 156.00

Secondary Syphon Kit (when two syphon primes required per one 4" STP)

Model	Description	List
402507930	Secondary syphon kit	USP 173.00





Replacement Pump Motor Assemblies *

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Model	Description	List
PMA75B	3/4 hp Pump Motor Assembly, single phase (521mm long)	USP 783.00
PMA75C	3/4 hp Pump Motor Assembly, three phase (502mm long)	USP 811.00
PMA150B	1 1/2 hp Pump Motor Assembly, single phase (578mm long)	USP 885.00
PMA150C	1 1/2 hp Pump Motor Assembly, three phase (553mm long)	USP 913.00
PMA200B	2 hp Pump Motor Assembly, single phase (654mm long)	USP 1,259.00
PMA200C	2 hp Pump Motor Assembly, three phase (597mm long)	USP 1,274.00

Replacement Variable Speed Pump Motor Assemblies *

Model	Description	List
PMAMVS2	2 hp Variable Speed Pump Motor Assembly with Magshell™ (508mm long)	USP 986.00
PMAMVS4	4 hp Variable Speed Pump Motor Assembly with Magshell™ (635mm long)	USP 1,436.00

* Factory Installed Approvals (may specify one in model number at time of PMA order)

Model	Description	List
(ATXF)	STP with ATEX Flameproof approval for EN markets	no adder

Note: If not otherwise specified, all models are supplied to UL approval as standard. Consult factory for other local approvals.

* Factory Installed Options (specified in model number at time of PMA order)

Model	Description	List
AG	Alcohol-Gasoline compatible	USP 230.00
F	Floating suction adapter, 1½" NPT female, must be factory installed	USP 125.00
н	High Pressure (3.1 bar deadhead output - 150 & 200 models only, adds up to 12mm to the length of Pump Motor Assembly)	USP 75.00
K	IFS (intake filter screen), factory assembled to pump motor assembly	USP 165.00
M	Magshell™ (flow enhancing, expanded PMA shell - 2 & 4 Hp models only)	no adder





4" STP Extractable Sections (less manifold, riser and PMA) *

Model	Description	List
STPEXT-VL1	Variable length #1 extractable (p/n 402074901)	USP 1,295.00
STPEXT-VL2	Variable length #2 extractable (p/n 402075902)	USP 1,295.00
STPEXT-VL3	Variable length #3 extractable (p/n 402075903)	USP 1,400.00
STPAGEXT-VL1	AG variable length #1 extractable (p/n 402201902)	USP 1,690.00
STPAGEXT-VL2	AG variable length #2 extractable (p/n 402202902)	USP 1,690.00
STPAGEXT-VL3	AG variable length #3 extractable (p/n 402203902)	USP 1,795.00
STPAPEXT-VL1	AP variable length #1 extractable (p/n 403614901)	USP 2,160.00
STPAPEXT-VL2	AP variable length #2 extractable (p/n 403614902)	USP 2,160.00
STPAPEXT-VL3	AP variable length #3 extractable (p/n 403614903)	USP 2,265.00

^{*} Please call Customer Service for lead times for AP Extractables

Single-Phase Smart Controller (STP-SCI)

Model	Description	List
225000930	Item #1 - SCI lower board control	USP 264.00
225005930	Item #2 - SCI upper board relay	USP 123.00

STP-DHIB Dispenser Hook Isolation Box

Model	Description	List
223243103	Item #1 - 250 AC fast-acting fuse	USP 6.50
223885931	Item #2 - 240 Volt circuit board (includes fuse)	USP 403.00

MagVFC™ & EcoVFC™

Model	Description	List
223919930	MagVFC™ / EcoVFC™ fan assembly	USP 147.00
225040930	MagVFC™ / EcoVFC™ user interface board	USP 394.00
228289930	MagVFC™ / EcoVFC™ normally open relay	USP 161.00





PMA, Riser and Check Valve for Variable Length and Fixed Length Pumps

Model	Description	List
400125001	Item #1 - 3/16" × 1-5/8" spiral pin	USP 5.00
400615001	Item #2 - Manual pressure relief plug	USP 12.00
400615002	Item #2 - Manual pressure relief plug (AG compatible)	USP 13.00
400211114	Item #3 - O-ring, Manual pressure relief plug	USP 4.50
400627001	Item #4 - Retaining ring, MPR	USP 5.00
400616001	Item #5 - Manual pressure relief screw	USP 17.00
400616002	Item #5 - Manual pressure relief screw (AG compatible)	USP 20.00
400333012	Item #6 - MPR screw, top O-ring (AG compatible)	USP 5.00
400333007	Item #7 - MPR screw, bottom O-ring (AG compatible)	USP 4.50
400628901	Item #8 - Manual pressure relief plug assembly (includes item #2 & #3)	USP 26.00
400628902	Item #8 - Manual pressure relief plug assembly (AG compatible)	USP 27.00
400629901	Item #9 - Manual relief screw assembly (includes item #4, #5, #6, & #7)	USP 28.00
400629902	Item #9 - Manual relief screw assembly (AG compatible)	USP 30.00
400259001	Item #10 - 1/4" NPT pipe plug, may be purchased locally	USP 4.50
403499001	Item #10 - 1/4" NPT pipe plug, may be purchased locally (stainless steel, for AP models)	USP 10.50
400137937	Item #11 - Syphon check valve	USP 78.00
400221930	Item #12 - Discharge manifold (includes item #1, #8, #9, & #10)	USP 408.00
400221931	Item #12 - Discharge manifold (includes item #1, #8, #9, & #10)(for AP models)	USP 540.00
151213930	Item #13 - 156" lead assembly	USP 85.00
151213932	Item #13 - 240" lead assembly	USP 92.00
Purchase locally	Item #14 - Stationary vapor tube, 3/8 OD × 7/20 WT	not available
4001689XX	Item #15 - 7" to 19" long	USP 95.00
Riser, 4-1/2" OD ×	Item #15 - 20"to 30" long	USP 132.00
3/16" WT	Item #15 - 31"to 49" long (consult factory for lead time)	USP 169.00
(XX = length)	Item #15 - 50" to 60" long (consult factory for lead time)	USP 259.00
4035229XX	Item #15 - 7" to 19" long (stainless steel, for AP models) consult factory for lead time	USP 201.00
Riser, 4-1/2" OD ×	Item #15 - 20"to 30" long (stainless steel, for AP models) consult factory for lead time	USP 241.00
4.12" ID	Item #15 - 31"to 49" long (stainless steel, for AP models) consult factory for lead time	USP 355.00
(XX = length)	Item #15 - 50" to 60" long (stainless steel, for AP models) consult factory for lead time	USP 458.00
400600002	Item #17 - 5/16-24 × 7/16" set screw for variable lengths models only	USP 4.00
403432002	Item #17 - 5/16-24 × 7/16" set screw for VL models only (stainless steel, for AP models)	USP 8.00
400333015	Item #18 - Lead assembly O-ring	USP 6.50
400264009	Item #19 - 5/16-18 × 1-1/8" socket head cap screw, may be purchased locally	USP 5.00
	Item #19 - 5/16-18 × 1-1/8" socket head cap screw, may be purchased locally (stainless	
403506001	steel, for Ape models)	USP 9.50
400263004	Item #20 - 5/16" high-collar lock washer, may be purchased locally	USP 4.00
403505001	Item #20 - 5/16" high-collar lock washer, may be purchased locally (stainless steel, for AP models)	USP 8.00
403403001	Item #21 - PMA gasket	USP 8.50
403403002	Item #21 - PMA gasket (AG compatible)	USP 21.00
PMA XXX	Item #22 - Pump motor assembly (XXX indicates options & Hp, includes item #30)	see PMAs
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PMA, Riser and Check Valve for Variable Length and Fixed Length Pumps

Model	Description	List
400981001	Item #23 - 3/8-16 × 1" Hex head screw	USP 4.50
403504001	Item #23 - 3/8-16 × 1" Hex head screw (stainless steel, for AP models)	USP 15.50
400285002	Item #24 - 3/8" standard lock washer, may be purchased locally	USP 4.00
1117703	Item #24 - 3/8" standard lock washer, may be purchased locally (for AP models)	USP 8.00
400197930	Item #25 - Manifold assembly cover (includes item #10, #23, #24, & #26)	USP 85.00
400197931	Item #25 - Manifold assembly cover (includes item #10, #23, #24, & #26)(for AP models)	USP 133.00
400333238	Item #26 - Manifold Cover O-ring (AG compatible)	USP 41.00
400147930	Item #27 - Clamp valve assembly (AG compatible)	USP 35.00
400174930	Item #28 - Check valve spring	USP 13.00
400988931	Item #29 - Standard check valve (includes item #26)	USP 147.00
400988934	Item #29 - Standard check valve (AG compatible)	USP 174.00
400988932	Item #29 - Model R check valve (includes item #26)	USP 147.00
400988935	Item #29 - Model R check valve (AG compatible)	USP 174.00
400988933	Item #29 - Model W check valve (includes item #26)	USP 147.00
400988936	Item #29 - Model W check valve (AG compatible)	USP 174.00
402459931	Item #29 - Model 65 PSI check valve (AG compatible, for slave STP in manifolded applications only)	USP 156.00
152350902	Item #30 - PMA hardware pack (includes item #19, #20, & #21)	USP 13.00
152350904	Item #30 - PMA hardware pack (AG compatible, for AG and AP models)	USP 27.00
400216905	AG compatible O-ring kit (not shown, includes ten items)	USP 183.00





Discharge Manifold Assembly

Model	Description	List
400192930	Item #1 - Junction box cover (includes item #2)	USP 53.00
400192931	Item #1 - Junction box cover (includes item #2, for AP models)	USP 53.00
400210233	Item #2 - Junction Box Cover O-ring	USP 5.00
400655001	Item #3 - Capacitor boot	USP 5.00
400170933	Item #4 - Capacitor assembly for 3/4 to $1\frac{1}{2}$ hp, 50 Hz, $15\mu fd$, 440 Volt single-phase (includes one black lead)	USP 71.00
400170935	ltem #4 - Capacitor assembly for 2 hp, fixed speed, 50 Hz, 40µfd, 440 Volt single-phase (includes one black lead)	USP 105.00
400257001	Item #5 - Retaining ring, Female connector	USP 7.00
400258002	Item #6 - 3/8-16 × 1-1/4 Hex head bolt, may be purchased locally	USP 4.50
602011016	Item #6 - 3/8-16 × 1-1/4 Hex head bolt, may be purchased locally (stainless steel, for AP models)	USP 8.00
400285002	Item #7 - 3/8 standard lock washer, may be purchased locally	USP 4.00
1117703	Item #7 - 3/8 standard lock washer, may be purchased locally (stainless steel, for AP models)	USP 8.00
400280001	Item #8 - 3/8 standard flat washer, may be purchased locally	USP 4.00
403500001	Item #8 - 3/8 standard flat washer, may be purchased locally (stainless steel, for AP models)	USP 11.00
400651930	Item #9 - Junction box assembly (includes item #6, #7, & #8)	USP 182.00
400651931	Item #9 - Junction box assembly (includes item #6, #7, & #8)(for AP models)	USP 252.00
400210212	Item #10 - O-ring, Female connector	USP 5.00
400200930	Item #11 - Wire connector kit (includes male/female connectors, item #5, #10, & #18)	USP 223.00
400200931	Item #11 - Wire connector kit (includes male/female connectors, item #5, #10, & #18)(for AP models)	USP 296.00
400589930	Item #12 - Extractable Cover (includes item #13)	USP 27.00
400589931	Item #12 - Extractable Cover (includes item #13, for AP models)	USP 27.00
400210229	Item #13 - O-ring, Extractable Cover	USP 7.00
400236903	Item #14 - Contractor's plug, 4-wire	USP 26.00
400259002	Item #15 - 3/8" NPT pipe plug, may be purchased locally	USP 4.50
403499002	Item #15 - 3/8" NPT pipe plug, may be purchased locally (stainless steel, for AP models)	USP 11.00
400562901	Item #16 - Syphon jet assembly	USP 20.00
400562903	Item #16 - Syphon jet assembly (AG compatible)	USP 57.00
400211046	Item #17 - O-ring, Extractable (upper, small)	USP 6.50
400249001	Item #18 - Retaining ring, Male Connector	USP 4.00
400250002	Item #19 - 1/8" dia. × 1/2" roll pin	USP 4.00
400333343	Item #20 - AG compatible O-ring, Extractable (upper, large)	USP 49.00
400333340	Item #21 - AG compatible O-ring, Extractable (lower)	USP 51.00
400259005	Item #22 - 2" NPT square head plug	USP 13.50
403499003	Item #22 - 2" NPT square head plug (stainless steel, for AP models)	USP 54.00





High Capacity Submersible Turbine Pump Model Designation System

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

STP XXXXX Y-A-B

STP = Basic Model Designation

Note: Standard models up to 10% ethanol capable.

XXXXX = Factory Installed Options

High Capacity model designations may include one or more of the following characters in alphabetical order:

F = Floating suction adapter (3" NPT male adapter)

* R = Model R check valve (1.65 relief/1.51 reset for PLLD)

* Note: If not otherwise specified, all STP models are supplied with standard model check valve (2.76 relief/2.41 reset for MLD, TS-LS300, and TS-LS500).

Y = Pump Motor Horsepower/Electrical Rating

3C = 3 hp fixed speed, 380-415 VAC, 50 hz, three phase

5C = 5 hp fixed speed, 380-415 VAC, 50 hz, three phase

A = 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 available from 1524mm to 5080mm (additional charge for models 3353mm and longer).

B = Riser Pipe Length

Riser pipe length is expressed as two numeric characters that indicate the total length of the riser in inches. Riser pipes are available from 152mm to 1524mm in 76mm increments (additional charge and lead time for risers 686mm or longer).





High Capacity Turbine Pumps (available as fixed length models only) **

Model	Description	List
STP3C *	3 hp 6" STP, three-phase 380-415 VAC	USP 6,955.00
STP5C *	5 hp 6" STP, three-phase 380-415 VAC	USP 7,415.00

^{*} Please call Customer Service for lead time on these items.

Notes:

- 1. STP models are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, 20% MTBE, 20% ETBE or 17% TAME with gasoline.
- 2. All models are supplied with a standard check valve unless factory option "R" is specified.
- 3. All above models require 380-415 VAC, three-phase, 50 Hz incoming power.
- 4. 6" riser pipe, if supplied locally, must be 6-5/8" OD by 1/4" WT tubing.
- 5. For riser pipe lengths 686mm to 1524mm, \$100 adder charge applies. Call Customer Service for lead times.
- ** Model length (A) defined as the dimension from turbine manifold bottom to pump motor inlet. Model length (A) can be a minimum of 1524mm to a maximum of 5080mm. Add \$135 (p/n 401190911) to list if model length (A) is 3353mm to 4318mm or add \$379 (p/n 401190914) to list if model length (A) is 4319mm to 5080mm (charges are for additional packaging STP). Call Customer Service for lead times.

Factory Installed Options

Model	Description	List
F	Floating suction adapter, 3" male NPT (must be ordered with STP)	USP 189.00
R	Model R relief valve factory installed, for Veeder-Root™ PLLD	USP 136.00

Veeder-Root™ is a trademark of Danaher Corporation.

Field Installed Options

Model	Description	List
401165930	Syphon system	USP 233.00
STP-CBB3C	Three-phase control box, 240 Volt relay, 3 hp, 380-415 Volt, 50 Hz pump control	USP 579.00
STP-CBB5C	Three-phase control box, 240 Volt relay, 5 hp, 380-415 Volt, 50 Hz pump control	USP 579.00
STP-SCIIIC	STP-SCIIIC three-phase smart controller	USP 704.00

^{*} STP-SCIIIC is compatible with FE Petro 3 and 5 hp submersibles and competitive makes input voltage rated 380-415 VAC three phase.

6" STP Extractable (less manifold, riser and PMA)

Model	Description	List
STPHC-EXT-XXX	6" fixed length (XXX indicates Model Length, p/n 401230901) *	USP 3,366.00

^{*} Model length (XXX) defined as the dimension from turbine manifold bottom to pump motor inlet can be a minimum of 1524mm to a maximum of 5080mm. Fixed Length adders apply for Extractable Model Lengths 3353mm to 5080mm (call Customer Service for lead times)





High Capacity Mechanical Leak Detectors *

Model	Description	List
401315902	STP-MLD-HC leak detector complete with Adapter "T" (blue, for gasoline)	USP 1,661.00
401320902	STP-MLD-HCD leak detector complete with Adapter "T" (tan, for diesel)	USP 1,661.00
401315901	Replacement high capacity leak detector ONLY (blue, for gasoline)	USP 1,489.00
401320901	Replacement high capacity leak detector ONLY (tan, for diesel)	USP 1,489.00
401316930	Replacement cover assembly	USP 180.00
401325901	Replacement Adapter "T" with cover assembly	USP 451.00
400449902	MLD-HC hardware pack, includes fittings and documentation	USP 21.00

Notes:

- 1. MLD-HC models are listed for compatibility with fuel mixtures containing up to 10% ethanol with gasoline, diesel fuels, and 20% MTBE, 20% ETBE, or 17% TAME with gasoline.
- 2. MLD-HCD models are listed for compatibility with diesel fuels and kerosene applications only.
- 3. All above models will only mount in Adapter "T" (p/n 401325901)
- * Refer to high capacity MLD installation manual for complete fuel compatibility specifications.





STP-SCIIIC Three-Phase Smart Controller *

Model	Description	List
5800103300	STP-SCIIIC three-phase smart controller	USP 704.00

Notes:

- 1. One STP-SCIIIC required per submersible, relay rated for 30 Amps.
- 2. STP-SCIIIC models do not utilize the pump motor thermal overload wiring (blue leads).
- * STP-SCIIIC is compatible with FE Petro 3 and 5 hp submersibles and competitive makes input voltage rated 380-415 VAC three phase.

STP-SCIIIC Repair Parts

Model	Description	List
228727102	Item #1 - Three-phase relay, 240 Volt coil (requires rev 1.15)	\$233.00
223905901	Item #2 - Logic board assembly (rev 1.15)	\$407.00
223910902	Item #3 - 380-415 Volt power board assembly	\$198.00
223867102	Item #4 - Mounting Bracket (required update for 228727101)	\$76.00

STP-CBB 3/5 Magnetic Starter

Model	Description	List
401220965	STP-CBB3C three-phase control box with adjustable overload, 240 Volt relay, 3 hp, 380-415 Volt, 50 Hz pump control	USP 579.00
401220966	STP-CBB5C three-phase control box with adjustable overload, 240 Volt relay, 5 hp, 380-415 Volt, 50 Hz pump control	USP 579.00





Replacement Pump Motor Assemblies *

Model	Description	List
PMA3C **	3 hp 380-415 Volt 6" pump motor assembly (914mm long)	USP 4,527.00
PMA5C **	5 hp 380-415 Volt 6" pump motor assembly (1067mm long)	USP 4,757.00

^{*} For pump motor assemblies with floating suction adapters (3" male NPT connections), specify "F" in the model number and \$189 adder charge applies (must be ordered with PMA).

Syphon System

Model	Description	List
402505001	Item #1 - Syphon block	USP 74.00
400562901	Item #2 - Syphon jet assembly	USP 20.00
400430004	Item #3 - 3/8"P × 3/8"T compression fitting	USP 7.00
400259001	Item #4 - 1/4" pipe plug	USP 4.50
400114001	Item #5 - 1/4" close nipple, two required per system	USP 8.00
400114003	Item #6 - 1/4" nipple x 3" long	USP 8.50
402510001	Item #7 - 1/4" threaded tee	USP 12.00
402511001	Item #8 - 1/4" threaded elbow, 90°	USP 11.50
400137937	Item #9 - Syphon check valve	USP 78.00
402544001	Item #10 - Caution tag	USP 22.00
400982001	Item #11 - Security seal	USP 4.00
402553902	Item #12 - Copper tube (HC pump)	USP 9.50
400430003	Item #13 - 1/4"P × 3/8"T compression fitting	USP 7.00
401165930	Syphon unit complete (includes all items above)	USP 233.00

^{**} Please call Customer Service for lead time on these items.





STP3 and STP5 (High Capacity general assembly)

Model	Description	List
401148101	Item #1 - Connection box cover	USP 78.00
400236909	Item #2 - Seal off plug assembly, 5-wire	USP 27.00
401149001	Item #3 - Eye bolt	USP 21.00
400258001	Item #4 - 3/8-16 x 1" large Hex head cap screw	USP 4.50
400285002	Item #5 - 3/8" lock washer	USP 4.00
401236002	Item #6 - Upper manifold seal	USP 147.00
400273004	Item #8 - 12 gauge wire terminal	USP 4.50
400273006	Item #8 - 14 gauge wire terminal	USP 4.50
401142901	Item #9 - Plug assembly	USP 250.00
401091001	Item #10 - 6-32 x 3/8" large round head machine screw, three required per connector	USP 5.50
401137901	Item #11 - Receptacle assembly	USP 332.00
401238001	Item #12 - Bushing ring, electrical entry	USP 8.00
401239001	Item #13 - Seal plug, electrical entry	USP 54.00
401112101	Item #14 - Discharge manifold	USP 981.00
401163001	Item #15 - 6" flange gasket	USP 24.00
400333235	Item #16 - O-ring, Connectors	USP 28.00
400333234	Item #17 - O-ring, connection box cover	USP 28.00
400258005	Item #18 - 1/2-13 x 11/4" large Hex head cap screw	USP 4.50
400285005	Item #19 - 1/2" lock washer	USP 4.00
400259001	Item #20 - 1/4" pipe plug	USP 4.50
401032901	Item #21 - Model 550 Relief (old standard relief, tire valve - two per submersible)	USP 10.00
401330901	Item #21 - Standard relief (units built since S/N 0302XXXX)	USP 78.00
401330902	Item #21 - Model "R" relief (units built since S/N 0302XXXX)	USP 78.00
401154001 *	Item #22 - Valve spring and bracket	USP 84.00
400523001	Item #23 - 10-24 x 3/8" long Sems fastener, two required per bracket	USP 4.00
401150101 *	Item #24 - Inset valve assembly	USP 76.00
401236001	Item #25 - Lower manifold seal	USP 164.00
401158903	Item #26 - Air eliminator assembly	USP 82.00
400258006	Item #27 - 3/4-10 x 3" large Hex head cap screw	USP 8.00
401162001	Item #28 - 3" flange gasket	USP 17.00
401113101	Item #29 - 3" companion flange	USP 93.00
	Item #30 - 6" riser pipe	USP 205.00
	Item #30 - 9" riser pipe	USP 216.00
	Item #30 - 12" riser pipe	USP 237.00
4011910XX	Item #30 - 15" riser pipe	USP 254.00
6-5/8" OD × 1/4" WT	Item #30 - 18" riser pipe	USP 277.00
(XX = length)	Item #30 - 21" riser pipe	USP 369.00
	Item #30 - 24" riser pipe	USP 394.00
	Item #30 - 27" riser pipe (call Customer Service for lead times)	USP 418.00
	Item #30 - 30" riser pipe (call Customer Service for lead times)	USP 441.00

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^{* 401154001} and 401150101 must be replaced together





STP3 and STP5 (High Capacity general assembly) continued

Model	Description	List
400333218	Item #31 - O-ring, lead assembly	USP 20.00
151593906	Item #32 - 192" lead assembly	USP 213.00
401161101	Item #33 - 6" flange	USP 375.00
993517	Item #34 - 3/4" lock washer (400285006)	USP 4.50
400274004	Item #35 - 3/4-10 Hex nut	USP 4.50
400264011	Item #36 - 3/8-16 x 1-1/4" large SHCS	USP 5.50
400333255	Item #37 - O-ring, motor discharge (large, shell)	USP 64.00
402406001	Item #38 - Rubber washer	USP 6.00
400333225	Item #39 - O-ring, motor discharge (small, electrical hub)	USP 12.00
PMA XXX	Item #40 - Pump motor assembly (XXX indicates options and horsepower)	see PMAs





Diesel Exhaust Fluid Pump Motor Assembly Model Designation System

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

DEF PMA YYY Z

DEF = Pump Compatible with Diesel Exhaust Fluid ONLY

PMA = Pump Motor Assembly

YYY = Pump Motor Horsepower Rating

150 = 1 1/2 Hp Fixed Speed (130mm OD x 504mm long)

Z = Pump Motor Horsepower Rating

B = Single phase, 50 Hz, 200-250 VAC (rated 6.9 Amps, requires 30 microfarad run/start capacitor rated 440 VAC)

C = Three phase, 50 Hz, 380-415 VAC (rated 2.6 Amps)

50 Hertz DEF PMA

Model	Description	List
403383953	DEF-PMA 150 B: Single Phase, 50hz, 200-250 VAC, 1.5 Hp	USP 1,594.00
403383963	DEF-PMA 150 C: Three Phase, 50hz, 380-415 VAC, 1.5 Hp	USP 1,729.00

Notes

- 1. Stainless steel construction including impellers/diffusers, inlet/outlet, and outer shell. Two-stage, centrifugal type pump with 2" NPT female outlet, Viton® or EPDM seals, and black 23' (7 m) polyethylene jacketed power cable.
- 2. Bypass relief valve cracking pressure of 30-40 psi (2.1-2.8 bar) and 4 gpm (15 lpm) minimum flow at the discharge of all models.
- 3. Non-return check valve cracking pressure of 3 psi (0.2 bar) between product piping and bypass relief valve of all models.
- 4. Liquid compatibility: All models are intended for use with Diesel Exhaust Fluid (DEF). DEF is a non-flammable, non-combustible liquid that has a specific gravity of 1.09 at 68°F (20°C), and is made per ISO 22241-1 specifications with 32.5% urea and distilled or deionized water. As defined by ISO 22241-1, DEF is the same as AUS 32® (aqueous urea solution) and also commonly known as AdBlue®

Variable Length Diesel Exhaust Fluid Submersible Turbine Pump Kits

Model	Description	List
403472901	50 Hz, single phase, VL1 71" - 104" (1,800 mm - 2,640 mm) variable length diesel exhaust fluid submersible turbine pump kits (includes VL items #1 - #5 below)	USP 2,819.00
403473901	50 Hz, single phase, VL2 104" - 168" (2,640 mm - 4,265 mm) variable length diesel exhaust fluid submersible turbine pump kits (includes VL items #1 - #5 below)	USP 2,819.00
403475901	50 Hz, three phase, VL1 71" - 104" (1,800 mm - 2,640 mm) variable length diesel exhaust fluid submersible turbine pump kits (includes VL items #1 - #4 and #6 below)	USP 2,954.00
403476901	50 Hz, three phase, VL2 104" - 168" (2,640 mm - 4,265 mm) variable length diesel exhaust fluid submersible turbine pump kits (includes VL items #1 - #4 and #6 below)	USP 2,954.00





Variable Length Diesel Exhaust Fluid Submersible Turbine Pump Replacement Kits

Model	Description	List
403463901	Item #2 - VL Check valve kit (includes 1½" NPT non-return check valve and 1½" NPT x 4" long nipple on inlet)	USP 273.00
403461901	Item #3 - VL Bypass kit (includes ½" NPT bypass relief valve, ½" NPT x 1½" NPT bushing in 1½" NPT tee)	USP 414.00
403455901	Item #4 - VL Pump motor assembly connection kit (includes 2" BSP male inlet x 1½" NPT male outlet EZ FIT connection	USP 404.00
403383953	Item #5 - 50 Hz, single phase pump motor assembly (DEF-PMA150B)	USP 1,594.00
403383963	Item #6 - 50 Hz, three phase pump motor assembly (DEF-PMA150C)	USP 1,729.00

Variable Length Accessories & Repair Parts

Model	Description	List
403713922	Single phase electrical kit, includes STP-CBBS (200-250 volt pump control with 240 volt coil, p/n 400818922) & 30uF/440V capacitor (for use with DEF-PMA150B)	USP 230.00
401220966	Three phase 380-415 volt pump control box with overload protection and 240 volt coil	USP 579.00
403459901	2" NPT female x 2" BSP male thread adapter (part of VL item #1, adapter only)	USP 119.00
403408931	1½" NPT non-return check valve (part of VL item #2, valve only)	USP 250.00
403409931	½" NPT bypass relief valve (part of VL item #3, valve only)	USP 344.00
403468901	DEF-PMA hardware pack (part of component #5 or #6, includes cable grip, cable ties, and documentation)	USP 16.50
400170937	Capacitor, 30 uF / 440 V (for use with DEF-PMA150B)	USP 83.00

Fixed Length Diesel Exhaust Fluid Submersible Turbine Pump Kits

Model	Description	List
403465901	Item #2 - FL Check valve kit (includes 2" NPT non-return check valve, 2" NPT x 4" long nipple on inlet, and 2" NPT male x 2 " BSP female adapter on outlet)	USP 493.00
403462901	Item #3 - FL Bypass kit (includes $\frac{1}{2}$ " NPT bypass relief valve, $\frac{1}{2}$ " NPT x 2" NPT bushing in 2" NPT tee)	USP 457.00
403457901	Item #4 - FL Pump motor assembly connection kit (includes 2" BSP male inlet x 2" NPT male outlet EZ FIT connection	USP 498.00
403383953	Item #5 - 50 Hz, single phase pump motor assembly (DEF-PMA150B)	USP 1,594.00
403383963	Item #6 - 50 Hz, three phase pump motor assembly (DEF-PMA150C)	USP 1,729.00

Fixed Length Accessories & Repair Parts

Model	Description	List
403713922	Single phase electrical kit, includes STP-CBBS (200-250 volt pump control with 240 volt coil, p/n 400818922) & 30uF/440V capacitor (for use with DEF-PMA150B)	USP 230.00
401220966	Three phase 380-415 volt pump control box with overload protection and 240 volt coil	USP 579.00
403460901	2" NPT male x 2" BSP female thread adapter (part of FL item #1, adapter only)	USP 119.00
403458901	2" NPT x 4" long Pipe Nipple (part of FL item #2, nipple only)	USP 72.00
403408932	2" NPT non-return check valve (part of FL item #2, valve only)	USP 368.00
403409931	½" NPT bypass relief valve (part of FL item #3, valve only)	USP 344.00
403468901	DEF-PMA hardware pack (part of component #5 or #6, includes cable grip, cable ties, and documentation)	USP 16.50
400170937	Capacitor, 30 uF / 440 V (for use with DEF-PMA150B)	USP 83.00