



ACCEPT ONLY THE BEST

**CET Drop-In Unit
Custom Made For**

Created February 15th 2017

**CET Fire Pumps Mfg Drop-In-Unit
Tank**

The water tank shall be constructed of 1/2" thick polypropylene sheet. The material shall be of a certified, high quality, non-corrosive, stress relieved thermo plastic, black in colour with a textured finish, and UV stabilized for maximum protection. The skid type booster tank shall be of a standard configuration and shall be so designed to have complete modular slide in capability. All joints and seams are to be fully nitrogen welded and electronically tested for maximum strength. The unit shall incorporate transverse partitions manufactured for 3/8" PT2E polypropylene which shall interlock with a series of longitudinal partitions constructed of 1/2" PT2E polypropylene. All swash partitions shall be so designed to allow for maximum water and air flow between compartments and are fully welded to each other as well as to the inside of the tank. The passenger side rear wall of the tank shall have a standard built in sight gauge 2" in width, and 70% transparent.

Fill tower and tank cover

The tank shall be equipped with a combination vent/overflow and manual fill tower. The fill tower shall be an 8" round by 6" high with a moulded drop-on type cover. The cover shall be fastened to the tower with a teather to prevent loss. The tower shall be located in the right rear corner of the tank. There shall be a vent / overflow installed inside and to the extreme rear of the tower approximately 2" down from the top. This vent / overflow shall be of a standard schedule 40 polypropylene pipe with minimum ID of 3". The vent / overflow shall be piped internally toward the front and exit out the front tank wall with a 1" extension past the front tank wall.

The tank cover shall be constructed of 1/2" thick PT2E polypropylene, black in color, UV stabilized, and incorporate an exclusive self locking design.

Tank Capacity

The tank shall have a capacity of 250 U.S. gallons of water. The tank shall be covered by the *ALL OUT* No Fault Life Time Warranty.

Sump

The floor of the tank shall be manufactured from 3/4" PT2E polypropylene. There shall be one (1) sump as standard per tank. The sump shall be integral to the tank floor and be a minimum of 5/8" deep recessed into the floor. The sump shall not be visible from or protrude through the bottom of the tank.

Tank Outlets

There shall be two standard tank outlets located in the same vertical plane on the driver side rear wall of the tank. One (1) 2-1/2" female NPT tank to pump suction fitting and one (1) 1-1/2" female NPT tank fill fitting with flow deflector

1" Tank Drain

There shall be a 1" tank drain to the rear right side of the tank with a plug.

Tank Mounting Blocks

The cover shall incorporate two (2) booster reel mounting blocks that shall be to accommodate two (2) each sliding nut fasteners. These mounting blocks shall be welded to the covers running from the rear edge of the tank forward.

Skid Base

There shall be a full width skid base manufactured of 3/4" PT2E polypropylene welded to the tank. This base shall be 48" wide by 96" long and shall extend 34" past the tank in the rear to allow for pump mounting. The pump mounting area shall be supported by 1/2" PT2E polypropylene gussets 15" high by 32" long. The gussets shall be equipped with 2" holes to assist in lifting the unit. The mounts shall allow for the truck to be secured directly to a truck bed without the need for any skid frame work underneath.

Tank will be baffled in accordance with NFPA bulletin 1906 requirements.

Mounting

The Drop-In-Unit shall be mounted in a manner that allows access to the engine, pump, and auxiliary systems for routine maintenance. The Drop-In-Unit shall not be welded or otherwise permanently secured to other components.

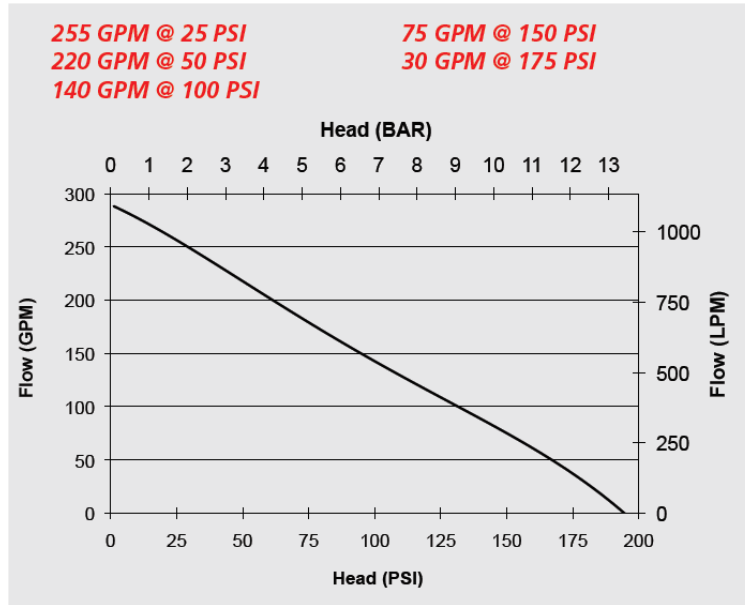
CET Fire Pump, PFP-18hpVGD-MR-CE

The pump shall be a CET DI-PFP-18hpVGD-MR single stage centrifugal pump, bolted directly to the engine, with a 2.5" Victaulic suction inlet, and a 1.5" Victaulic discharge outlet.

The volute and pump head shall be a lightweight, high strength, seawater resistant, aluminum alloy. The impeller shall be a bronze enclosed type for maximum efficiency, fully machined and balanced. The engine crankshaft shall serve as the pump shaft, with the impeller mounted directly on the crankshaft. The shaft seal shall be self-adjusting, self-lubricating, and mechanical type. The pump shall be equipped with a brass drain cock.

The pump piping shall be flexible to prevent any breakage caused by vibration.

The pump shall be capable of a maximum discharge volume of 255 GPM at 25 PSI, and a maximum discharge pressure of 175 PSI while pumping 30 GPM. The performances are based on a maximum altitude of 500ft and any higher elevation will lower the pump performance. The standard engine performance drops 3% for every 1000 ft.



Engine

The pump shall be driven by a V-Twin cylinder, gasoline powered engine, Vanguard 18 horsepower engine. The engine shall be air-cooled, with a 12 volt start and recoil back-up start.

The engine should be connected to the main battery of the truck.

Pump Controls

A control panel shall be supplied and installed on the pump. The controls shall consist of a start switch, 2.5" diameter discharge pressure gauge and a work light.

3 US gallon External Fuel Tank

A 3 US gallon external fuel tank shall be provided for the pump motor. It will be large enough to run the pump motor for one (1) hour at its rated capacity and pressure as per NFPA 1906, 8.10.1. Tank will be mounted at the left rear of the flatbed.

Plumbing and Valves

Intake and discharge piping shall not interfere with the routine maintenance of the pump, engine, or auxiliary systems and shall not unduly restrict the servicing of these components.

Suction Piping - 2.5" - Two (2) Industrial Valves

All piping on the suction side shall be made of **steel** (welded joints) painted red. The suction piping, the pump and the discharge shall be tested to 400 PSI.

The suction piping shall consist of a 2.5" tank to pump line with a 2.5" flexible rubber hump hose to minimize flex and vibration between the pump and the tank.

RIGID PIPING SHALL NOT BE ACCEPTABLE.

Between the tank and the pump there shall be a 2.5" **industrial** valve. This valve shall remain open to pump from the tank.

This pipe shall have a tee into the suction side of the pump, and shall continue to the rear of the truck for overboard suction where there shall be an additional 2.5" **Industrial** Valve.

The overboard suction connection shall have a 2.5" NST female swivel adapter and a 2.5" NSTF plug with retaining cable.

To draft, the tank to pump valve shall be closed, a suction hose connected to the overboard suction connection and placed in a static water supply, and the primer activated.

Discharge Piping

All piping shall be steel piping or high pressure flexible hose. A 2.5" X 2.5" square steel manifold shall be piped directly to the discharge outlet of the pump. Attached to this discharge manifold, by means of welded steel pipe nipples, shall be all the discharge valves. All piping shall be painted **red** to match the pump.

1" Tank Fill

There shall be a 1" valve piped from the discharge manifold as a means for refilling the tank. The valve shall be **Industrial** quarter turn valve handle and 1" NPT threads, and shall be connected to the tank fill port by 1" high pressure flexible hose.

One (1) 1' Discharge to Booster Reel

There shall be 1" valve piped from the discharge manifold to each booster reel. The valves shall be **Industrial** quarter turn valves handle and 1" NPT threads, and shall be connected to each reel by 1" high pressure flexible hose.

One (1) 1.5" Discharge To Rear

There shall be one (1) 1.5" valve piped from the discharge manifold to the rear of the truck for connection of forestry hose. The valve shall be an **industrial** quarter turn valve with 1.5" NST threads. The valve shall be furnished with a 1.5" NST cap and chain.

One Booster Reel

One (1) 12v electric **low profile** rewind booster reel capable of handling 150' of 1" diameter booster hose. The reel shall have a push button rewind control and a backup geared crank rewind handle. The reel shall be equipped with a 1" NPT 90-degree swivel inlet, and a 1" NST outlet riser. The reel shall be manufactured of steel and shall be primed and painted red. The reel shall be installed on the top of the water tank facing each side.

100' of 1" fabric booster hose shall be supplied and installed on the reel.

Two (2) high mounted roller and spool assemblies shall be furnished and installed on the reel.

Testing

The pump shall be tested after the pump and all its associated piping and equipment have been installed on the fire apparatus. The tests shall be conducted at the manufacturer's approved facility.

The testing shall include at least the pumping tests, the priming device test, the vacuum test, the water tank-to-pump flow test, and the piping integrity test.

General Warranty

CET warrants to the original purchaser that CET will, at its election, either replace or repair any part of the new equipment sold to the purchaser hereunder which has been given no abnormal use; and which has received proper maintenance; and which is determined by CET to be defective in material or workmanship; and which has, within one (1) year after delivery to the purchaser be returned at the purchaser's expense, with transportation charges prepaid, to CET factory OR which has, within one (1) year after delivery to the purchaser, been pre-approved by CET for a third-party to perform the work. All problems shall be reported to CET in writing and damaged parts shall be returned to CET.

CET Fire Pump Warranty

CET warrants to the original purchaser that CET will, at its election, either replace or repair any part of the Pump sold to the purchaser hereunder which has been given no abnormal use; and which has received proper maintenance; and which is determined by CET to be defective in material or workmanship; and which has, within one (3) year after delivery to the purchaser be returned at the purchaser's expense, with transportation charges prepaid, to CET factory OR which has, within one (3) years after delivery to the purchaser, been pre-approved by CET for a third-party to perform the work. All problems shall be reported to CET in writing and damaged parts shall be returned to CET.

Exclusions from warranty:

1. CET incurs no liability under this warranty or otherwise for parts, accessories or components not manufactured by it, but purchased for assembly into the equipment, but CET will assign to the Purchaser whatever warranty rights are extended by the supplier of such part, accessory or component
2. CET incurs no liability under this warranty or otherwise, for equipment which has been abused, altered or improperly maintained, or for equipment which has been returned for inspection or repair more than ten (10) days after defect complained of has been or should have been discovered by the Purchaser, or Equipment which is operated after the defect has been discovered.
3. CET incurs no liability for alteration or repairs unless the Purchaser first receives CET / written consent or approval. CET will not be responsible for work or repairs made or done by others.
4. CET incurs no liability for design alterations, parts, accessories or components which are not standard but are specified by the Purchaser for incorporation into the equipment.

Interpretation

CET shall not be liable for transportation charges either in shipment to or by it and shall not be liable for loss of use, or consequential damage of any kind in connection with the sales, alteration, repair or replacement of any equipment or part thereof. Liability under this warranty is limited to replacement or repair and in any event shall not exceed the purchase price paid. This warranty is not transferable by the Purchaser. CET reserves the right to make changes in design or add any improvements to the Equipment at any time without incurring any obligation to install or modify same on other equipment previously supplied.

There are no other warranties, conditions or representations, expressed or implied, except the above.

CET Water Tank Warranty Limited Lifetime

CET Fire Pumps, Mfg. warrants each CET water and/or foam tank to be from manufacturing defects in material and workmanship for the service life of the original vehicle. Every CET tank shall be thoroughly inspected and tested for leaks before leaving our facility and must be installed in accordance with the CET Fire Pumps, Mfg. installation guidelines.

CET will repair or, at its option, replace the tank with a new tank. CET will cover customary and reasonable costs to remove and install the tank. This warranty will not cover the tanks that have been improperly installed, misused, or abused. The serial number must not have been altered, defaced or removed. CET will not cover any unauthorized third party repairs or alterations. Any of these actions may void the warranty.

There are no warranties, expressed or implied, which extend beyond the description of the face, hereof. There is no express or implied warranty of merchantability or a warranty of fitness for a particular purpose. Additionally, this warranty is in lieu of all other obligations or liabilities on the part of CET Fire Pumps, Mfg.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly canceled. CET Fire Pumps, Mfg. neither authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

In no event will CET Fire Pumps, Mfg. be liable for an amount in excess of the currently published retail price plus installation and removal cost of the tank, for any loss or damage, whether direct or indirect, incidental, consequential, or otherwise arising out of failure of its product.

This warranty gives you the specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation of incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

The warranty is transferable within the United States and Canada at the discretion of CET Fire Pumps, Mfg. by notifying CET Fire Pumps, Mfg. within thirty (30) days of the vehicle transfer date. At that time, CET will, at it discretion, provide a transfer of ownership form.

Manufacturer's discretion

Materials, parts, or procedures used are subject to change at manufacturer's discretion at any time to provide equal or better products.



This is to certify that the Quality Management System of:

C.E.T. Fire Pumps MFG Limited

75 Hector Street
Pierreville QC J0G 1J0
Canada

applicable to:

Design and manufacture of fire equipment.

has been assessed and approved by
National Quality Assurance, U.S.A., against the provisions of:

ISO 9001: 2008

For and on behalf of
NQA, USA, 4 Post Office Square,
Acton, MA 01720



Certificate Number: 15849

EAC Code: 18

Certified Since: May 11, 2015

Valid Until: May 10, 2018