

Specification

This specification briefly defines the main attributes of a portable helicopter refuelling system. The system is designed for open line refuelling of turbine powered rotary wing and small fixed wing aircraft at flow rates of up to 160 litres / minute using Avtur F34 / Jet – A1 turbine fuels.

Basic specification:

- Portable pump system
- Refuelling capability only
- Diesel driven centrifugal pump
- Twin coalescer filter unit meeting EI 1581 5th Edition
- Positive Displacement Fuelling Meter.
- 160LPM nominal flow rate via a single open line trigger nozzle or Hose End Pressure Controller (HEPC)*

*refuelling performance quoted at sea level, 18°C and subject to prevailing suction and discharge conditions

Pumping and Filtration:

Fuel will be drawn from the drum stock using a standalone pumping and filtration module. The module will comprise of the following main items:

- 1.5" BSP male dry break adaptor suction connection and dust cap
- Single stage self-priming centrifugal product pump
- 4-stroke diesel engine complete with recoil hand start mechanism and spark arrestor. The diesel engine is capable of running on Avtur F34 Kerosene fuel but with slightly reduced power and decreased service intervals.
- Pump vacuum pressure gauge (63mm)
- Pump delivery pressure gauge (63mm)

160LPM Portable Pumpset

Part No. FT-016861

- Twin filter water separator vessels delivering clean and dry fuel to 0.5 microns.
- Positive displacement product discharge meter equipped with a mechanical register (resettable register and non-resettable totaliser)
- 1.5" male dry break discharge connection and dust cap

General:

All rigid pipework between the main elements of the pumping module will be piped using Grade 304L seamed Stainless Steel tubing. Flexible connections will be utilised between any fixed or flexible elements of pipework. All small bore drain and instrumentation pipework will be constructed in Stainless Steel. All pipework low points will be equipped with a drain boss and drain plug.

Both pump vacuum and delivery pressure gauges are glycerine filled and trimmed in stainless steel. Small bore fittings will be Nickle plated. All of the above items will be mounted within a robust steel mounting frame.

The helicopter fuelling system will be supplied with the following ancillary equipment.

- 2kgs capacity BC fire extinguisher in quick release stowage.
- Hand rewind bonging reel equipped with 30m of clear coated bonding cable and earthing clamp
- Earthing spike c/w 5m of bonding cable
- Fuelling system P & I diagram fixed to the main pumping / filtration module

Optional Equipment:

Hoses:

- 20FT 1.5" NB Suction Hose with Hose Unit
- 25FT 1.5" NB Delivery hose with Hose Unit

All supply of hoses conforms to BS ISO1825 aviation specification.

- Openline Trigger nozzle
- Closeline Hose End Pressure Controller (HEPC)

Pumpset Dimensions:

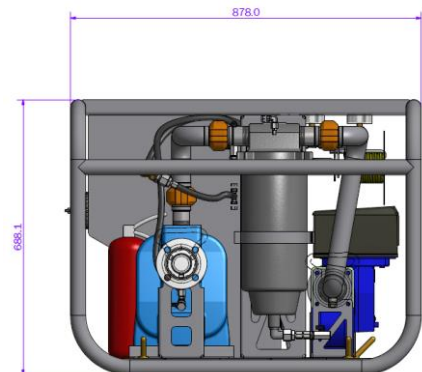
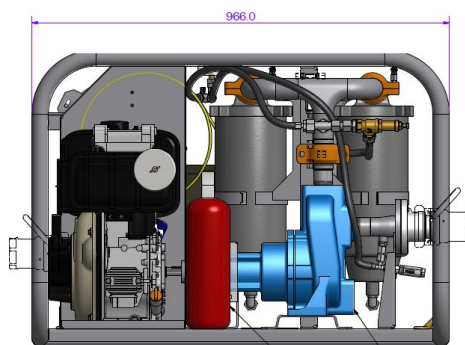
Width = 966mms

Depth = 878mms

Height = 688mms

Weight = 180 KGS (WET)

Weight = 141 KGS (DRY)



fluid transfer
international

