



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 225 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
- Positive Displacement Fuelling Meter
- 225LPM 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 pillow tank using a standalone pumping and filtration module. The module will comprise of the following main items:

- 2" BSP male camlock adaptor suction connection and dust cap
- 2" BSP lever operated isolating ball valve
- 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)
- Air Elimination System
- Differential Pressure Gauge

225LPM Portable Pumpset

Part No. FT-016433

- Twin filter water separator vessels delivering clean and dry fuel to 0.5 microns.
- Thermal Pressure Relief System
- Stainless steel collector / flushing tank for depressurised and filter water separator vessels product equipped with level gauge and spring return drain valve, also comes with dust caps
- Positive displacement product discharge meter equipped with a mechanical register (resettable register and non-resettable totaliser)
- 2" lever operated discharge isolating valve
- 2" male Camlock 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 Nickel 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 bonding 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
- Maintenance tool kit

Optional Equipment:

Hoses:

- 50FT 2" NB Suction Hose with Hose Unit
- 100FT 1.5" NB Delivery hose

All supply of hoses conforms to BS ISO1825 aviation specification.

- Open line Trigger nozzle
- ISO 45 Quick Disconnect Closed line Hose End Pressure Controller (HEPC)
- 19,000 / 20,000 Litre nominal capacity pillow / layflat bladder tank for use within harsh conditions worldwide.

Pumpset Dimensions:

Width = 888mms
Depth = 1251mms
Height = 1136mms on wheels
Weight = 291 KGS (WET)
Weight = 306 KGS (DRY)

fluid transfer
international

