



Fuel Polishing FPS-14UL SAE J1488

FUEL POLISHING SYSTEM (SmartFilter Series) (Up To 25 GPM) (UL-343) (J1488 & J1839) (ISO 12/9/6)

Single Pass Water Removal Efficiency. Flow Rates Up To V. 25 gpm. $\geq 95\%$. Filtration Ratio per ISO 16889. Using APC calibrated per ISO 11171.

Fuel cleanliness can be measured through the ISO 4406 code that defines the quantity of solid particles in a fluid.

The Smart Fuel Polishing System (FPS-14-UL-SAE J1488) uses an UL-343 listed pump and motor with filters to cleans the fuel to SAE J1488 & SAE J1839 standards. The system is a three stage plus water removal standalone fuel polishing system designed for diesel, kerosene and biodiesel fuels. The system efficiently removes water and solids to 1 microns, insuring clean, dry, contaminant-free fuel for emergency diesel generators and other fuel storage facilities. The Fuel Polishing System (FPS-14-UL-SAE J1488) is fully automated with remote monitoring capabilities





FPS-14UL-SAE J1488 FUEL POLISHING SYSTEM

Smart Fuel Polishing Systems are packaged in a powder coated steel cabinet and are designed with high quality industrial components to assure extended life and trouble-free operation. The Smart Fuel Polishing System Filtration / Polisher has a state of the art designed to minimize the footprint and maximize the efficiency for Filtration / Polishing of tanks from 100 to 500,000 gallon tank capacity. The FPS-XX-UL is designed to handle main storage tanks and belly/day tanks.

System Benefits:

With SAE J1985, test results using SAE J1985, SAE J1488 and SAE J905 procedures demonstrate that our filters exceeds the OE specifications in efficiency and contaminant holding capacity. The enhanced performance of our InterBlend media combined with heavy-duty construction make the our system the best choice for protecting fuel systems in new generation engines.



With standard filters, fuel is cleaned to 1 micron and the water is removed. 1 micro is three times cleaner than most generator manufacturers recommend. Most other fuel polishing systems available by our competitors only will clean fuel to 5-30 microns making the generator inline filters do the rest of the cleaning. We clean to 1 micron to ensure the inline filters to the generator stay clean allowing the generator to keep running.

- UL-343 Listed Pump and Motor (NYC Ready)
- SAE J1488 Single pass water removal
- ISO 4406 12/9/6 Single pass particle removal
- Eliminates annual tank cleaning, fuel purchases, and disposal costs.
- Discourages the growth of bacteria, reducing the need for expensive additives.
- Removes contaminants to 1 microns, exceeding manufacturers recommendations.
- Multi-Tank Capability (Optional).
- Automatic Unattended Operation.
- Fully programmable 7 day event schedule.
- Integrates with Building Management Systems (BMS).
- Three stage filtration (Course, Fine, Clean w/ Water Separation.
- Monitors differential pressures across each stage of the filtration.
- Monitors enclosure leak detection.
- Filters up to 25 gallons per minute.

The Filtration/Fuel Polishing System.

- Monitors Filter Differential Pressure.
- Monitors Separators for Water.
- Viking Pump rated for continuous operation. Remote monitoring. High reliability industrial design.
- Programmable 24/7 Filtration/Fuel Polishing Schedule.

The Pump Controls, Includes

- Duplex Motor Starters and Overload Protection:
- Pump Run Status.



- Monitors Motor Starters and Overload Protection.
- Controls Pumps Three Phase (1 Phase is Available)
- Enclosure Leak Sensor

Operating status and alarms:

- Stage 1 – (40 mesh) Strainer needs cleaning alarm.
- Stage 2 – (10 micron) Filter needs cleaning alarm.
- Stage 3 – (1 micron) (12/9/6) Fuel filter needs cleaning alarm.
- Stage 4 – (SAE J1488) Water separator and high water alarm.
- Motor Overload.
- Pump Failure.
- Enclosure liquid alarm.
- Maintenance needed warning (Filters need changing)

The BMS:

- System Summary Alarm (1) Dry, RS232 Standard, Ethernet (Modbus), BaCnet Available

Specifications:

- UL-343 Listed Viking Pump and Motor
- SAE J1488 (w/ filter)
- 4 Stage fuel polishing,
 - Stage 1 – (40 mesh) Fuel filtration
 - Stage 2 – (10 micron) Fuel filtration
 - Stage 3 – (1 micron) Fuel filtration (ISO 12/9/6)
 - Stage 4 water separation. (SAE J1488)
- Power requirements: Power input: 115/208/230 1 Phase. (3 Phase Available).
- Flow Rates Models: **(Gallons/Min) with SAE J1488 or without SAE J1488 Filters**
 - (4 GPM) FPS-04-UL-SAE J1488 or FPS-04-UL
 - (7 GPM) FPS-04-UL-SAE J1488 or FPS-07-UL



- (10 GPM) FPS-04-UL-SAE J1488 or FPS-10-UL
- (14 GPM) FPS-04-UL-SAE J1488 or FPS-14-UL
- (20 GPM) FPS-04-UL-SAE J1488 or FPS-20-UL
- (25 GPM) FPS-04-UL-SAE J1488 or FPS-25-SUB-UL
- Max PSI IS 25 (About 25 Feet of Head) (Others Available)
- Enclosure: Nema 12/4x (suitable for outdoor).
- Controls UL508A listed
- Meets NEC (NFPA 70) and NFPA 30 & 37 requirements. Suitable for class 2, division 2, groups B, C, & D.

Optional Equipment:

- SAE J1488 Filter (Stage 4)
- Automatic Water Blowdown System w/ Storage Tank.
- 304 Stainless Smart Controller
- 304 Stainless Steel filtration Enclosure
- Multi Function Controller (MFC) to integrate tank level gauging, leak detection, automatic pump controls for day tanks, bell tanks and boilers.
- Fuel Additive Systems
- Two Stage (stage 2) Water Removal
- BaCnet communication for BMS systems integration

Money Saving Options:

- Non UL Pumps
- Basic Controller with w/ alarms and 24/7 timer
- 24/7 Timmer w/ 18 start stop setpoints (no alarms)

Literature Links:

- [FPS-14UL](#)
- [Multi Function Controller \(MFC\)](#)

