

18" Diesel Pump

Vacuum Assisted – dBa Silencer

Product Description

Diesel engine driven centrifugal pump equipped with vacuum-assisted priming system. Skid mounted for added stability and higher suction lift and enclosure for sound attenuation, having the following additional features: Run dry mechanical seal, Auto-start control, monitoring of fuel level, engine load, run time, oil and coolant temperature, and telemetry system.

Technical Data

Operating Parameters

Min. / Max. Flow	1530 gpm / 12410 gpm
Min. / Max. Shutoff Head	62 ft (27psi) / 177 ft (76psi)
Maximum Casing Pressure	260 psi
Maximum Temperature	200°F
Maximum Solid Size	4 inch
Min. / Max. Pump Speed	1070 rpm / 1800 rpm

Pump & Accessory Specifications

Suction / Discharge Size	18 inch / 18 inch
Impeller Diameter	17.5 inch
Vacuum System - Type / Capacity	Diaphragm / 50 CFM
Ratio - Pump Speed : Driver Speed	1 : 1.34
Casing	Ductile Iron ASTM A536 65-45-12
Impeller	CA6NM Stainless Steel
Wear Ring	ASTM A48 Class 40 Gray Iron
Shaft	17-4PH Stainless Steel
Mechanical Seal Faces	Tungsten-Carbide vs Silicon-Carbide
Mechanical Seal Lubrication	ISO Viscosity Grade 32 or Lower <small>(synthetic recommended)</small>
O-rings & Gaskets	Buna-N & Viton
Check Valve Body	Ductile Iron
Check Valve Flapper	Buna-N
Check Valve Type	Swing type

Driver Properties

Driver Type	Diesel Engine
Driver Make	John Deere
Model	6090HF485
Max. Continuous Rating	315 hp
Total Displacement	9 liters
Aspiration	Turbocharged and air-to-air aftercooled
Number of Cylinders	6
Safety Shutdowns	Low Oil Pressure, High Temp.
Fuel Consumption	14.4 gal/hr @ 1800 rpm
Run Time	20.2 hours @ 1800 rpm
Fuel Type	No. 2 Diesel: NO BIODIESEL
Fuel Capacity	290 U.S. gallons
Noise Rating	70 dBa @ 30 ft



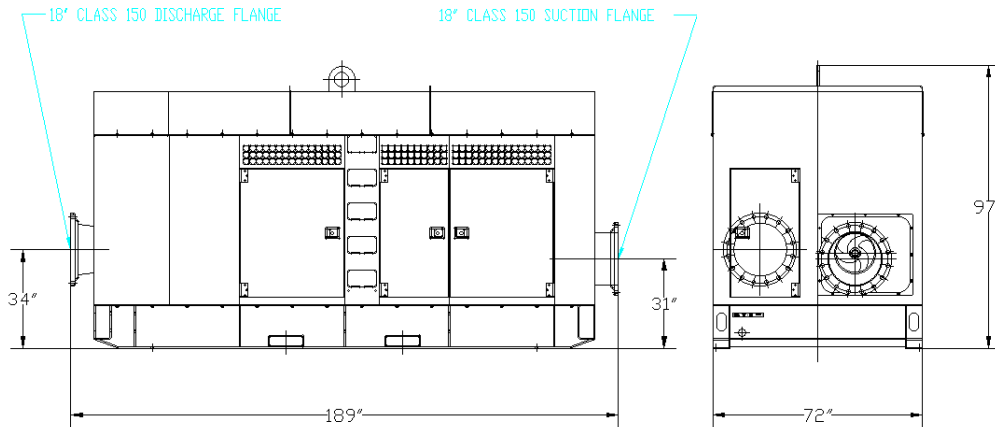
Notes

- Performance data based on water at 60°F
- Engine and pump speeds differ
- Run time indicated is for reference and could vary based on speed and engine loads
- Maximum temperature is the equipment material limitation. Based on the application, process, product and NPSH requirements, the maximum allowable temperature could be lower
- This pump is also available with a 20 CFM venturi-compressor priming system

18" Diesel Pump

Vacuum Assisted – dBa Silencer

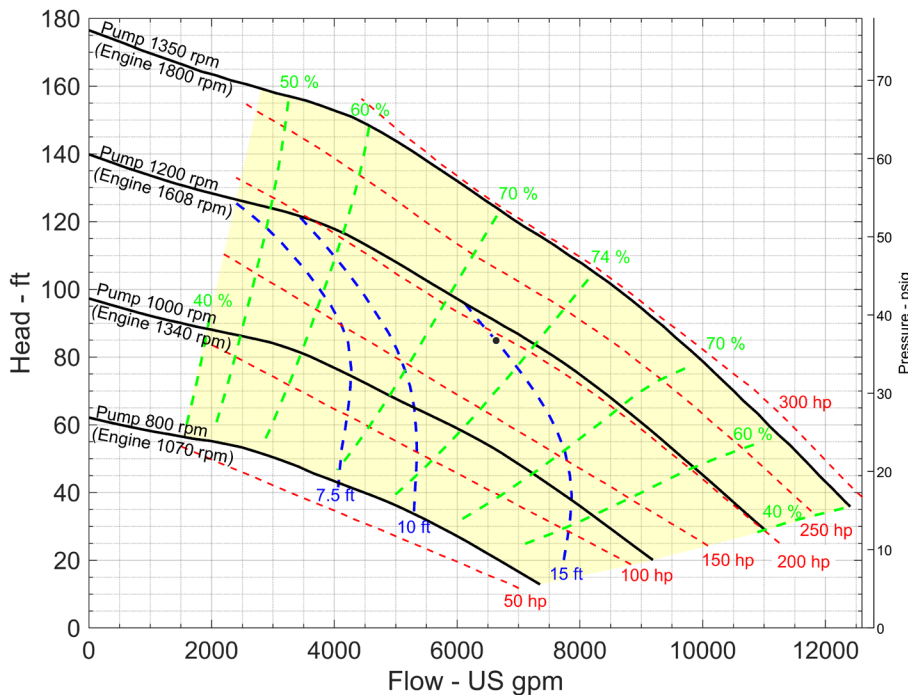
Dimensional Drawing



Dimensional Details

Total Weight wo/Fuel	15440 lbs
Total Weight w/Fuel	17500 lbs
Overall Height	97 inch
Overall Width	72 inch
Overall Length	189 inch

Performance Curve



Pump Make	Pioneer Pump
Pump Model	PP1414S17
Operating Speed	Variable
Min. Speed	1070 rpm
Max. Speed	1800 rpm
Impeller Rated Dia.	17.5 inch
Impeller Type	Enclosed
No. of Impeller Vanes	3
Solid Dia.	4 inch
Specific Speed	5003 US Units
Suction Size	14 inch
Discharge Size	14 inch