

# APPALACHIAN 88P

## Self-Priming Surface Pump



**DAEPUMPS.COM**

info@daepumps.com

(760) 821-8112

## Appalachian 88P

**Diesel / 120 HP / 3,950 GPM / 200' Head**



### Appalachian Series

The pump system consists of a centrifugal pump and a separator, which enables air to be separated from the liquid and be sucked by a vacuum pump - making automatic priming possible. Even with suction heights of several feet the machine rapidly evacuates the air from the suction pipe and starts to pump. The Appalachian series range is also suitable for pumping liquids with solids in suspension with best possible efficiency.

### Applications

The Appalachian 88P pump is designed to withstand toughest applications and delivers best in class pumping efficiency. One of the most common areas of utilization is the mining and Oil & Gas segment where reliability, efficiency and versatility is the key to provide a customized solution. Other suitable applications within Construction and General dewatering, Municipal as well as General Industry are ideal for the Appalachian 88P pump. Self-priming pumps by DAE Pumps are packed with features that not only meet but exceed the needs of our customers.

**Test according to UNI EN ISO 9906 standard - level 2B**  
**Test liquid: clean water, density 62.43 lb/ft<sup>3</sup> (8.345 lb/gal)**

Speed	Impeller Dia.	Solids Dia.	Ns	Suction	Discharge	No. Vanes
Various	12" / 315 mm	3" / 76 mm	2000 rpm	8" / 200 mm	8" / 200 mm	2

### Benefits

#### Efficiency

The 12" impeller with 82% efficiency at B.E.P. provides best pumping result with minimal efforts

#### Solid's handling

Closed impeller type with solids handling capability of 3" for trouble free operation

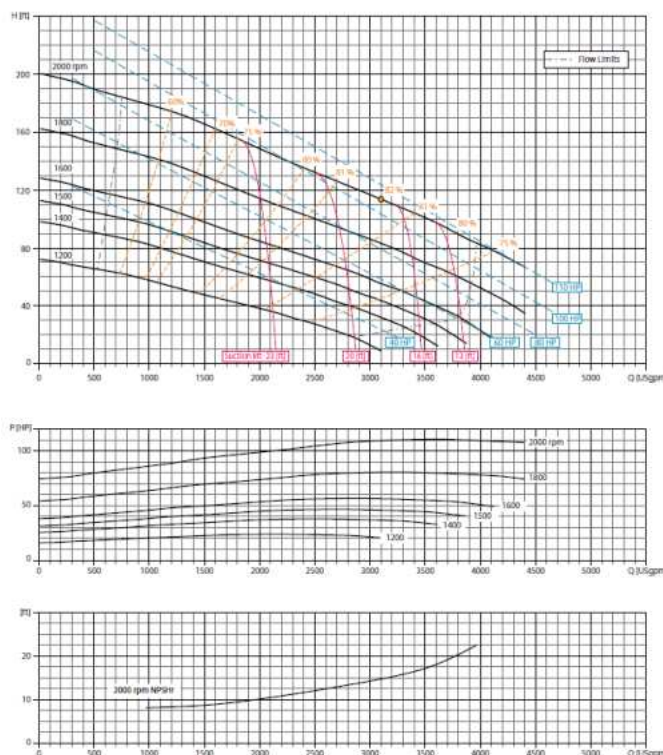
#### Easy maintenance

Hinged cover for direct access to the impeller and pump volute

#### Polyethylene Fuel tank

Corrosion-free PE tank provides longer lifetime and avoids tank cleaning due to oxidation

### Performance Curve



## Technical Data

### Pump

Model	Appalachian 88P
Qmax	3,950 GPM
Hmax	200 ft
Q max eff.	3,100 GPM
Eff. max	82%
Suction port	8" Flange – ANSI class 150
Delivery port	8" Flange – ANSI class 150
Impeller type	Closed, 2 vane
Impeller diameter	12"
Solids handling	3"
Material	G11
Casing	ASTM A536 ductile iron
Impeller	ASTM A536 ductile iron
Wear ring / Wear plate	ASTM A48 Class 20 grey iron
Shaft	AISI 630 stainless steel
Mechanical seal	Silicon carbide / Silicon carbide / VITON
Elastomers	NBR + VITON
Lubrication	Grease (bearing)
Check Valve	ASTM A536 ductile iron + NBR rubber flap
Separator	Aluminum alloy

### Priming system

Vacuum pump	
Vacuum pump type	Diaphragm
Nominal air capacity	50.0 cfm
Max vacuum	– 26.6 inHg
Drives	Link belt

### Engine

Make	Perkins
Model	904J-E36TA
Type	Diesel turbo common rail
Displacement	221in <sup>3</sup> )
No. cylinders	4
Cooling	Liquid with radiator
Rpm type	Variable
Standard speed	2000 rpm
US emissions	EPA Tier 4F
Starting	Electric
Engine system voltage	12 V
Engine Power Rating	120 HP



## Control panel

Model PW 750

Manual operation

Automatic operation: start-stop with transducers or floats

FleetLink Optional

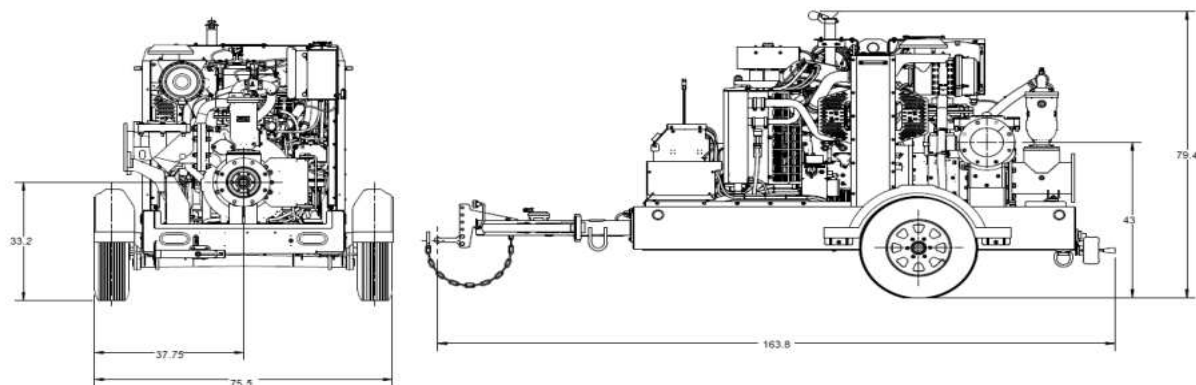
## Arrangement

### Technical data

Material	ASTM A36 steel
Coatings	Epoxy powder, average thickness of 3 MIL
Features	Lifting beam. Forklift pockets. Pump access through hinged door. Protected PE fuel tank.
Battery	Acid charge Pb-Ca maintenance free 12V – 1100 CCA
Fuel Tank Capacity	90 USG Net Fuel capacity
Fuel Consumption	5.2 US Gal/hr @2000 rpm @BEP
Dry weight	4,530 lbs. (Open) / 4,950 lbs. (Enclosed)
Wet Weight	5,200 lbs. (Open) / 5,580 lbs. (Enclosed)

## Dimensional Drawing

Open  
[in]



Enclosed

