

Appalachian H640

High Head Self-Priming Surface Pump



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Appalachian H640 – High Head Self-Priming Surface Pumps

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 meters the machine rapidly evacuates the air from the suction pipe and starts to pump. Additionally, thanks to the semi-open impeller, the Appalachian range is also suitable for pumping liquids with solids in suspension with the best possible efficiency.

Applications

The DAE Pumps Appalachian H640 pump is designed to withstand the toughest applications and deliver best in class pumping efficiency. One of the common areas of utilization is in the mining and oil & gas segment where reliability, efficiency and versatility is the key to providing a customized solution. Other suitable applications within construction and general dewatering, municipal as well as general industry are ideal for the Appalachian H640 pump. Our 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 2 Losses from priming system and check valve not included Test liquid: clean water, density 62.43 lb./ft³ (8,345 lb./gal)

Benefits

Efficiency: The 17" impeller with 69% efficiency at B.E.P. provides the best pumping result with minimal efforts

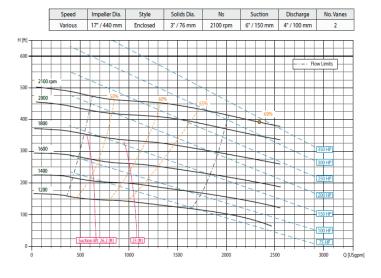
Solids handling: Semi-open impeller type with solids handling capability of 3" for trouble-free operation

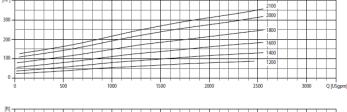
Footprint: Best in class footprint for the transport of 3x Appalachian H640 pumps on same trailer.

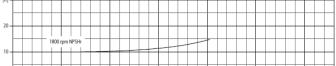
Serviceability: Semi cartridge seal and bolted front wear ring for easy service

Polyethylene fuel tank: Corrosion-free PE tank provides a longer lifetime and avoids tank cleaning due to oxidation

Performance Curve









Technical data

Pump

| Model | Appalachian H640 |
|-------------------|-----------------------------|
| Qmax | 1,950 GPM |
| Hmax | 500 ft |
| Q max eff. | 2,340 GPM |
| Eff. max | 69 % |
| Suction port | 6" Flanged - ANSI Class 150 |
| Delivery port | 4" Flanged - ANSI Class 150 |
| Impeller type | Enclosed, 2 vane |
| Impeller diameter | 17" |
| Solids handling | 3" |
| | |

| Material | | |
|-----------------------|--|--|
| Casing | ASTM A536 ductile iron | |
| Impeller | ASTM A743 CA6NM | |
| Wear ring | ASTM A48 Class 20 grey iron | |
| Wear plate | ASTM A48 Class 20 Grey Iron + NBR rubber coating | |
| Shaft | AISI 630 Stainless steel | |
| Mechanical Seal Faces | Silicon carbide Vs Silicon carbide | |
| Elastomers | VITON | |
| Check Valve | ASTM AS36 ductile iron + NRR rubber flan | |

Separator Steel

Priming system

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

Engine

| Make | John Deere |
|---------------------|--------------------------|
| Model | 6068HFC08 |
| Type | Diesel turbo common rail |
| Displacement | 549 in ³ |
| No. cylinders | 6 |
| Cooling | Liquid with radiator |
| Rpm type | Variable |
| Standard speed | 2,100 rpm |
| US emissions | EPA Tier 4F |
| Starting | Electric |
| Starting voltage | 24 V |
| Oil change interval | 275 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. Fork lift pockets. Pump access through hinged door. Protected PE fuel tank. |
| Battery | Acid charge Pb-Ca maintenance free, |
| | 12 V - 1100 CCA |
| Fuel tank capacity | 173 USG |
| DEF tank capacity | 46.7 USG |
| Fuel consumption | 9.7 US Gal/hr @2,100 rpm |
| Dry weight | 8,770 lbs |
| Wet weight | 10,300 lbs |

Dimensional

[in]

