

PRODUCT BULLETIN MODEL NOVO 2" SPHE

The American-Marsh 2" SPHE, wet prime centrifugal pump is a high pressure discharge pump fully meeting MIL-PRF-52109G specifications. The intended use of this pump is for moving potable water in any location on the battlefield. The unit will prime itself and pull a 24 foot vertical lift ensuring smooth operation. Due to the integral suction check valve, the 2" SPHE pump can prime and re-prime automatically.

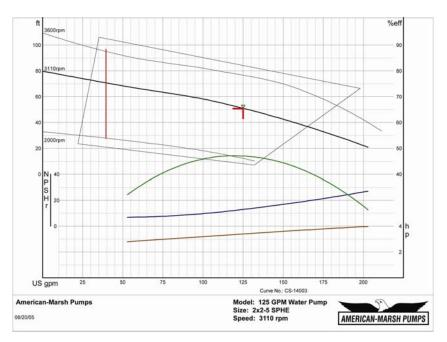


The heart of the system, the fluid end, is based off of the time tested NOVO 2" SPHE process pump product line. This pump was originally designed to pump a wide variety of demanding process fluids. Due to these demanding applications, the casing, impeller and rear cover feature heavy wall construction extending the life of the parts. The rear cover is engineered to maximize seal life by self venting gases and ensuring a consistent and debris free stream of clean fluid for lubrication.

Features

- Fully automatic priming up to 25 foot (7.6 m) based on atmospheric conditions. Maximum heads to 50 Feet (15 m) and flows to 125 GPM (15 m³/hr).
- Fully meets MIL-PRF-52109G, Type II, Size 2 requirements.
- Fluid end available in high tensile strength cast iron.
- Pump has a top discharge for ease in venting casing and in connecting discharge manifold.
- Solids handling suction flapper valve.
- High pressure mechanical seal with carbon vs. silicon carbide faces. Elastomers are of buna-nitrile construction rated for potable water services.
- Compact pump assembly mounted on a heavy duty, tubular steel base assembly.





Materials

Pump Casing

Cast, High Strength Cast Iron

Rear Cover

Cast, High Strength Cast Iron

Impeller

Cast, High Strength Cast Iron

Shaft

1018 Carbon Steel with 316 Stainless Steel Sleeve

Suction Flapper Valve

High Buna-Nitrile Rubber

Mechanical Seal Construction

Carbon vs. Silicon Carbide w/Buna-Nitrile Elastomers

Base

Fabricated, High Strength, Carbon Steel

Pump Specifications

Manufacturer & Model Number

American-Marsh Pumps, Model 2" SPHE

Rated Duty Point

125 GPM @ 50 Feet (28 M³/Hr @ 15 meters)

Maximum Operating Speed

3600 RPM

Maximum Operating Temperature

+125°F (100°C)

Maximum Casing Pressure

175 PSI (12 bar) @ +125°F (52°C)

Maximum Suction Pressure

50 PSI (4 bar)

Pipe Connections

Suction: 2" (50 mm) NPT Discharge: 2" (50 mm) NPT

Priming Port

1" (25 mm) Solids Handling

1/4" (6 mm)

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Engine Specifications

Manufacturer & Model Number

Lombardini, Model 15LD315

Horsepower (Continuous)

5.6 HP (4.1 KW) @ 3600 rpm

Displacement

21.35 in³ (0.35 L)

Aspiration

Natual

Number of Cylinders

Bore

3.07 in (78 m)

Stroke

2.60 in (66 mm)

Exhaust Noise Emmission

100 dBa

Starting Method

Re-coil