

# PRODUCT BULLETIN MODEL NOVO 1.5" LSE

The American-Marsh 1.5" LSE, 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 a variety of fuels to 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 1.5"LSE pump can prime and re-prime automatically.

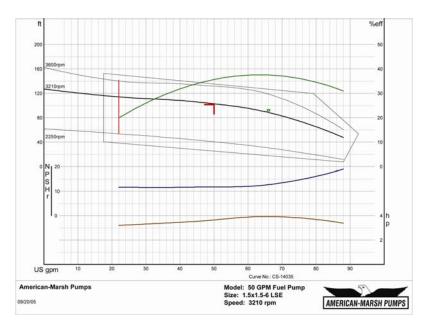


The heart of the system, the fluid end, is based off of the time tested NOVO 1.5" LSE process pump product line. This pump was originally designed to pump a wide variety of demanding process fluids. Due to these demanding applications, the casing, impeller and rear cover feature heavy wall construction 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 100 Feet (30 m) and flows to 50 GPM (11 m<sup>3</sup>/hr).
- Fully meets MIL-PRF-52109G, Type I, Size 1 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 fuel 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 1.5" LSE

**Rated Duty Point** 

50 GPM @ 100 Feet (11 M<sup>3</sup>/Hr @ 31 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: 1.5" (38 mm) NPT Discharge: 1.5" (38 mm) NPT

**Priming Port** 

1" (25 mm)

Solids Handling

1/4" (6 mm)

#### **Engine Specifications**

Manufacturer & Model Number

Lombardini, Model 15LD315

**Horsepower (Continuous)** 

5.6 HP (4.1 KW) @ 3600 rpm

Displacement

21.35 in<sup>3</sup> (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** 

24 volt, Electric w/Integrated Female NATO Plug