

Fuel Supply Pump

SP-3000-STD / SP-3000-RR



- ⊞ Flow Rate - 3,000 liters per hour
- ⊞ Max Pressure - 400 psi
- ⊞ Volume - 13,000 mm³/rotation
- ⊞ Weight - 1,271 g
- ⊞ Aluminum and Steel Construction
- ⊞ Inlet Fitting Sized For Initial Flow Control

The CP3 Supply Pump is a single bolt on solution that replaces the small factory supply pump and will flow up to 3,000 l/hr at pressure which can support up to four CP3 1850 (14mm) high pressure pumps.

With the installation of this supply pump into a multi-CP3 system, the small gear pumps on the back of each CP3 is deleted and the pumps are fed directly with high-pressure supply fuel. This eliminates redundant power drawing pumps that can be prone to failure in certain conditions.

The Fuel Supply Pump is designed to be combined with the Regulated Filter Head to create the Fuel Delivery System, which will support applications ranging from 200 horsepower to 3,000 horsepower and beyond.

The pump and housing design keep weight and durability in mind with a steel wear plate separating the pumping element and aluminum housing.

The inlet fitting and supply hose are sized to restrict pump output based on the system needs. This decreases parasitic loss, fuel aeration, and heat generated in the fuel.

Application

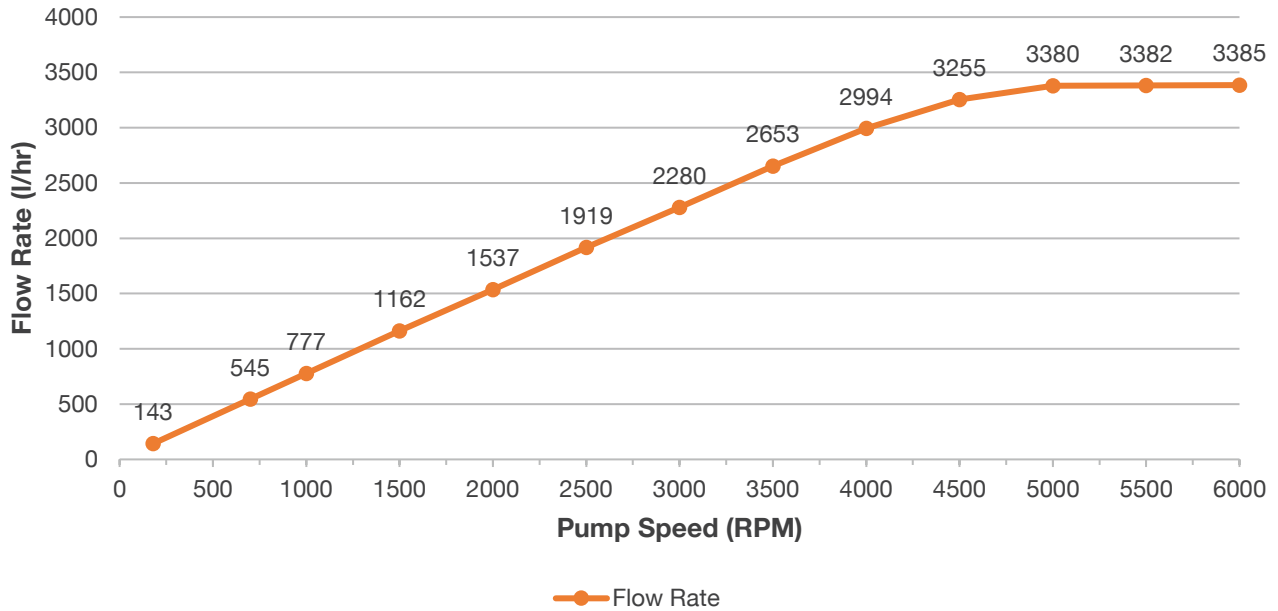
Standard or Reverse Rotation CP3 High Pressure Fuel Pump

Technical Specifications

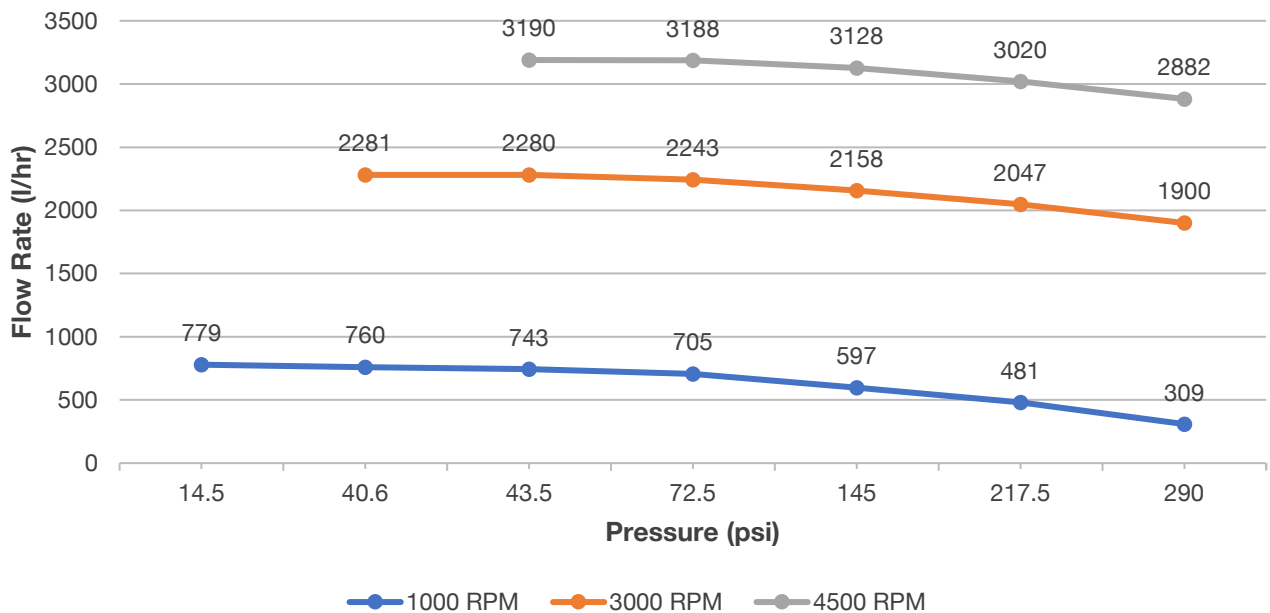
Fuel Compatibility	Diesel
Weight	1271g (2.8 lbs)
Maximum Dimensions	93 x 95 x 66 mm
Max Flow	3,000 l/hr
Max Speed	6,000 RPM
Fuel Temperature	-40° to 70°C
Maximum Pressure	200 psi continuous 400 psi Max
Inlet Sizing	See Page 3
Use Supplied Inline Filter on Suction Side	

Flow Data

Pump Flow Rate vs. RPM

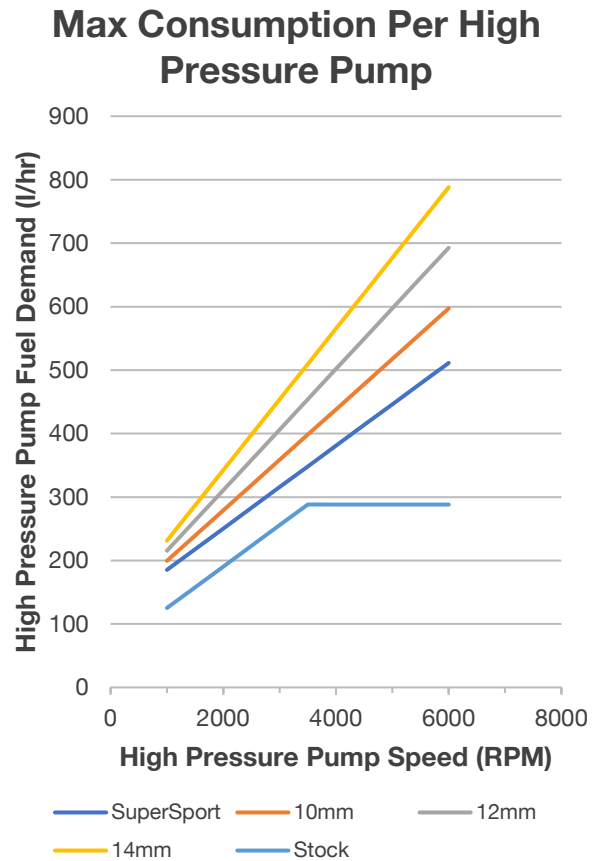
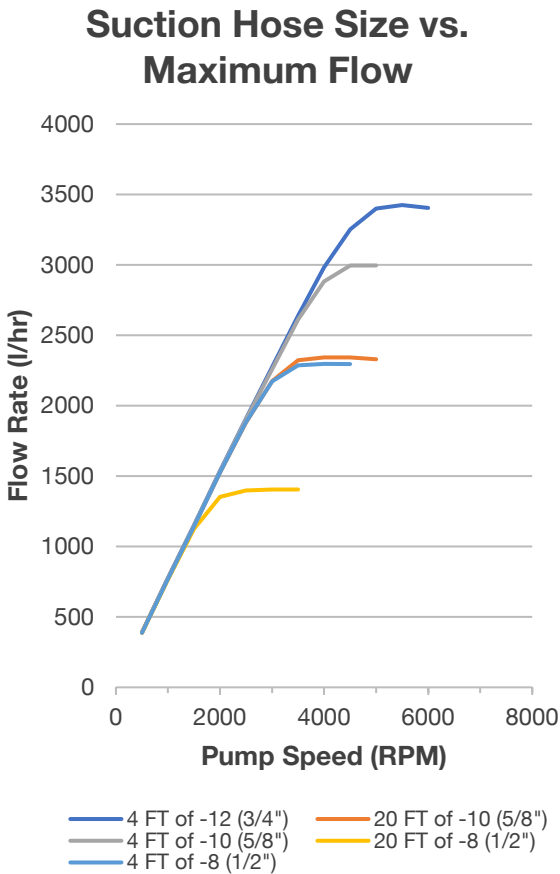


Pump Efficiency: Flow Rate vs Pressure at Specific RPM



Pump Suction Hose and Fitting Sizing

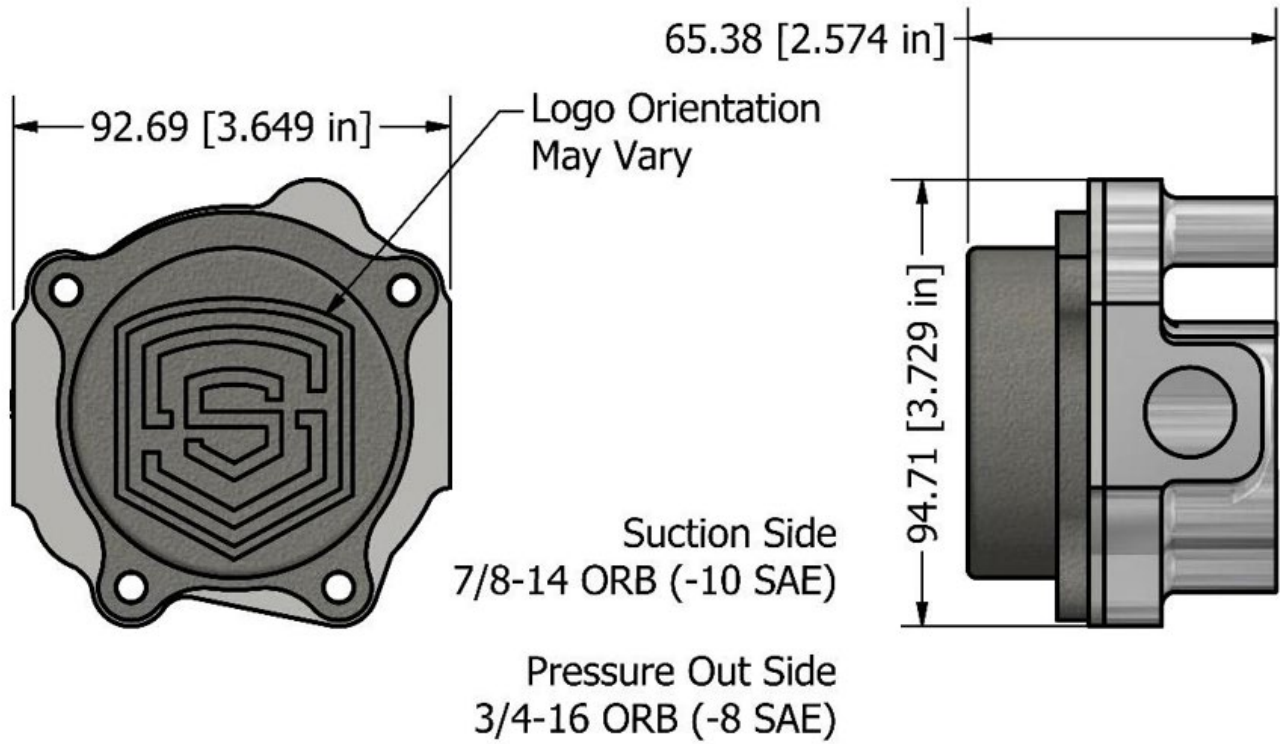
The graphs below will determine the recommended supply pump suction hose size for various high-pressure pump configurations. The recommended safety factor is 20%.



Example: The supply pump needs to support (2) 12mm high pressure pumps up to 5,000 rpm.

One 12mm pump consumes 600 l/hr, so two pumps consume 1,200 l/hr, and a safety factor of 20% should be used. Therefore, the supply pump suction hose needs to support 1,440 l/hr ($1,200 \times 1.2 = 1,440$). Then find the 1,440 l/hr point on the Suction Hose Size graph and select the line that is above that point. In this case, **20 FT of -8 AN** hose will support that requirement.

Drawings



Routing Diagram

