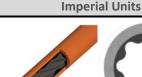


## **Power Sections**

22 East Lake Crescent N.E., Airdrie, Alberta, Canada, T4A 2H3 Ph: (587) 775-7777 www.spirasystems.com



Conventional



Stator Specifications				
	Inches			
Overall Length	210.0			
Tube O.D.	6.75			
Tube I.D. at Terminal	5.50			
Rubber Cut Back Top	7.5			
Rubber Cut Back Bottom	7.5			
Weight (lb)	800			
Tube Material	4140-4145			
To be threaded and ID Banded by customer				

Rotor Specifications				
	Inches			
Overall Length	202.5			
Contour Length	195.5			
Major Diameter	4.220			
Eccentricity	0.355			
Head Diameter	4.000			
Gunbored Weight (lb)	385			
Solid Weight (lb)	563			
Material	17-4PH			
Coating option 1	Chrome			
Coating option 2	Carbide			
To be threaded by customer				

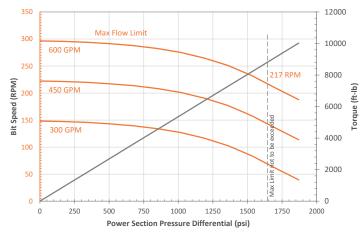
Performance Specifications						
Flow Range (GPM)	300 - 600					
Speed Range (RPM)	nge (RPM) 150 - 295					
Torque Slope (ft-lbs/psi)	5.360					
Rotation (rev/Gal)	0.494					
Stall Torque (ft-lbs)	13,250					
Operating Parameters						
Max Diff Pressure (psi)	1,650					
Torque (ft-lbs)	8,800					
Flow Rate (GPM)	600					
Full Load RPM	217 at 600 GPM					

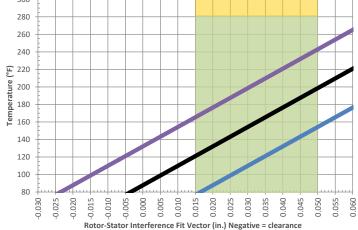
6.75 4/5 LOBES 7 STAGES

Minor Diameter Fit Details (at 68°F)							
	Nominal Fit (in.)**	Minor Dia (in.)*	Nominal Fit (in.)**	Minor Dia (in.)*	Operating Temp		
Size Band	Vector Measurements		True Size Laser Measurements		Optimal		
1.0T	-	-	-	-	-		
0.5T	0.002	3.508	0.012	3.498	95 - 175 °F		
STD	-0.008	3.518	0.002	3.508	120 - 195 °F		
0.5L	-	-	-	-	-		
1.0L	-	-	-	-	-		
1.5L	-	-	-		-		
2.0L	-	-	-	-	-		
Minor Shrinkage (in./°F)				0.0	0044		

All default tolerances are +/- 0.015 unless otherwise explicitly agreed upon with Spira Systems. Call for availability of sizes not listed.

- \*Approximate Vector/laser gauge conversion:  $0.010 \pm 0.005$
- \*\*Negative fits indicate clearance fit at room temperature using nominal new rotor
- \*\*\*Best operating temperatures are based on new stators subject to normal thermal expansion conditions. Operators may wish to consider swell and run life when selecting sizes.





----- Expected slightly reduced torque when operating at this flow limit

--- Expect reduced life when operating at this pressure limit for extended periods of time

1. Choose desired operating temperature

2. Read across to middle of shaded region

Follow *slope* down to room temperature to determine which fit to order

Acceptable Fit at Reduced Diff
Optimal Operating Fit Range

1L Size Band
STD Size Band
1T Size Band

Performance curves are for reference only. Actual power section performance may vary depending on operating conditions (e.g. chosen rotor/stator interference fit, possible rubber swelling by drilling fluid, rotor and stator wear, actual downhole temperature, actual stator temperature, physical and chemical properties of the drilling fluid and other factors encountered downhole). The torque may exceed that specified for the connected components. Operating above the recommended limits may result in damage to the power section and connected components which will be the liability of the operator. Data subject to change without notice. Visit www.spirasystems.com for most up to date information.