

## **Power Sections**

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



7.00" 7/8 LOBES 5.7 STAGES





Stator Specifications				
	Inches			
Overall Length	260.0			
Tube O.D.	7.00			
Tube I.D.	5.50			
Rubber Cut Back Top	8.0			
Rubber Cut Back Bottom	8.0			
Weight (lb)	935			
Tube Material	4140-4145			
To be threaded and ID Banded by customer				

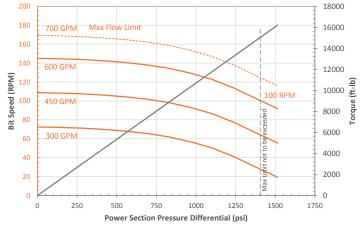
Rotor Specifications				
	Inches			
Overall Length	252.0			
Contour Length	245			
Major Diameter	4.644			
Eccentricity	0.247			
Head Diameter	4.500			
Gunbored Weight (lb)	748			
Solid Weight (lb)	970			
Material	17-4PH			
Coating option 1	Chrome			
Coating option 2	Carbide			
To be threaded by customer				

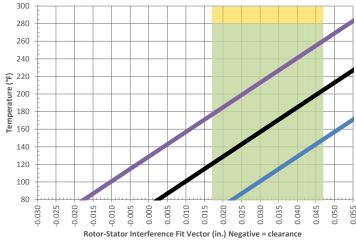
Performance Specifications					
Flow Range (GPM)	300 - 700				
Speed Range (RPM)	75 - 145				
Torque Slope (ft-lbs/psi)	10.698				
Rotation (rev/Gal)	0.242				
Stall Torque (ft-lbs)	19,900				
Operating Parameters					
Max Diff Pressure (psi)	1,450				
Torque (ft-lbs)	15,000				
Flow Rate (GPM)	600				
Full Load RPM	100 at 600 GPM				

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 Las	ser Measurements	Optimal		
1.0T	-	-	-	-	-		
0.5T	0.009	4.142	0.017	4.134	105 - 160 °F		
STD	-0.001	4.152	0.007	4.144	130 - 185 °F		
0.5L	-	-	-	-	-		
1.0L	-	-	-	-	-		
1.5L	-	-	-	-	-		
2.0L	-	-	-	-	-		
Minor Shrinkage (in./°F)			0.0	00036			

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

<sup>\*\*\*</sup>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

 ${\bf 2.} \ {\bf Read \ across \ to \ middle \ of \ shaded \ region}$ 

3. 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.

<sup>\*</sup>Approximate Vector/laser gauge conversion:  $0.008 \pm 0.005$ 

<sup>\*\*</sup>Negative fits indicate clearance fit at room temperature using nominal new rotor