

Power Sections

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



Conventional

8.00 7/8 LOBES 4 STAGES



Stator Specifications				
	Inches			
Overall Length	203.2			
Tube O.D.	8.00			
Tube I.D. at Terminal	6.25			
Rubber Cut Back Top	8.0			
Rubber Cut Back Bottom	8.0			
Weight (lb)	1205			
Tube Material	4140-4145			
To be threaded and ID Banded by customer				

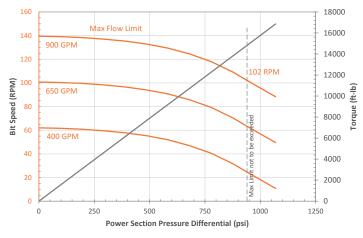
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Rotor Specifications				
	Inches			
Overall Length	196.3			
Contour Length	188.3			
Major Diameter	5.186			
Eccentricity	0.293			
Head Diameter	4.750			
Gunbored Weight (lb)	760			
Solid Weight (lb)	933			
Material	17-4PH			
Coating option 1	Chrome			
Coating option 2	Carbide			
To be threaded by customer				

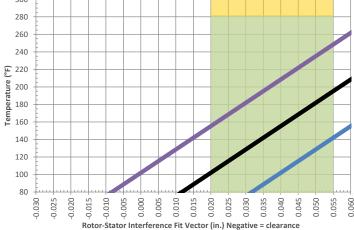
Performance Specifications						
Flow Range (GPM)	400 - 900					
Speed Range (RPM)	60 - 140					
Torque Slope (ft-lbs/psi)	osi) 15.770					
Rotation (rev/Gal)	0.155					
Stall Torque (ft-lbs)	22,250					
Operating Parameters						
Max Diff Pressure (psi)	950					
Torque (ft-lbs)	14,800					
Flow Rate (GPM)	900					
Full Load RPM	102 at 900 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 Laser Measurements		Optimal		
1.0T	-	-	-	-	-		
0.5T	0.018	4.582	0.023	4.577	75 - 165 °F		
STD	0.008	4.592	0.013	4.587	100 - 195 °F		
0.5L	-0.002	4.602	0.003	4.597	125 - 220 °F		
1.0L	-	-	-	-	-		
1.5L	-	-	-	-	-		
2.0L	-	-	-	-	-		
Minor Shrinkage (in./°F)			0.0	00037			

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: 0.005 ± 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

 $---\cdot$ 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

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.