

Power Sections

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



Stator Specifications	
	Inches
Overall Length	187.0
Tube O.D.	4.75
Tube I.D. at Terminal	3.75
Rubber Cut Back Top	8.0
Rubber Cut Back Bottom	8.0
Weight (lb)	505
Tube Material	4140-4145
To be threaded and ID Banded by customer	

Rotor Specifications	
	Inches
Overall Length	178.0
Contour Length	172.3
Major Diameter	2.945
Eccentricity	0.163
Head Diameter	2.750
Gunbored Weight (lb)	235
Solid Weight (lb)	274
Material	17-4PH
Coating option 1	Chrome
Coating option 2	Carbide
To be threaded by customer	

Performance Specifications	
Flow Range (GPM)	150 - 300
Speed Range (RPM)	80 - 130
Torque Slope (ft-lbs/psi)	5.200
Rotation (rev/Gal)	0.521
Stall Torque (ft-lbs)	6,950
Operating Parameters	
Max Diff Pressure (psi)	900
Torque (ft-lbs)	4,650
Flow Rate (GPM)	250
Full Load RPM	95 at 250 GPM

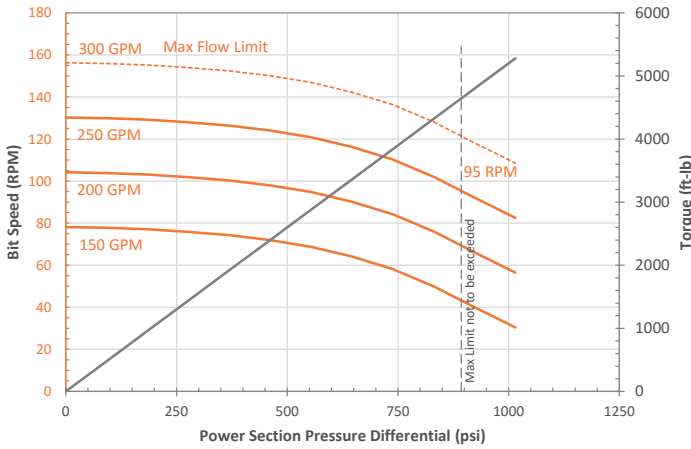
Minor Diameter Fit Details (at 68°F)					
Size Band	Nominal Fit (in.)**	Minor Dia (in.)*	Nominal Fit (in.)**	Minor Dia (in.)*	Operating Temp
	Vector Measurements		True Size Laser Measurements		Optimal
1.0T	0.012	2.607	0.022	2.597	80 - 215 °F
0.5T	0.002	2.617	0.012	2.607	120 - 255 °F
STD	-0.008	2.627	0.002	2.617	160 - 290 °F
0.5L	-	-	-	-	-
1.0L	-	-	-	-	-
1.5L	-	-	-	-	-
2.0L	-	-	-	-	-
Minor Shrinkage (in./°F)					0.00025

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

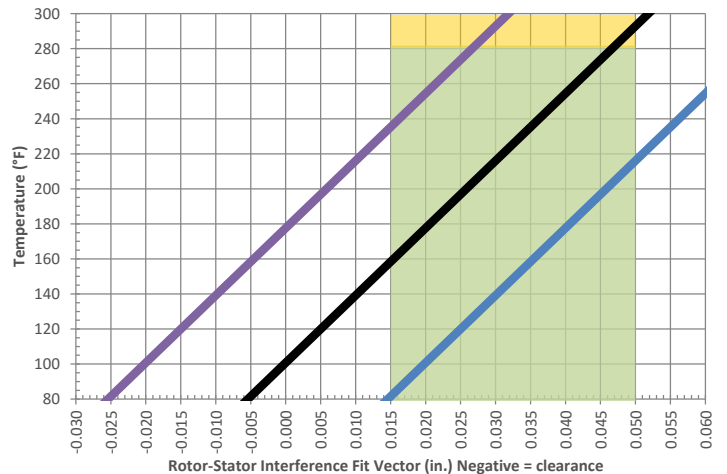
*Approximate Vector/laser gauge conversion: 0.010 ± 0.005

**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
 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.