

## **Power Sections**

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



**Canadian Oilfield Units** 





Stator Specifications				
Overall Length (in.)	235.0 [5969 mm]			
Tube O.D. (in.)	5.00 [127 mm]			
Tube I.D. (in.)	4.00 [102 mm]			
Rubber Cut Back Top (in.)	8.0			
Rubber Cut Back Bottom (in.)	8.0			
Weight (kg)	235			
Tube Material	4140-4145			
To be threaded and ID Banded by customer				

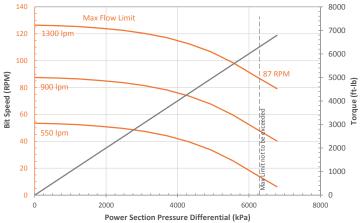
Rotor Specifications				
Overall Length (in.)	214.8 [5455 mm]			
Contour Length (in.)	208 [5290 mm]			
Major Diameter (in.)	3.122			
Eccentricity (in.)	0.177			
Head Diameter (in.)	3.250			
Bored Weight (kg)	147			
Solid Weight (kg)	169			
Material	17-4PH			
Coating option 1	Chrome			
Coating option 2	Carbide			
To be threaded by customer				

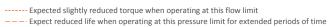
Performance Specifications							
Flow Range (lpm)	550 - 1300						
Speed Range (RPM)	55 - 125						
Torque Slope (ft-lb/kPa)	1.001						
Rotation (rev/l)	0.097						
Stall Torque (ft-lb)	8,350						
Operating Parameters							
Max Diff Pressure (kPa)	6,300						
Torque (ft-lb)	6,200						
Flow Rate (Ipm)	1,300						
Full Load RPM	87 at 1300 lpm						

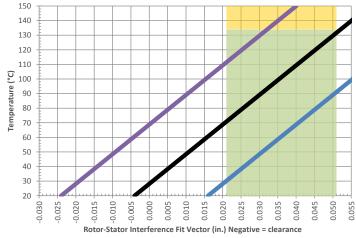
Minor Diameter Fit Details (at 20°C)							
	Nominal Fit (in.)**	Minor Dia (in.)*	Nominal Fit (in.)**	Minor Dia (in.)*	Operating Temp		
Size Band	Vector Measurements		True Size Las	ser Measurements	Optimal		
1.0T	-	-	-	-	-		
0.5T	0.006	2.763	0.010	2.759	65 - 95 °C		
STD	-0.004	2.773	0.000	2.769	85 - 115 °C		
0.5L	-0.014	2.783	-0.010	2.779	105 - 135 °C		
1.0L	-0.024	2.793	-0.020	2.789	120 - 150 °C		
1.5L	-	-	-	-	-		
2.0L	-	-	-	-	-		
Minor Shrinkage (in./°C)				0.0	00049		

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.







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



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:  $0.004 \pm 0.005$ 

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