

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.)	250.0 [6350 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)	255			
Tube Material	4140-4145			
To be threaded and ID Banded by customer				

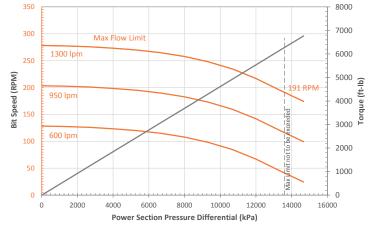
Rotor Specifications				
Overall Length (in.)	241.0 [6121 mm]			
Contour Length (in.)	235 [5969 mm]			
Major Diameter (in.)	3.018			
Eccentricity (in.)	0.192			
Head Diameter (in.)	2.900			
Bored Weight (kg)	147			
Solid Weight (kg)	171			
Material	17-4PH			
Coating option 1	Chrome			
Coating option 2	Carbide			
To be threaded by customer				

Performance Specifications						
Flow Range (Ipm)	600 - 1300					
Speed Range (RPM)	130 - 280					
Torque Slope (ft-lb/kPa)	0.461					
Rotation (rev/l)	0.214					
Stall Torque (ft-lb)	8,300					
Operating Parameters						
Max Diff Pressure (kPa)	13,700					
Torque (ft-lb)	6,200					
Flow Rate (Ipm)	1,300					
Full Load RPM	191 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	0.006	2.628	0.016	2.618	45 - 75 °C			
0.5T	-0.004	2.638	0.006	2.628	65 - 95 °C			
STD	-0.014	2.648	-0.004	2.638	85 - 115 °C			
0.5L	-0.024	2.658	-0.014	2.648	100 - 130 °C			
1.0L	-0.034	2.668	-0.024	2.658	120 - 150 °C			
1.5L	-	-	-	-	-			
2.0L	-	-	-	-	-			
Minor Shrinkage (in./°C)				0.0	00054			

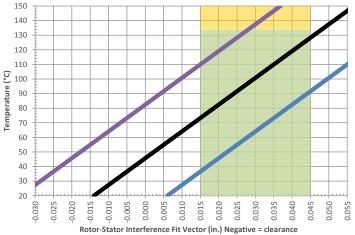
All default tolerances are +/- 0.015 unless otherwise explicitly agreed upon with Spira Systems. Call for availability of sizes not listed.

^{***}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



1L Size Band
STD Size Band

1T Size Ban

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.

^{*}Approximate Vector/laser gauge conversion: 0.010 ± 0.005

^{**}Negative fits indicate clearance fit at room temperature using nominal new rotor