

## **Power Sections**

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Rotor Specifications					
verall Length in. [mm]	194.3	[4934]	Ī		
ontour Length in. [mm]	187.8	[4769]			
lajor Diameter in. [mm]	3.980	[101.1]			
ccentricity in. [mm]	0.226	[5.7]			
ead Diameter in. [mm]	3.500	[88.9]			
unbored Weight lb [kg]	475	[215]			
olid Weight Ib [kg]	542	[246]			
1aterial (See note 4)	17	7-4 PH			
oating Options	Chrome	e or Carbide			
<b>T</b> 1 1 1	lass as a sector based				

## 6.50 7/8 LOBES 4.8 STAGES

Model: SPS650784.8

**Mixed Units** 



Stator Specifications			
Overall Length in. [mm]	203.5	[5169]	
Tube O.D. in. [mm]	6.50	[165]	
Tube I.D. (Terminal) in. [mm]	5.00	[127]	
Rubber Cutback Top in. [mm]	8.0	[203.2]	
Rubber Cutback Btm in. [mm]	8.0	[203.2]	
Weight lb [kg]	840	[380]	
Tube Material	4140-4145		
To be threaded and ID Ban	ded by cus	tomer	

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To be threaded by customer			

Performance Specifications				
Flow Range GPM [lpm]	150 - 500	[570 - 1890]		
Speed Range RPM	50 - 130			
Torque Slope ft-lb/psi [Nm/kPa]	7.977	[1.569]		
Rotation rev/Gal [rev/lit]	0.330	[0.087]		
Stall Torque ft-lb [Nm]	13,500	[18,300]		
Operating Parameters				
Max Diff Pressure psi [kPa]	1,150	[7,800]		
Torque ft-lbs [Nm]	9,000	[12,200]		
Flow Rate GPM [lpm]	400	[1,500]		
Full Load RPM	97 at 400 GPM			

Size Band	Vector Fit (in.) (see note 1)	Vector Measurement (in.)	Recommended Min Operating Temperature	Recommended Optimal Operating Temperature (see note 2)	Recommended Max Operating Temperature (see note 2)
1.0T	-	-	-	-	-
0.5T	-	-	-	-	-
STD	0.003	3.525	125°F [50°C]	180°F [80°C]	240°F [115°C]
0.5L	-0.007	3.535	160°F [70°C]	220°F [105°C]	275°F [135°C]
1.0L	-	-	-	-	-
Minor Diameter Rate of Change (in/°F) [in/°C]				0.000256 [0.000461]	

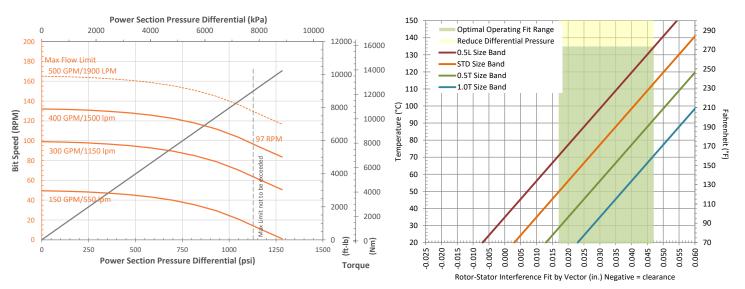
Notes:

1. Negative fits indicate clearance fit at room temperature using nominal new rotor.

2. Reduce differential pressure by 20% for temperatures above 250°F (125°C) and by 40% for temperatures above 285°F (140°C)

3. Typical stator minor diameter tolerances are +/- 0.015.

4. Material minimum yield to be discussed at time of order subject to availability.



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 the operator may be liable for. Data subject to change without notice. Visit www.spirasystems.com for most up to date information.