

## **Power Sections**

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



7.00 7/8 LOBES 8.5 STAGES Model: SPS700788.5 **Mixed Units** 

Stator Specifications			Rotor Specifications			Pe
Overall Length in. [mm]	300.0	[7620]	Overall Length in. [mm]	294.0	[7468]	Flow Range GPM [lp
Tube O.D. in. [mm]	7.00	[178]	Contour Length in. [mm]	288.0	[7315]	Speed Range RPM
Tube I.D. (Terminal) in. [mm]	5.75	[146]	Major Diameter in. [mm]	5.024	[127.6]	Torque Slope ft-lb/p
Rubber Cutback Top in. [mm]	7.0	[177.8]	Eccentricity in. [mm]	0.268	[6.8]	Rotation rev/Gal [re
Rubber Cutback Btm in. [mm]	7.0	[177.8]	Head Diameter in. [mm]	5.000	[127]	Stall Torque ft-lb [N
Weight lb [kg]	985	[445]	Gunbored Weight lb [kg]	1067	[484]	
Tube Material	4140	)-4145	Solid Weight lb [kg]	1326	[601]	
			Material (See note 4)	17-4 PH		Max Diff Pressure p
			Waterial (See Hote 4)			Torque ft-lbs [Nm]
			Coating Options	Chrome	e or Carbide	Flow Rate GPM [lpn
To be threaded and ID Banded by customer			To be threaded by customer			Full Load RPM

Performance Specifications							
Flow Range GPM [lpm]	500 - 750	[1890 - 2840]					
Speed Range RPM	130 - 195						
Torque Slope ft-lb/psi [Nm/kPa]	9.783	[1.924]					
Rotation rev/Gal [rev/lit]	0.260	[0.069]					
Stall Torque ft-lb [Nm]	29,300	[39,700]					
Operating Parameters							
Max Diff Pressure psi [kPa]	2,000	[13,800]					
Torque ft-lbs [Nm]	19,550	[26,500]					
Flow Rate GPM [lpm]	750	[2,800]					
Full Load RPM	143 at 750 GPM						

## Fit Dotails at 20°C [CO°F] /S

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	0.023	4.465	68 °F [20 °C]	95°F [35°C]	150°F [65°C]				
0.5T	0.013	4.475	75°F [25°C]	130°F [55°C]	185°F [85°C]				
STD	0.003	4.485	110°F [45°C]	170°F [75°C]	225°F [105°C]				
0.5L	-	-	-	-	-				
1.0L	-	-	-	-	-				
	0.000264 [0.000474]								

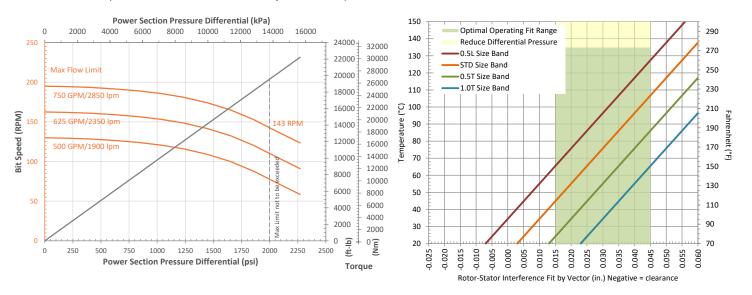
Notes:

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.