



VIKING

Power Technologies

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Conventional Power Section

700 78 85

7.00" OD 7/8 Lobes 8.5 Stages

Rotor Specification

Overall Length	294.00 in.
Contour Length	288.00 in.
Head Length	6.00 in.
Head Diameter	5.00 in.
Major Diameter	5.024 in.
Eccentric	0.268 in.
Material	17-4 PH
Weight	1,360 lbs.
Thread Form	Contact Factory

Stator Specification

Overall Length	300.00 in.
Contour Length	284.00 in.
Tube O.D.	7.00 in.
Tube I.D.	5.75 in.
Cutback (Band / Non-Band)	8.00 / 8.00 in.
Stages	8.5
Material	4140 HT
Weight	1,136 lbs.
Thread Form	Contact Factory

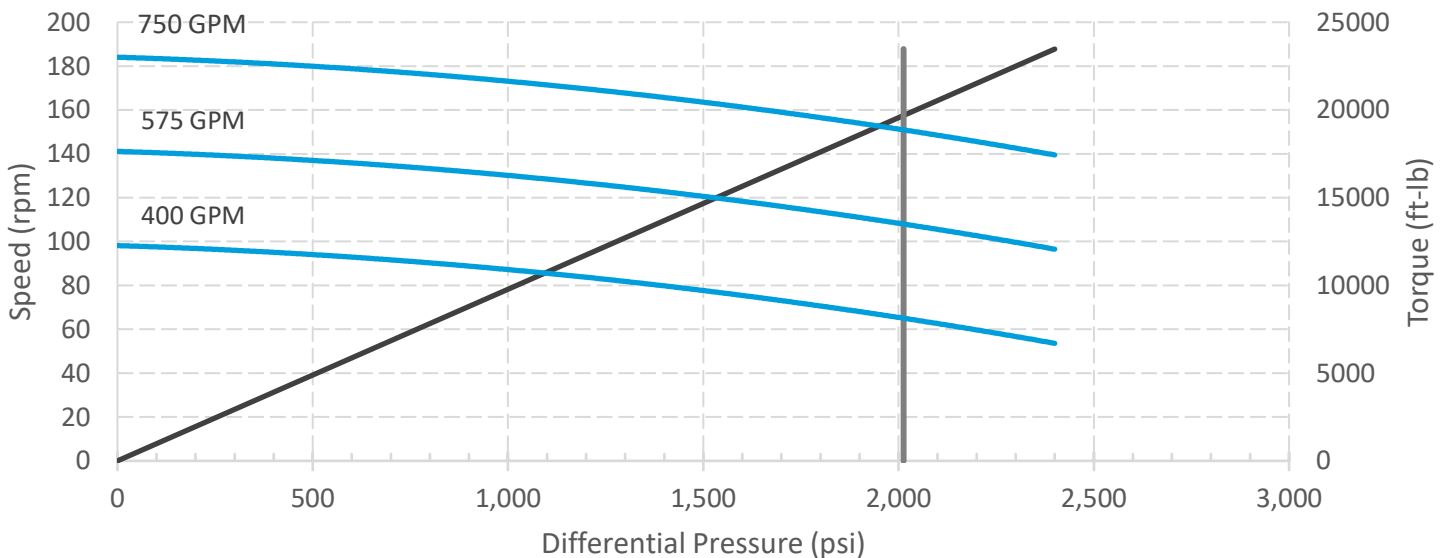
Downhole Performance Specifications

Torque Slope	9.78 ft-lbs/psi	Max Diff. Pressure	2,010 psi	2,010 psi
Flow Range	400 - 750 gpm	Max Torque	19,690 ft-lbs	15,880 ft-lbs
Speed Range	98 - 184 rpm	Speed (Max Diff. & Flow)	151 rpm	130 rpm
Rotation	0.245 rev/gal	Max HP	565 hp	390 hp
Off-Bottom Pressure	150 psi	Stall Diff. Pressure	3,150 psi	
		Stall Torque	30,810 ft-lbs	

Dyno Performance

Elastomer Performance

	007			VPX		
	Minor	Nominal Fit	Optimal Temperature	Minor	Nominal Fit	Optimal Temperature
	Temperature Slope 0.000217 in/°F			Temperature Slope 0.000265 in/°F		
1.0 Undersize	4.477	0.011	90 - 220 °F	4.495	-0.007	155 - 260 °F
Standard	4.487	0.001	135 - 265 °F	4.504	-0.016	190 - 290 °F
0.5 Oversize						
1.0 Oversize						
1.5 Oversize						
2.0 Oversize						



Power section performance curves are for reference only. Actual performance will vary with different downhole conditions and rotor/stator fits. If operated above the optimal differential pressure, stator life will be reduced. Optimal load power calculation is based on maximum RPM and optimal load torque. Information contained in this document is subject to change without notice.



Rotor Specification

Overall Length	7467.6 mm
Contour Length	7315.2 mm
Head Length	152.4 mm
Head Diameter	127.00 mm
Major Diameter	127.61 mm
Eccentric	6.81 mm
Material	17-4 PH
Weight	617 kgs
Thread Form	Contact Factory

Stator Specification

Overall Length	7620.0 mm
Contour Length	7213.6 mm
Tube O.D.	177.8 mm
Tube I.D.	146.1 mm
Cutback (Band / Non-Band)	203.2 / 203.2 mm
Stages	8.5
Material	4140 HT
Weight	515 kgs
Thread Form	Contact Factory

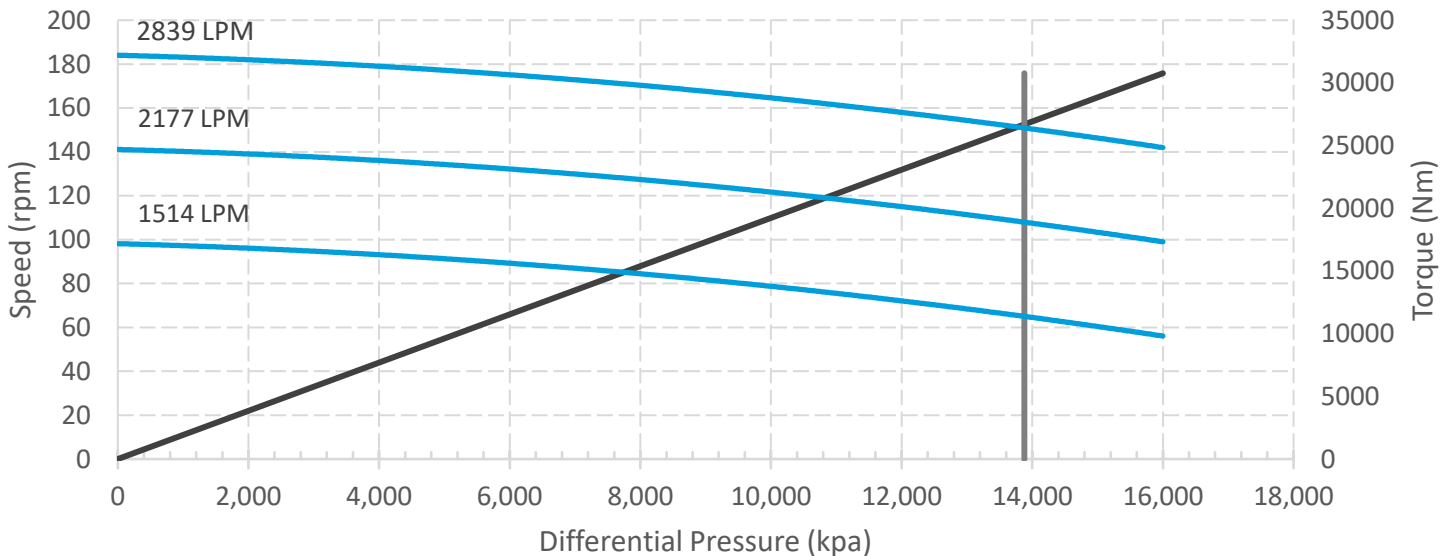
Downhole Performance Specifications

Torque Slope	1.92 Nm/kPa	Max Diff. Pressure	13858 kPa	13858 kPa
Flow Range	1514 - 2839 lpm	Max Torque	26696 Nm	21530 Nm
Speed Range	98 - 184 rpm	Speed (Max Diff. & Flow)	151 rpm	130 rpm
Rotation	0.0647 rev/liter	Max HP	421 kW	291 kW
Off-Bottom Pressure	1,034 kPa	Stall Diff. Pressure	21718 kPa	
		Stall Torque	41773 Nm	

Dyno Performance

Elastomer Performance

	007			VPX		
	Minor	Nominal Fit	Optimal Temperature	Minor	Nominal Fit	Optimal Temperature
	Temperature Slope 0.009921 mm/°C			Temperature Slope 0.012116 mm/°C		
1.0 Undersize	113.72	0.28	32 - 104 °C	114.17	-0.18	68 - 127 °C
Standard	113.97	0.03	57 - 129 °C	114.40	-0.41	88 - 143 °C
0.5 Oversize						
1.0 Oversize						
1.5 Oversize						
2.0 Oversize						



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