



# VIKING

Power Technologies

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## DuraTorque Power Section

500 78 64 DT

5.00" OD 7/8 Lobes 6.4 Stages

### Rotor Specification

Overall Length	226.00 in.
Contour Length	220.00 in.
Head Length	6.00 in.
Head Diameter	3.25 in.
Major Diameter	3.029 in.
Eccentric	0.170 in.
Material	17-4 PH
Weight	374 lbs.
Thread Form	Contact Factory

### Stator Specification

Overall Length	235.00 in.
Contour Length	219.00 in.
Tube O.D.	5.00 in.
Tube I.D.	4.00 in.
Cutback (Band / Non-Band)	8.00 / 8.00 in.
Stages	6.4
Material	4140 HT
Weight	520 lbs.
Thread Form	Contact Factory

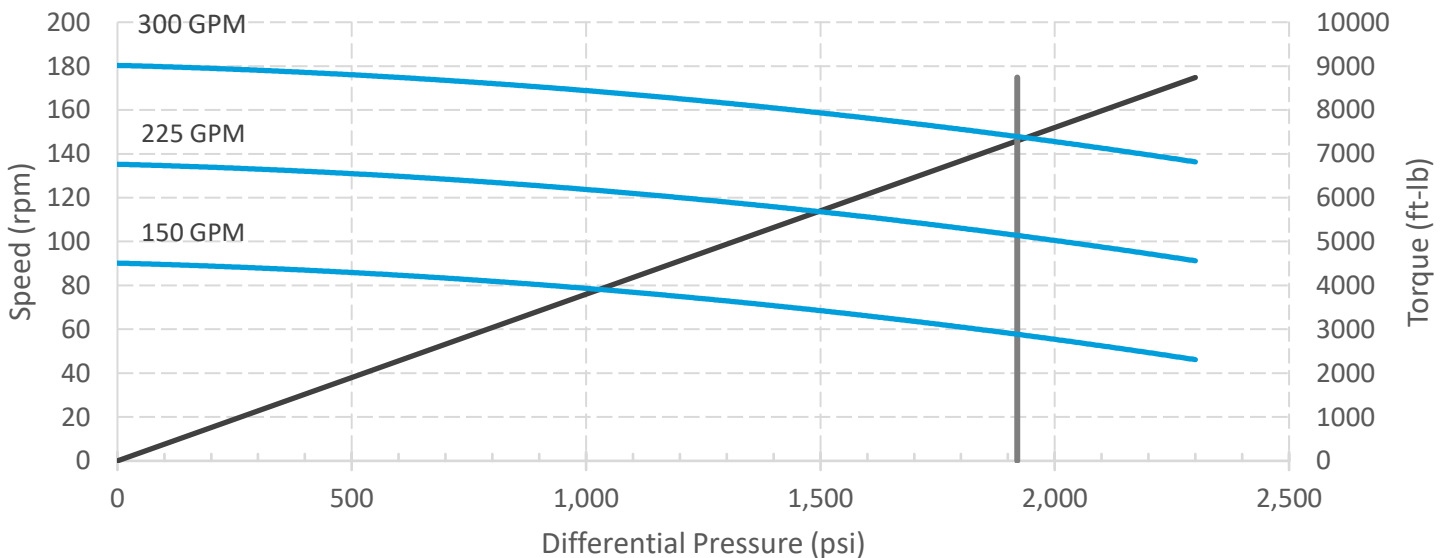
### Downhole Performance Specifications

Torque Slope	3.80 ft-lbs/psi	Max Diff. Pressure	1,920 psi	1,920 psi
Flow Range	150 - 300 gpm	Max Torque	7,300 ft-lbs	5,890 ft-lbs
Speed Range	90 - 180 rpm	Speed (Max Diff. & Flow)	148 rpm	127 rpm
Rotation	0.601 rev/gal	Max HP	205 hp	140 hp
Off-Bottom Pressure	85 psi	Stall Diff. Pressure	3,010 psi	
		Stall Torque	11,440 ft-lbs	

### Dyno Performance

### Elastomer Performance

	007			VPX		
	Minor	Nominal Fit	Optimal Temperature	Minor	Nominal Fit	Optimal Temperature
1.0 Undersize						
Standard	2.698	-0.009	180 - 280 °F	2.712	-0.023	220 - 300 °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	5740.4 mm
Contour Length	5588.0 mm
Head Length	152.4 mm
Head Diameter	82.55 mm
Major Diameter	76.94 mm
Eccentric	4.32 mm
Material	17-4 PH
Weight	170 kgs
Thread Form	Contact Factory

### Stator Specification

Overall Length	5969.0 mm
Contour Length	5562.6 mm
Tube O.D.	127.0 mm
Tube I.D.	101.6 mm
Cutback (Band / Non-Band)	203.2 / 203.2 mm
Stages	6.4
Material	4140 HT
Weight	236 kgs
Thread Form	Contact Factory

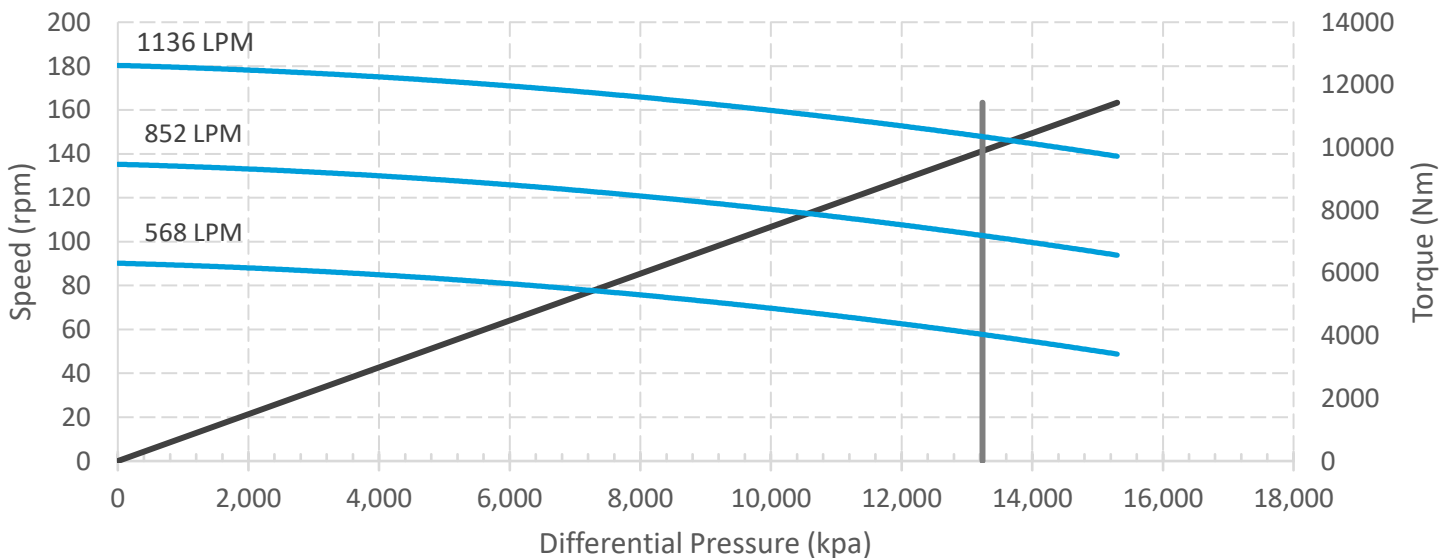
### Downhole Performance Specifications

Torque Slope	0.75 Nm/kPa	Max Diff. Pressure	13238 kPa	13238 kPa
Flow Range	568 - 1136 lpm	Max Torque	9897 Nm	7986 Nm
Speed Range	90 - 180 rpm	Speed (Max Diff. & Flow)	148 rpm	127 rpm
Rotation	0.1588 rev/liter	Max HP	153 kW	104 kW
Off-Bottom Pressure	586 kPa	Stall Diff. Pressure	20753 kPa	
		Stall Torque	15511 Nm	

### Dyno Performance

### Elastomer Performance

	007			VPX		
	Minor	Nominal Fit	Optimal Temperature	Minor	Nominal Fit	Optimal Temperature
1.0 Undersize						
Standard	68.53	-0.23	82 - 138 °C	68.88	-0.58	104 - 149 °C
0.5 Oversize						
1.0 Oversize						
1.5 Oversize						
2.0 Oversize						



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