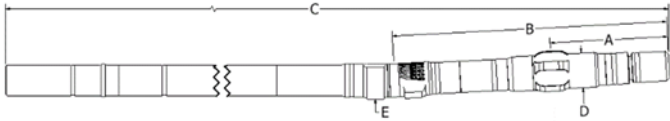


**RVEN-96 : 7/8 Lobe 3.4 Stage**



**Dimensions**

Bit to Stabilizer Center	A	50 in
Bit to Bend, ABH	B	89.5 in
Bit to Bend, Fixed	B	79.7 in
Bit to Top Sub	C	446 in
Body OD, Slick	D	9.62 in
Body OD, Stabilizer	D	10.75 in
Pad Radius, ABH	E	5.2 in
Pad Radius, Fixed	E	5.1 in
Bottom Connection	6-5/8 REG Box 7-5/8 REG Box	
Top Connection	6-5/8 REG Box	
Top Sub Float Bore	5F-6R	

**Recommended Operating Limits**

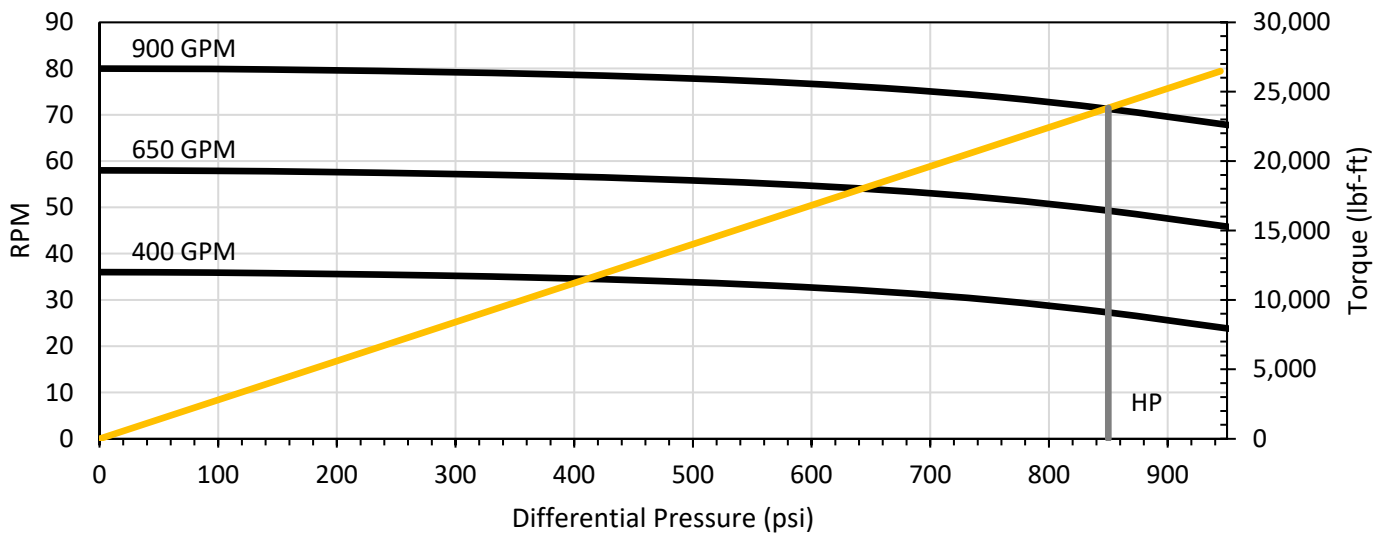
Max WOB	90,000 lbf
Max Overpull, Backream	130,000 lbf
Max Overpull, Re-Run	553,000 lbf
Max Overpull, POOH	1,172,000 lbf

**Performance Details**

**HP**

Max Diff Pressure	850 psi
Max Torque	23,830 lbf-ft
Stall Torque	35,750 lbf-ft
Rotation	0.089 rev/gal
Flow Range	400-900 gpm
Speed Range	36-80 rpm

**Theoretical Performance Curve**



Performance curves based on testing at 70°F. Actual field performance may vary with field operation conditions.

**Predicted Build Rates (Adj.) – Degrees/100ft**

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	12 1/4	14 3/4	17 1/2	12 1/4	14 3/4
<b>0.39</b>	-	-	-	3.1	4.0	5.0
<b>0.78</b>	2.4	-	-	4.9	5.8	6.8
<b>1.15</b>	4.3	-	-	6.6	7.5	8.6
<b>1.50</b>	6.2	2.7	-	8.2	9.2	10.2
<b>1.83</b>	7.9	4.4	-	9.8	10.7	11.7
<b>2.12</b>	9.3	5.9	2.1	11.1	12.0	13.1
<b>2.38*</b>	10.7	7.2	3.5	12.3	13.2	14.3
<b>2.60*</b>	11.8	8.4	4.6	13.3	14.3	15.3
<b>2.77*</b>	12.7	9.3	5.5	14.1	15.0	16.1
<b>2.90*</b>	13.4	9.9	6.1	14.7	15.6	16.7
<b>2.97*</b>	13.7	10.3	6.5	15.0	16.0	17.0
<b>3.00*</b>	13.9	10.4	6.7	15.2	16.1	17.1

\*Bend Setting not recommended for Rotary Drilling

**Predicted Build Rates (Fixed) – Degrees/100ft**

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	12 1/4	14 3/4	17 1/2	12 1/4	14 3/4
<b>0.78</b>	1.7	-	-	5.0	5.9	6.9
<b>1.15</b>	3.6	-	-	6.8	7.7	8.7
<b>1.50</b>	5.4	1.6	-	8.4	9.4	10.4
<b>1.75</b>	6.7	2.9	-	9.6	10.5	11.6
<b>1.83</b>	7.1	3.3	-	10.0	10.9	11.9
<b>2.00</b>	8.0	4.2	-	10.8	11.7	12.8
<b>2.12</b>	8.6	4.8	-	11.4	12.3	13.3
<b>2.25*</b>	9.3	5.5	1.3	12.0	12.9	13.9
<b>2.38*</b>	9.9	6.2	2.0	12.6	13.5	14.6
<b>2.50*</b>	10.6	6.8	2.6	13.2	14.1	15.1

\*Bend Setting not recommended for Rotary Drilling