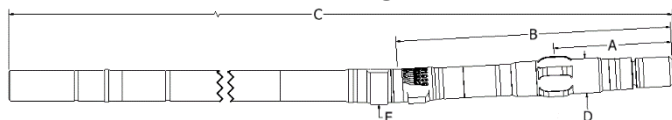


RVEN-96 : 7/8 Lobe 4.8 Stage



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	394 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	185,000 lbf
Max Overpull, Backream	267,000 lbf
Max Overpull, Re-Run	553,000 lbf
Max Overpull, POOH	1,172,000 lbf

Performance Details

HP

Max Diff Pressure	1,200 psi
Max Torque	26,720 lbf-ft
Stall Torque	40,080 lbf-ft
Rotation	0.110 rev/gal
Flow Range	600-1200 gpm
Speed Range	66-132 rpm

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

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	12 1/4	14 3/4	17 1/2	12 1/4	14 3/4	17 1/2
Deg						
0.39	-	-	-	2.9	4.1	5.5
0.78	2.0	-	-	4.9	6.1	7.5
1.15	4.1	-	-	6.8	8.0	9.4
1.50	6.1	2.3	-	8.6	9.8	11.2
1.83	8.0	4.2	-	10.3	11.5	12.9
2.12	9.6	5.8	1.7	11.8	13.0	14.4
2.38*	11.1	7.3	3.2	13.2	14.4	15.7
2.60*	12.3	8.6	4.4	14.3	15.5	16.8
2.77*	13.3	9.5	5.4	15.2	16.4	17.7
2.90*	14.0	10.3	6.1	15.8	17.0	18.4
2.97*	14.4	10.7	6.5	16.2	17.4	18.7
3.00*	14.6	10.8	6.7	16.4	17.6	18.9

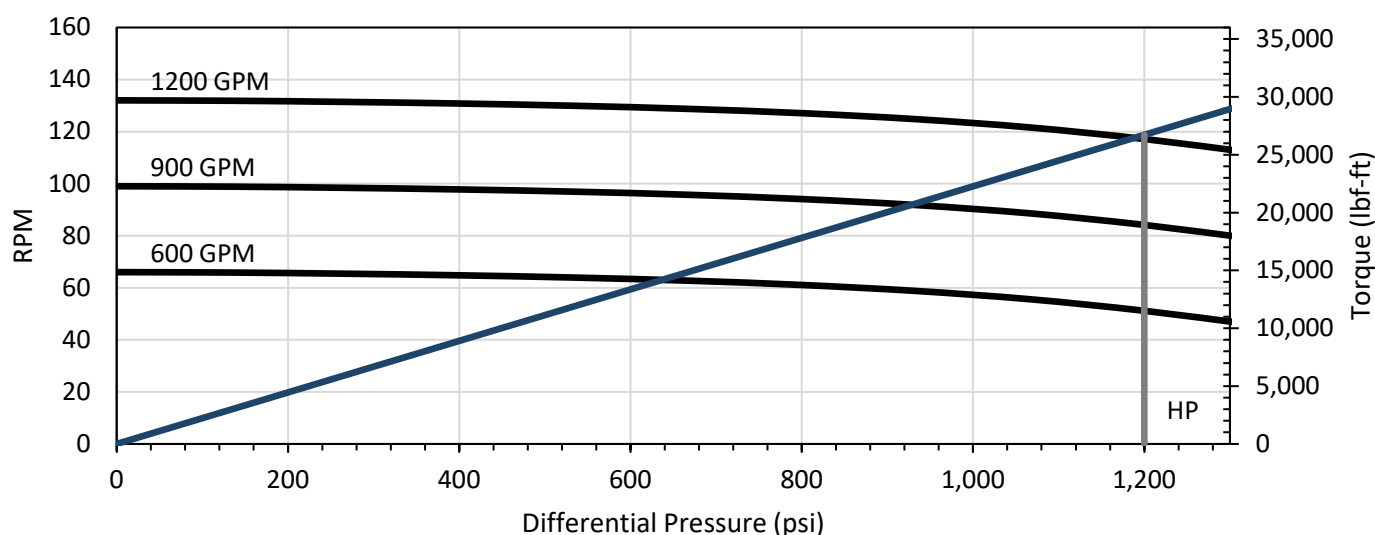
*Bend Setting not recommended for Rotary Drilling

Predicted Build Rates (Fixed) – Degrees/100ft

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	12 1/4	14 3/4	17 1/2	12 1/4	14 3/4	17 1/2
Deg						
0.78	1.2	-	-	5.1	6.3	7.6
1.15	3.4	-	-	7.0	8.2	9.6
1.50	5.4	1.1	-	8.9	10.1	11.4
1.75	6.9	2.6	-	10.2	11.4	12.8
1.83	7.3	3.1	-	10.6	11.8	13.2
2.00	8.3	4.1	-	11.5	12.7	14.1
2.12	9.0	4.8	-	12.2	13.4	14.7
2.25*	9.8	5.5	-	12.9	14.1	15.4
2.38*	10.5	6.3	1.6	13.6	14.8	16.1
2.50*	11.2	7.0	2.3	14.2	15.4	16.7

*Bend Setting not recommended for Rotary Drilling

Theoretical Performance Curve



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