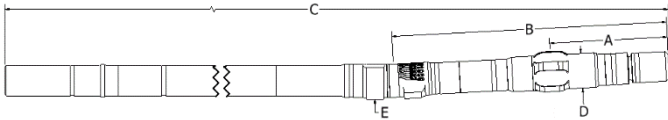


RVEN-50 : 7/8 Lobe 8.2 Stage



Dimensions

Bit to Stabilizer Center	A	11.1 in
Bit to Bend, ABH	B	52 in
Bit to Bend, Fixed	B	53 in
Bit to Top Sub	C	358 in
Body OD, Slick	D	5.0 in
Body OD, Stabilizer	D	5.7 in
Pad Radius, Fixed & ABH	E	2.75 in
3-1/2 REG Box		
3-1/2 IF Pin		
XT39		
NC35		
3-1/2 IF Box		
4 FH Box		
Top Connection		
Top Sub Float Bore		3-1/2 IF

Recommended Operating Limits

Max WOB	46,000 lbf
Max Overpull, Backream	67,000 lbf
Max Overpull, Re-Run	137,000 lbf
Max Overpull, POOH	331,000 lbf

Performance Details

HP

Max Diff Pressure	1,930 psi
Max Torque	6,880 lbf-ft
Stall Torque	10,840 lbf-ft
Rotation	0.690 rev/gal
Flow Range	150-350 gpm
Speed Range	100-240 rpm

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

Bend Setting	Slick Hole Size			Stabilized Hole Size		
Deg	6	6 1/4	6 3/4	6	6 1/4	6 3/4
0.39	1.3	-	-	1.5	1.6	1.9
0.78	3.9	3.1	1.5	3.9	3.8	4.1
1.15	6.3	5.5	3.9	6.3	6.0	6.2
1.50	8.6	7.8	6.2	8.6	8.0	8.3
1.83	10.7	10.0	8.4	10.7	10.0	10.2
2.12	12.6	11.9	10.3	12.6	11.9	11.8
2.38*	14.3	13.6	12.0	14.3	13.6	13.3
2.60*	15.8	15.0	13.4	15.8	15.0	14.6
2.77*	16.9	16.1	14.5	16.9	16.1	15.6
2.90*	17.7	17.0	15.4	17.7	17.0	16.3
2.97*	18.2	17.4	15.9	18.2	17.4	16.7
3.00*	18.4	17.6	16.1	18.4	17.6	16.9

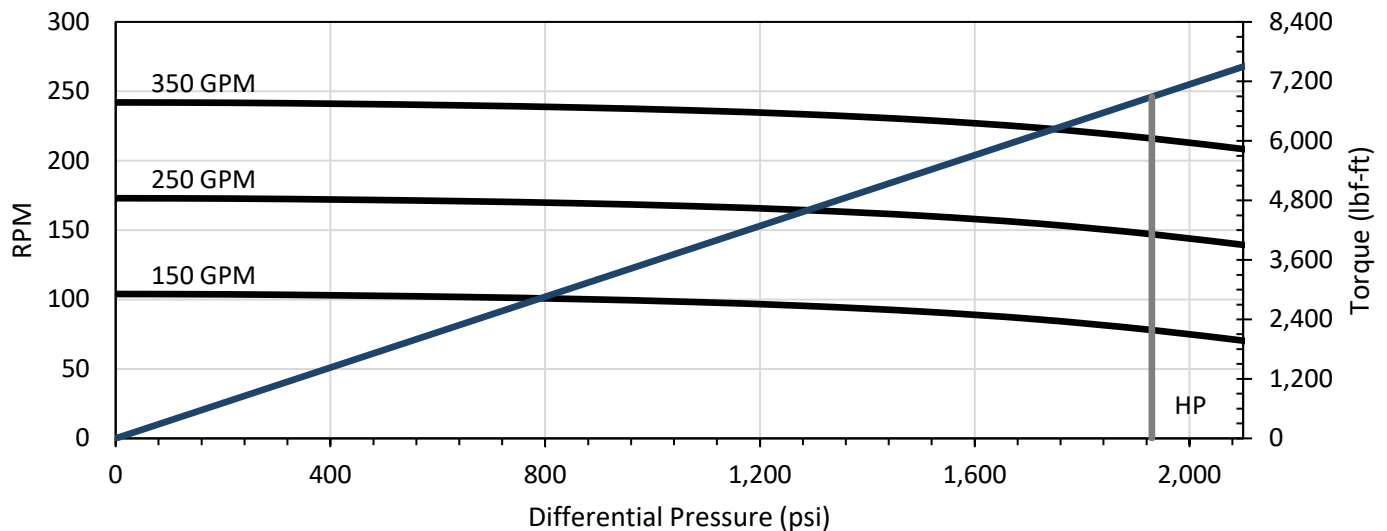
*Bend Setting not recommended for Rotary Drilling

Predicted Build Rates (Fixed) – Degrees/100ft

Bend Setting	Slick			Stabilized		
	Hole Size			Hole Size		
Deg	6	6 1/4	6 3/4	6	6 1/4	6 3/4
0.78	3.9	3.1	1.6	3.9	3.8	4.1
1.15	6.3	5.5	4.0	6.3	6.0	6.2
1.50	8.6	7.8	6.3	8.6	8.0	8.2
1.75	10.2	9.5	7.9	10.2	9.5	9.7
1.83	10.8	10.0	8.4	10.8	10.0	10.1
2.00	11.9	11.1	9.6	11.9	11.1	11.1
2.12	12.7	11.9	10.3	12.7	11.9	11.8
2.25*	13.5	12.7	11.2	13.5	12.7	12.6
2.38*	14.4	13.6	12.0	14.4	13.6	13.3
2.50*	15.1	14.4	12.8	15.1	14.4	14.0

*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.