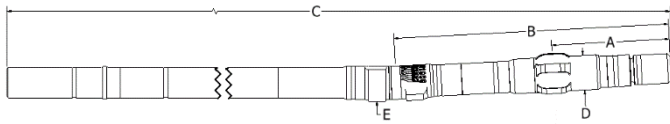


RVEN-50 : 5/6 Lobe 8.3 Stage



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	351 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	1,960 psi
Max Torque	4,980 lbf-ft
Stall Torque	7,840 lbf-ft
Rotation	1.000 rev/gal
Flow Range	100-300 gpm
Speed Range	100-300 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	3.2	1.6	3.9	3.9	4.2
1.15	6.4	5.6	4.0	6.4	6.1	6.4
1.50	8.8	8.0	6.4	8.8	8.1	8.4
1.83	11.0	10.2	8.6	11.0	10.2	10.4
2.12	12.9	12.1	10.5	12.9	12.1	12.1
2.38*	14.6	13.8	12.3	14.6	13.8	13.6
2.60*	16.1	15.3	13.7	16.1	15.3	14.9
2.77*	17.2	16.4	14.9	17.2	16.4	15.9
2.90*	18.1	17.3	15.7	18.1	17.3	16.6
2.97*	18.6	17.8	16.2	18.6	17.8	17.0
3.00*	18.8	18.0	16.4	18.8	18.0	17.2

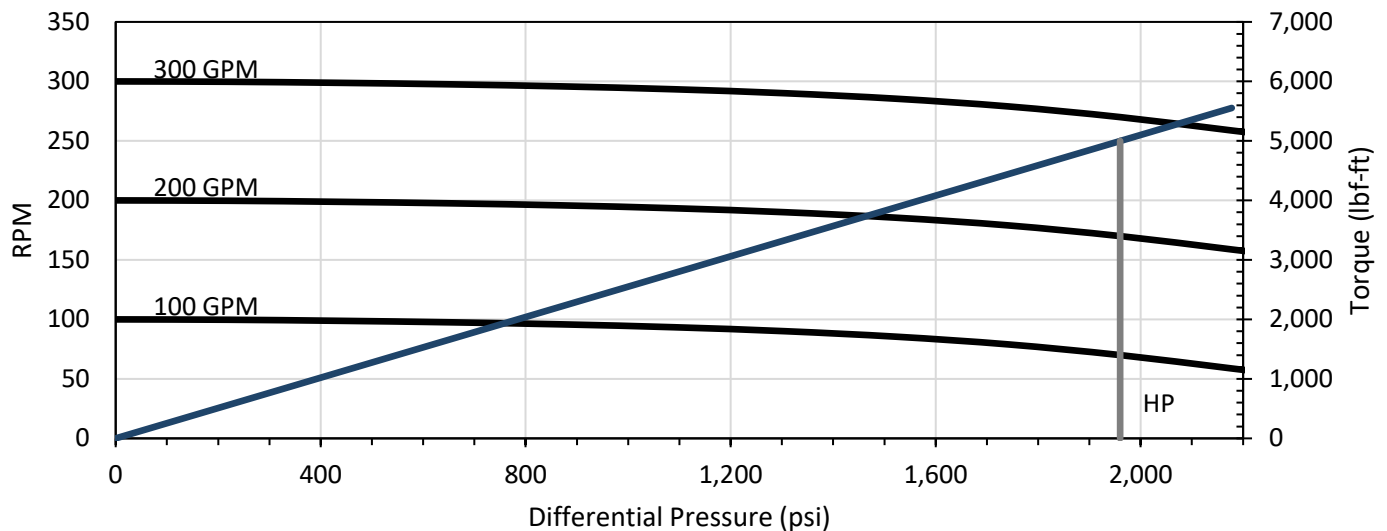
*Bend Setting not recommended for Rotary Drilling

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	4.0	3.2	1.6	4.0	3.9	4.2
1.15	6.4	5.7	4.1	6.4	6.1	6.4
1.50	8.8	8.0	6.4	8.8	8.1	8.4
1.75	10.5	9.7	8.1	10.5	9.7	9.9
1.83	11.0	10.2	8.6	11.0	10.2	10.3
2.00	12.1	11.3	9.8	12.1	11.3	11.3
2.12	12.9	12.1	10.6	12.9	12.1	12.0
2.25*	13.8	13.0	11.4	13.8	13.0	12.8
2.38*	14.7	13.9	12.3	14.7	13.9	13.6
2.50*	15.5	14.7	13.1	15.5	14.7	14.3

*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.