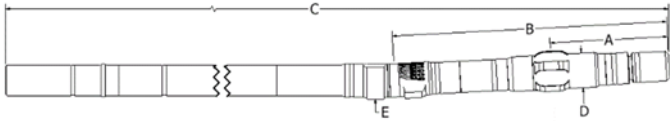


RVEN-86 : 7/8 Lobe 5.9 Stage

Dimensions

Bit to Stabilizer Center	A	NA in
Bit to Bend, Fixed	B	76 in
Bit to Top Sub	C	472 in
Body OD, Slick	D	8.62 in
Pad Radius, Fixed	E	4.25 in
Bottom Connection		4-1/2 REG Box 6-5/8 REG Box 4-1/2 IF Pin
Top Connection		4-1/2 IF Box 4-1/2 XH Box
Top Sub Float Bore		4R

Recommended Operating Limits

Max WOB	158,000 lbf
Max Overpull, Backream	228,000 lbf
Max Overpull, Re-Run	286,000 lbf
Max Overpull, POOH	847,000 lbf

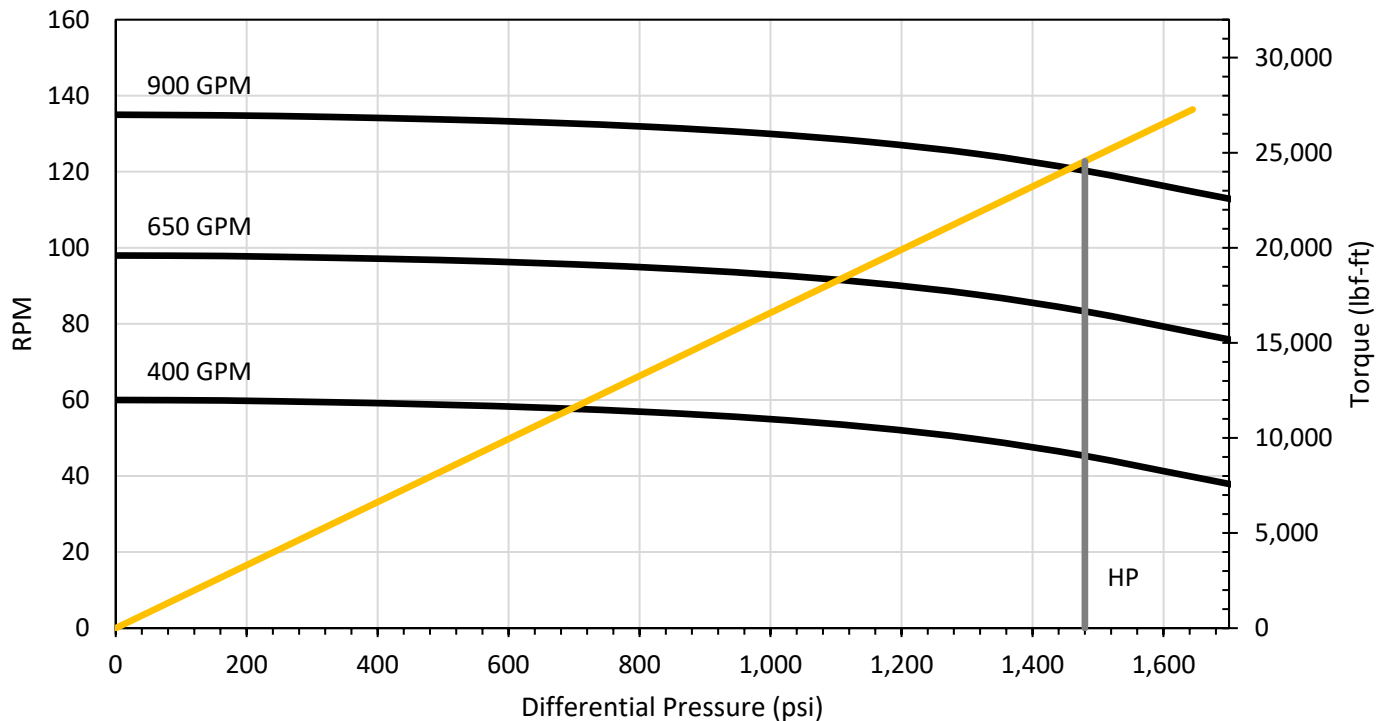
Predicted Build Rates (Fixed) – Degrees/100ft

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	9 7/8	10 5/8	12 1/4	9 7/8	10 5/8
0.78	1.9	0.7	1.8	3.3	3.5	4.0
1.15	3.7	2.6	0.0	4.9	5.1	5.6
1.50	5.4	4.3	1.8	6.4	6.6	7.1
1.75	6.7	5.5	3.0	7.5	7.7	8.2
1.83	7.1	5.9	3.4	7.8	8.0	8.5
2.00	7.9	6.7	4.2	8.5	8.8	9.3
2.12	8.5	7.3	4.8	9.0	9.3	9.8
2.25*	9.1	8.0	5.5	9.6	9.8	10.3
2.38*	9.8	8.6	6.1	10.2	10.4	10.9
2.50*	10.4	9.2	6.7	10.7	10.9	11.4

*Bend Setting not recommended for Rotary Drilling

Performance Details

Performance Details	HP
Max Diff Pressure	1,480 psi
Max Torque	24,470 lbf-ft
Stall Torque	36,700 lbf-ft
Rotation	0.150 rev/gal
Flow Range	400-900 gpm
Speed Range	60-135 rpm

Theoretical Performance Curve


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