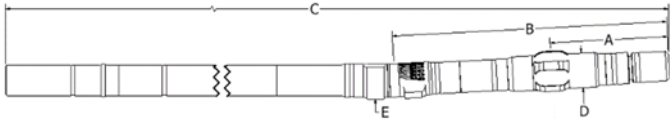


RVEN-86 : 7/8 Lobe 2.5 Stage

Dimensions

Bit to Stabilizer Center	A	NA in
Bit to Bend, Fixed	B	76 in
Bit to Top Sub	C	426 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

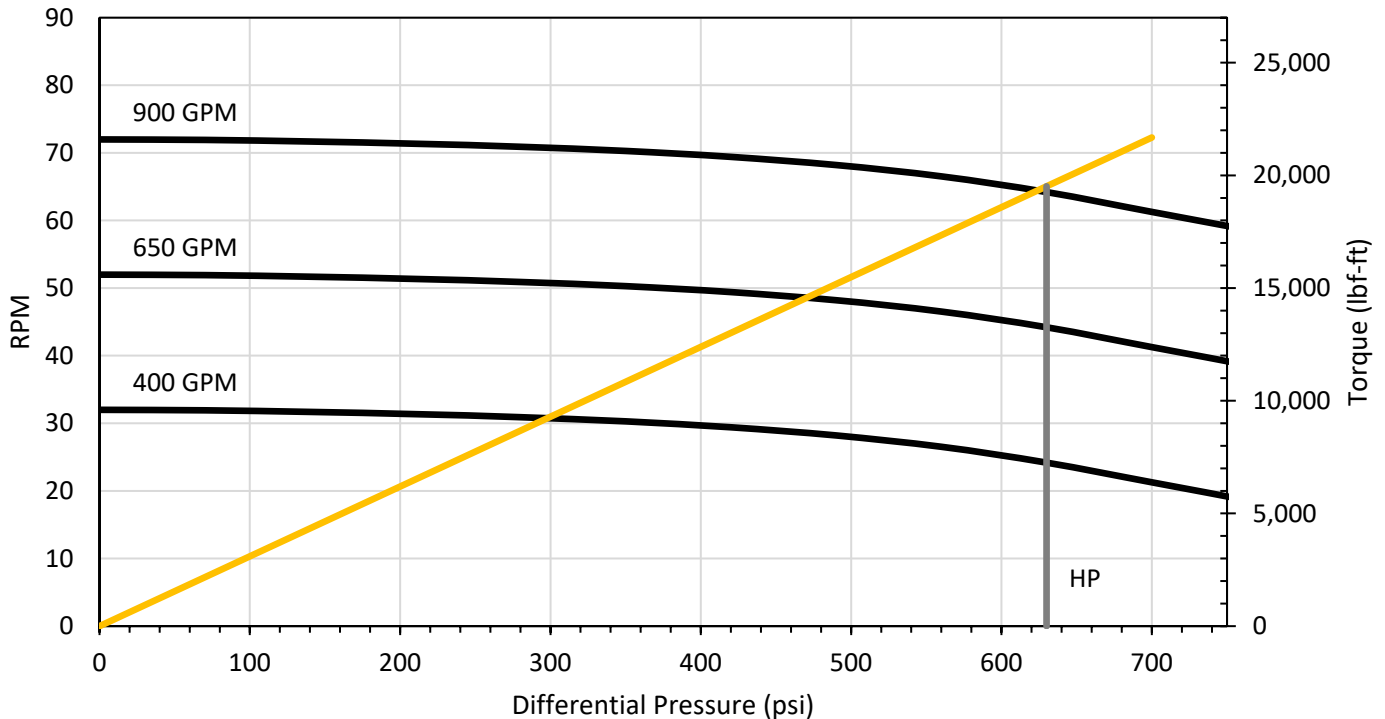
Predicted Build Rates (Fixed) – Degrees/100ft

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	2.1	0.8	2.0	3.7	3.9	4.6
1.15	4.1	2.8	0.1	5.4	5.7	6.3
1.50	6.0	4.7	2.0	7.0	7.3	7.9
1.75	7.4	6.1	3.3	8.2	8.5	9.1
1.83	7.8	6.5	3.8	8.5	8.8	9.4
2.00	8.8	7.5	4.7	9.3	9.6	10.2
2.12	9.4	8.1	5.3	9.9	10.2	10.8
2.25*	10.1	8.8	6.0	10.5	10.8	11.4
2.38*	10.8	9.5	6.8	11.1	11.4	12.0
2.50*	11.5	10.2	7.4	11.7	11.9	12.6

*Bend Setting not recommended for Rotary Drilling

Performance Details

Performance Details	HP
Max Diff Pressure	630 psi
Max Torque	19,360 lbf-ft
Stall Torque	29,040 lbf-ft
Rotation	0.080 rev/gal
Flow Range	400-900 gpm
Speed Range	32-72 rpm

Theoretical Performance Curve


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