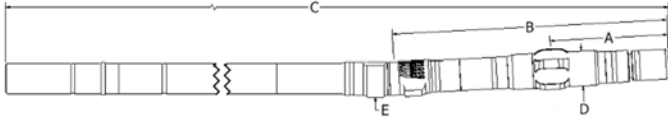


RVEN-70 : 5/6 Lobe 8.6 Stage



Dimensions

Bit to Stabilizer Center	A	27 in
Bit to Bend, Fixed	B	48 in
Bit to Top Sub	C	397 in
Body OD, Slick	D	7.0 in
Body OD, Stabilizer	D	7.5 in
Pad Radius, Fixed	E	3.75 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	49,000 lbf
Max Overpull, Backream	71,000 lbf
Max Overpull, Re-Run	325,000 lbf
Max Overpull, POOH	630,000 lbf

Predicted Build Rates (Fixed) – Degrees/100ft

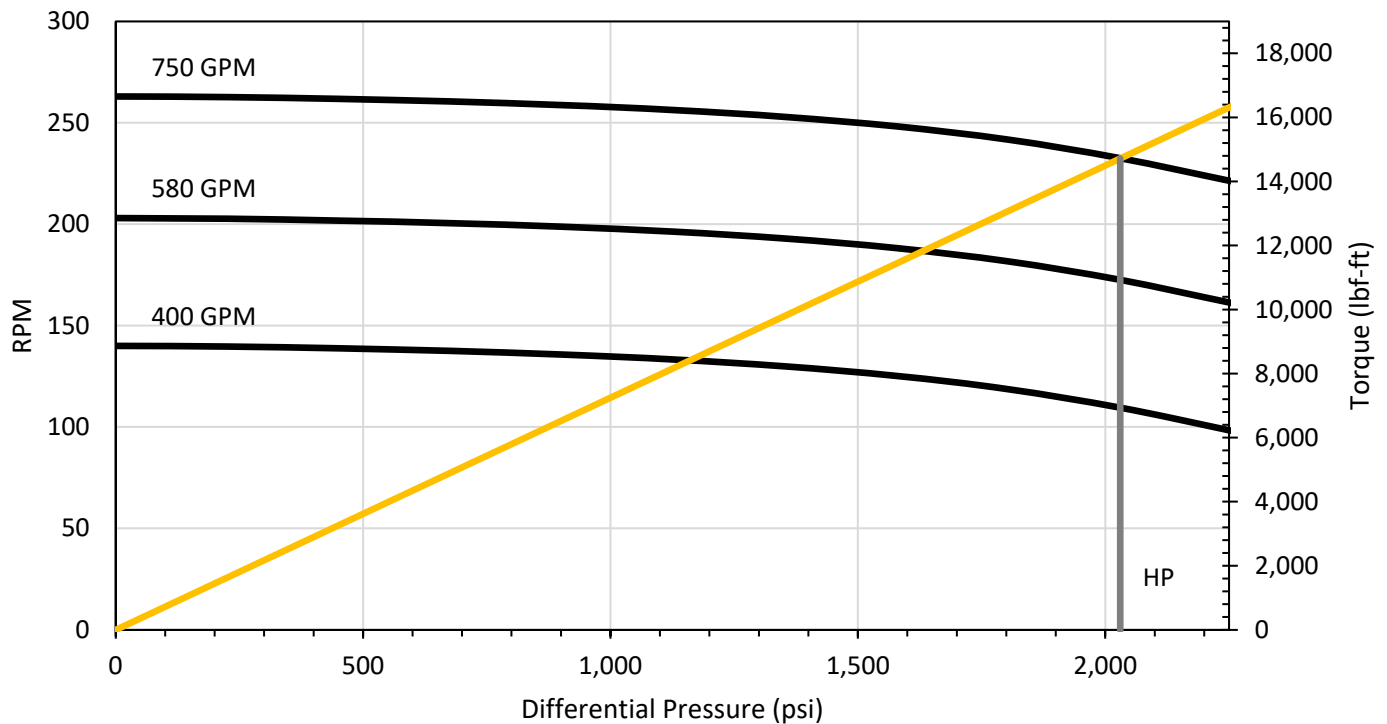
Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4
0.78	2.0	1.3	1.8	4.4	4.5	5.0
1.15	4.2	3.5	0.3	6.4	6.5	7.1
1.50	6.2	5.5	2.4	8.4	8.5	9.0
1.75	7.7	7.0	3.9	9.7	9.9	10.4
1.83	8.2	7.5	4.3	10.2	10.3	10.8
2.00	9.2	8.5	5.3	11.1	11.2	11.7
2.12	9.9	9.2	6.0	11.8	11.9	12.4
2.25*	10.6	9.9	6.8	12.5	12.6	13.1
2.38*	11.4	10.7	7.5	13.2	13.3	13.8
2.50*	12.1	11.4	8.3	13.9	14.0	14.5

*Bend Setting not recommended for Rotary Drilling

Performance Details

	HP
Max Diff Pressure	2,030 psi
Max Torque	14,660 lbf-ft
Stall Torque	23,080 lbf-ft
Rotation	0.350 rev/gal
Flow Range	400-750 gpm
Speed Range	140-260 rpm

Theoretical Performance Curve



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