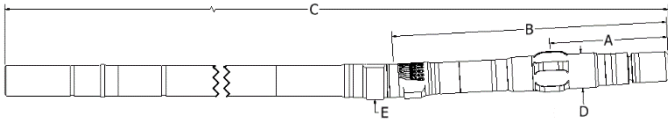


## RVEN-70 : 4/5 Lobe 7.0 Stage



### Dimensions

Bit to Stabilizer Center	A	27 in
Bit to Bend, Fixed	B	48 in
Bit to Top Sub	C	332 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	117,000 lbf
Max Overpull, Backream	169,000 lbf
Max Overpull, Re-Run	325,000 lbf
Max Overpull, POOH	630,000 lbf

## Predicted Build Rates (Fixed) – Degrees/100ft

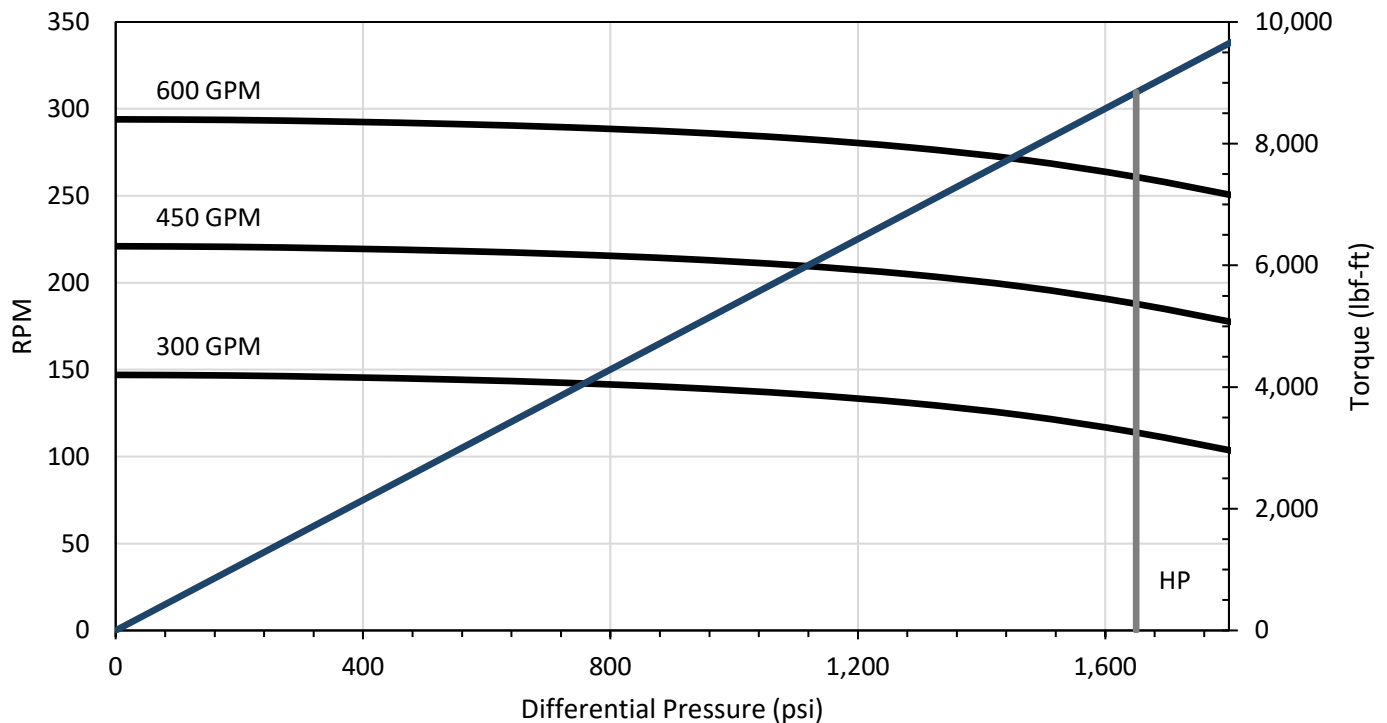
Bend Setting	Slick			Stabilized		
	Hole Size			Hole Size		
Deg	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
0.78	2.5	1.6	2.1	5.3	5.5	6.2
1.15	5.0	4.2	0.5	7.7	7.9	8.6
1.50	7.5	6.7	2.9	10.0	10.1	10.9
1.75	9.2	8.4	4.7	11.6	11.8	12.5
1.83	9.8	9.0	5.2	12.1	12.3	13.0
2.00	11.0	10.1	6.4	13.2	13.4	14.1
2.12	11.8	11.0	7.2	14.0	14.2	14.9
2.25*	12.7	11.9	8.1	14.8	15.0	15.7
2.38*	13.6	12.8	9.0	15.7	15.8	16.6
2.50*	14.5	13.6	9.9	16.5	16.6	17.3

\*Bend Setting not recommended for Rotary Drilling

### Performance Details

HP	
Max Diff Pressure	1,650 psi
Max Torque	8,820 lbf-ft
Stall Torque	13,890 lbf-ft
Rotation	0.490 rev/gal
Flow Range	300-600 gpm
Speed Range	150-300 rpm

### Theoretical Performance Curve



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