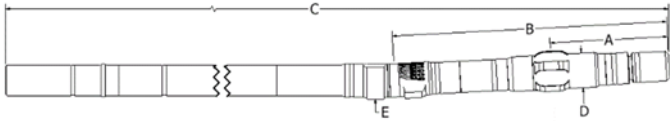


RVEN-86 : 7/8 Lobe 4.0 Stage

Dimensions

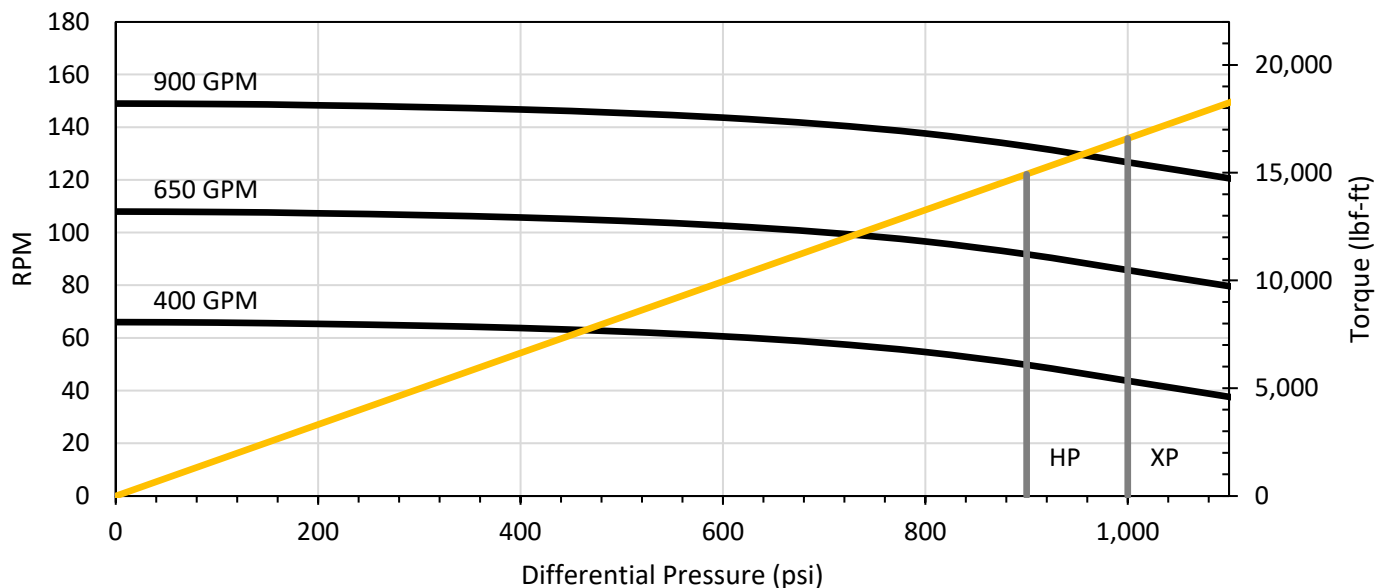
Bit to Stabilizer Center	A	NA in
Bit to Bend, Fixed	B	76 in
Bit to Bend, ABH	B	94 in
Bit to Top Sub	C	375 in
Body OD, Slick	D	8.62 in
Pad Radius, Fixed	E	4.43 in
Pad Radius, ABH	E	4.25 in
Bottom Connection	4-1/2 REG Box 6-5/8 REG Box 4-1/2 IF Pin	
Top Connection	4-1/2 IF Box 4-1/2 XH Box	
Top Sub Float 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

Performance Details

	HR	XP
Max Diff Pressure	900	1,000 psi
Max Torque	14,930	16,590 lbf-ft
Stall Torque	22,400	24,880 lbf-ft
Rotation	0.166	0.166 rev/gal
Flow Range	400-900	400-900 gpm
Speed Range	66-149	66-149 rpm

Theoretical Performance Curve


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

Predicted Build Rates (Adj.) – 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
0.39	1.3	-	-	2.0	2.4	3.2
0.78	3.7	2.5	-	3.9	4.3	5.1
1.15	6.0	4.8	2.2	6.0	6.1	6.8
1.50	8.2	7.0	4.3	8.2	7.7	8.5
1.83	10.2	9.0	6.4	10.2	9.3	10.1
2.12	12.0	10.8	8.2	12.0	10.8	11.5
2.38*	13.6	12.4	9.8	13.6	12.4	12.8
2.60*	14.9	13.7	11.1	14.9	13.7	13.8
2.77*	16.0	14.8	12.2	16.0	14.8	14.6
2.90*	16.8	15.6	13.0	16.8	15.6	15.3
2.97*	17.2	16.0	13.4	17.2	16.0	15.6
3.00*	17.4	16.2	13.6	17.4	16.2	15.7

*Bend Setting not recommended for Rotary Drilling

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	2.4	-	-	4.1	4.5	5.3
1.15	4.7	3.3	-	6.0	6.4	7.2
1.50	6.9	5.4	2.3	7.8	8.2	9.0
1.75	8.4	6.9	3.8	9.1	9.5	10.3
1.83	8.9	7.4	4.3	9.5	9.9	10.7
2.00	9.9	8.5	5.3	10.4	10.8	11.6
2.12	10.7	9.2	6.1	11.0	11.4	12.2
2.25*	11.5	10.0	6.9	11.7	12.1	12.8
2.38*	12.3	10.8	7.7	12.3	12.7	13.5
2.50*	13.0	11.6	8.4	13.0	13.3	14.1

*Bend Setting not recommended for Rotary Drilling