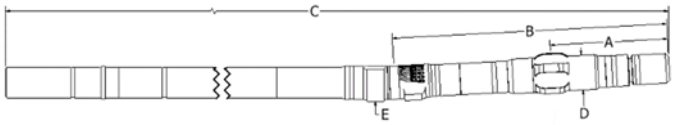
RVDF-70 : 7/8 Lobe 8.5 Stage



Dimensions

Bit to Stabilizer Center	A	30	in
Bit to Bend, ABH	B	68.4	in
Bit to Bend, Fixed	B	49	in
Bit to Top Sub	C	416	in
Body OD, Slick	D	7.25	in
Body OD, Stabilizer	D	7.25	in
Pad Radius, ABH	E	3.75	in
Pad Radius, Fixed	E	3.75	in
Bottom Connection		4-1/2 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	160,000	lbf
Max Overpull, Backream	231,000	lbf
Max Overpull, Re-Run	319,000	lbf
Max Overpull, POOH	875,000	lbf

Performance Details	HR	XP	
Max Diff Pressure	1,910	2,130	psi
Max Torque	18,710	20,790	lbf-ft
Stall Torque	28,060	31,180	lbf-ft
Rotation	0.260	0.260	rev/gal
Flow Range	400-750	400-750	gpm
Speed Range	104-195	104-195	rpm

Predicted Build Rates (Adj.) – 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	9 7/8
0.39	-	-	-	2.0	2.1	2.5
0.78	2.5	2.1	-	3.9	4.0	4.5
1.15	4.6	4.1	1.9	5.7	5.8	6.3
1.50	6.5	6.0	3.8	7.5	7.6	8.0
1.83	8.3	7.8	5.6	9.1	9.2	9.6
2.12	9.9	9.4	7.2	10.5	10.6	11.1
2.38*	11.3	10.8	8.6	11.8	11.9	12.4
2.60*	12.5	12.0	9.8	12.9	13.0	13.4
2.77*	13.5	13.0	10.8	13.7	13.8	14.3
2.90*	14.2	13.7	11.5	14.4	14.5	14.9
2.97*	14.6	14.1	11.9	14.7	14.8	15.3
3.00*	14.7	14.2	12.0	14.9	15.0	15.4

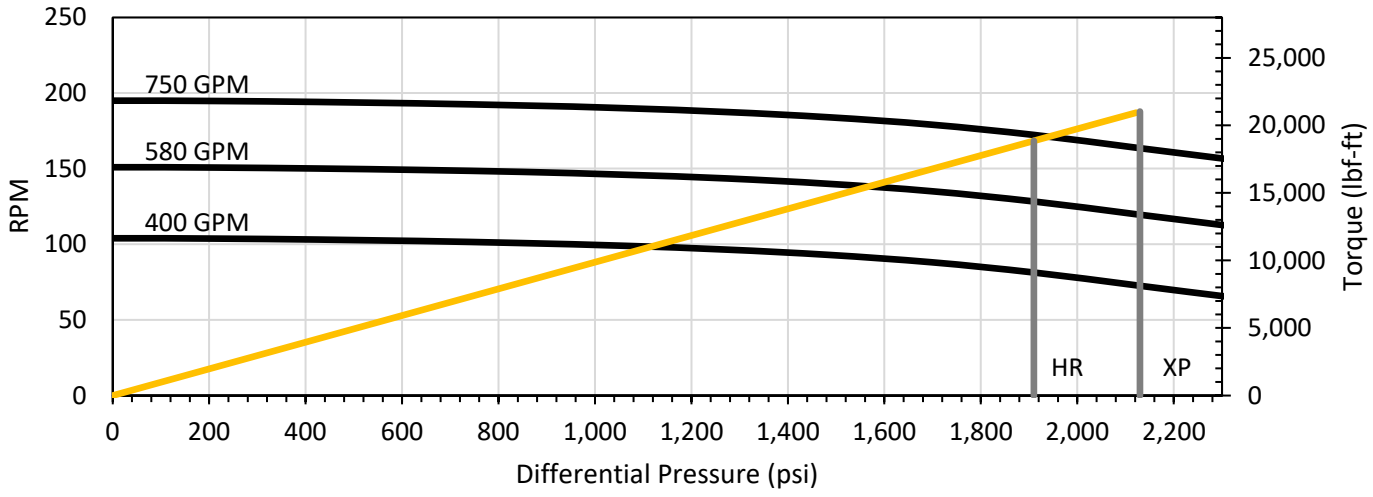
**Bend Setting not recommended for Rotary Drilling*

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	9 7/8
0.75	1.7	1.1	-	4.0	4.1	4.5
1.00	3.1	2.5	-	5.3	5.4	5.8
1.25	4.5	3.9	-	6.6	6.7	7.1
1.50	5.9	5.2	2.3	7.9	8.0	8.4
1.63	6.6	5.9	3.0	8.5	8.6	9.1
1.75	7.2	6.6	3.7	9.2	9.3	9.7
1.88	8.0	7.3	4.4	9.8	9.9	10.4
2.00	8.6	8.0	5.1	10.5	10.6	11.0
2.25*	10.0	9.3	6.4	11.8	11.9	12.3
2.38*	10.7	10.1	7.2	12.4	12.5	13.0
2.50*	11.4	10.7	7.8	13.1	13.2	13.6

**Bend Setting not recommended for Rotary Drilling*

Theoretical Performance Curve



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