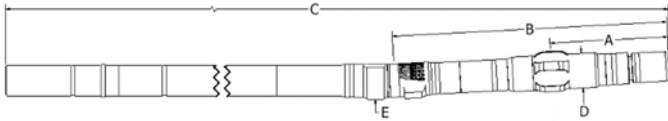


### RVDF-50 : 6/7 Lobe 8.0 Stage



#### Dimensions

Bit to Stabilizer Center	A	30 in
Bit to Bend, ABH	B	52.8 in
Bit to Bend, Fixed	B	42.3 in
Bit to Top Sub	C	359 in
Body OD, Slick	D	5.06 in
Body OD, Stabilizer	D	5.06 in
Pad Radius, ABH	E	2.66 in
Pad Radius, Fixed	E	2.67 in
Bottom Connection	3-1/2 REG Box 3-1/2 IF Pin 3-1/2 Athens Pin	
Top Connection	3-1/2 REG Box 3-1/2 IF Box 3-1/2 XH Box	
Top Sub Float Bore	2F-3R, 3F, 3-1/2 IF	

#### Recommended Operating Limits

Max WOB	60,000 lbf
Max Overpull, Backream	87,000 lbf
Max Overpull, Re-Run	125,000 lbf
Max Overpull, POOH	421,000 lbf

Performance Details	HR	XP
Max Diff Pressure	1,800	2,000 psi
Max Torque	5,720	6,350 lbf-ft
Stall Torque	8,580	9,530 lbf-ft
Rotation	0.810	0.810 rev/gal
Flow Range	150-350	150-350 gpm
Speed Range	122-284	122-284 rpm

#### Predicted Build Rates (Adj.) – Degrees/100ft

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	6	6 1/4	6 3/4	6	6 1/4
0.39	-	-	-	2.0	2.2	2.5
0.78	3.4	2.6	1.0	4.4	4.5	4.9
1.15	5.9	5.1	3.5	6.7	6.8	7.1
1.50	8.3	7.5	5.9	8.8	9.0	9.3
1.83	10.6	9.8	8.2	10.8	11.0	11.3
2.12	12.6	11.8	10.2	12.6	12.8	13.1
2.38*	14.3	13.5	11.9	14.3	14.3	14.6
2.60*	15.8	15.0	13.4	15.8	15.7	16.0
2.77*	17.0	16.2	14.6	17.0	16.7	17.0
2.90*	17.9	17.1	15.5	17.9	17.5	17.8
2.97*	18.4	17.6	16.0	18.4	18.0	18.3
3.00*	18.6	17.8	16.2	18.6	18.1	18.4

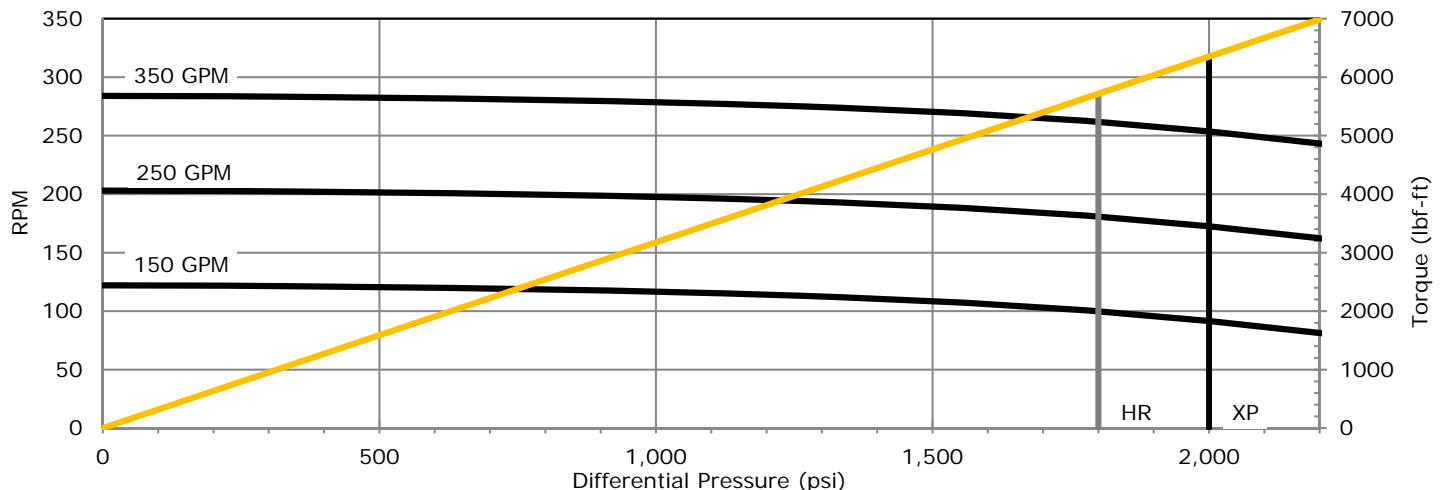
\*Bend Setting not recommended for Rotary Drilling

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

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	Deg	6	6 1/4	6 3/4	6	6 1/4
0.75	2.8	1.9	-	4.4	4.5	4.8
1.15	5.6	4.6	2.6	6.9	7.1	7.4
1.50	8.0	7.0	5.0	9.1	9.3	9.6
1.75	9.7	8.7	6.8	10.7	10.9	11.2
1.83	10.2	9.3	7.3	11.2	11.4	11.7
2.00	11.4	10.4	8.5	12.3	12.5	12.8
2.12	12.2	11.2	9.3	13.1	13.2	13.5
2.25*	13.1	12.1	10.2	13.9	14.1	14.4
2.38*	14.0	13.0	11.1	14.7	14.9	15.2
2.50*	14.8	13.8	11.9	15.5	15.6	15.9

\*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.