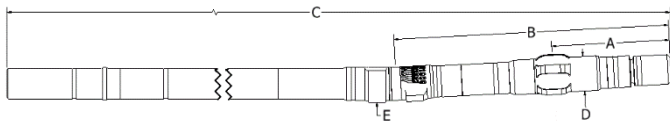


RVDF-50 : 7/8 Lobe 8.4 Stage



Dimensions

Bit to Stabilizer Center	A	30 in (0.8 m)
Bit to Bend, ABH	B	52.8 in (1.3 m)
Bit to Bend, Fixed	B	42.3 in (1.1 m)
Bit to Top Sub	C	363 in (9.2 m)
Body OD, Slick	D	5.06 in (129 mm)
Body OD, Stabilizer	D	5.06 in (129 mm)
Pad Radius, ABH	E	2.66 in (68 mm)
Pad Radius, Fixed	E	2.67 in (68 mm)
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 (26,700 daN)
Max Overpull, Backream	87,000 lbf (38,700 daN)
Max Overpull, Re-Run	125,000 lbf (55,600 daN)
Max Overpull, POOH	421,000 lbf (187,300 daN)

Performance Details

HR

Max Diff Pressure	1,890 psi (13,000 kPa)
Max Torque	6,860 lbf-ft (9,300 N-m)
Stall Torque	10,290 lbf-ft (14,000 N-m)
Rotation	0.700 rev/gal (0.18 rev/L)
Flow Range	150-350 gpm (570-1320 lpm)
Speed Range	105-250 rpm

Predicted Build Rates (Adj.) – Degrees/100ft (30m)

Bend Setting	Slick Hole Size			Stabilized Hole Size		
Deg	6	6 1/4	6 3/4	6	6 1/4	6 3/4
0.39	-	-	-	2.0	2.1	2.4
0.78	3.4	2.6	1.0	4.3	4.5	4.8
1.15	5.9	5.1	3.5	6.6	6.7	7.0
1.50	8.2	7.4	5.8	8.7	8.9	9.2
1.83	10.5	9.7	8.1	10.7	10.9	11.2
2.12	12.4	11.6	10.0	12.5	12.6	12.9
2.38*	14.2	13.4	11.8	14.2	14.2	14.5
2.60*	15.7	14.9	13.3	15.7	15.5	15.8
2.77*	16.8	16.0	14.4	16.8	16.6	16.9
2.90*	17.7	16.9	15.3	17.7	17.3	17.6
2.97*	18.2	17.4	15.8	18.2	17.8	18.1
3.00*	18.4	17.6	16.0	18.4	18.0	18.2

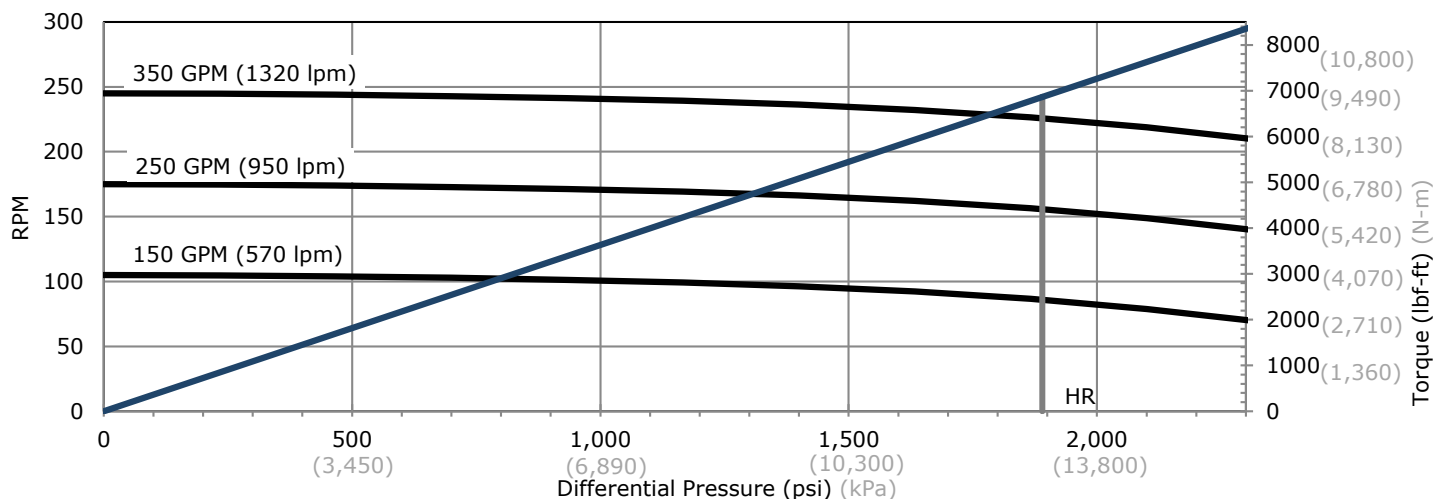
*Bend Setting not recommended for Rotary Drilling

Predicted Build Rates (Fixed) – Degrees/100ft (30m)

Bend Setting	Slick Hole Size			Stabilized Hole Size		
Deg	6	6 1/4	6 3/4	6	6 1/4	6 3/4
0.75	2.8	1.8	-	4.3	4.5	4.8
1.15	5.5	4.5	2.6	6.8	7.0	7.3
1.50	7.9	6.9	5.0	9.0	9.2	9.5
1.75	9.6	8.6	6.7	10.6	10.8	11.1
1.83	10.1	9.1	7.2	11.1	11.3	11.6
2.00	11.3	10.3	8.4	12.2	12.3	12.6
2.12	12.1	11.1	9.2	12.9	13.1	13.4
2.25*	12.9	12.0	10.1	13.7	13.9	14.2
2.38*	13.8	12.9	10.9	14.6	14.7	15.0
2.50*	14.6	13.7	11.7	15.3	15.5	15.8

*Bend Setting not recommended for Rotary Drilling

Theoretical Performance Curve



Performance curves based on testing at 70°F (21°C). Actual field performance may vary with field operation conditions.