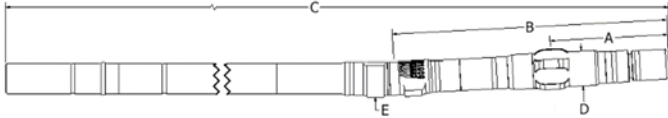


RVMA-71 : 7/8 Lobe 5.0 Stage



Dimensions

Bit to Stabilizer Center	A	27 in
Bit to Bend, ABH	B	63 in
Bit to Bend, Fixed	B	52 in
Bit to Top Sub	C	311 in
Body OD, Slick	D	7.13 in
Body OD, Stabilizer	D	7.88 in
Pad Radius, ABH	E	4.11 in
Pad Radius, Fixed	E	3.90 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 XT-39 Box	
Top Sub Float Bore	4R	

Recommended Operating Limits

Max WOB	109,000 lbf
Max Overpull, Backream	157,000 lbf
Max Overpull, Re-Run	252,000 lbf
Max Overpull, POOH	780,000 lbf

Performance Details	HR	XP
Max Diff Pressure	1,130	1,240 psi
Max Torque	10,460	11,510 lbf-ft
Stall Torque	15,690	17,260 lbf-ft
Rotation	0.288	0.288 rev/gal
Flow Range	300-600	300-600 gpm
Speed Range	86-180	86-180 rpm

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

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
Deg						
0.39	3.0	2.2	1.2	3.0	2.9	3.9
0.78	6.1	5.4	1.9	6.1	5.6	6.6
1.15	9.1	8.3	4.9	9.1	8.3	9.1
1.50	11.9	11.1	7.7	11.9	11.1	11.5
1.83	14.5	13.8	10.4	14.5	13.8	13.8
2.12	16.9	16.1	12.7	16.9	16.1	15.8
2.38*	18.9	18.2	14.8	18.9	18.2	17.5
2.60*	20.7	19.9	16.5	20.7	19.9	19.1
2.77*	22.1	21.3	17.9	22.1	21.3	20.2
2.90*	23.1	22.3	18.9	23.1	22.3	21.1
2.97*	23.7	22.9	19.5	23.7	22.9	21.6
3.00*	23.9	23.1	19.7	23.9	23.1	21.8

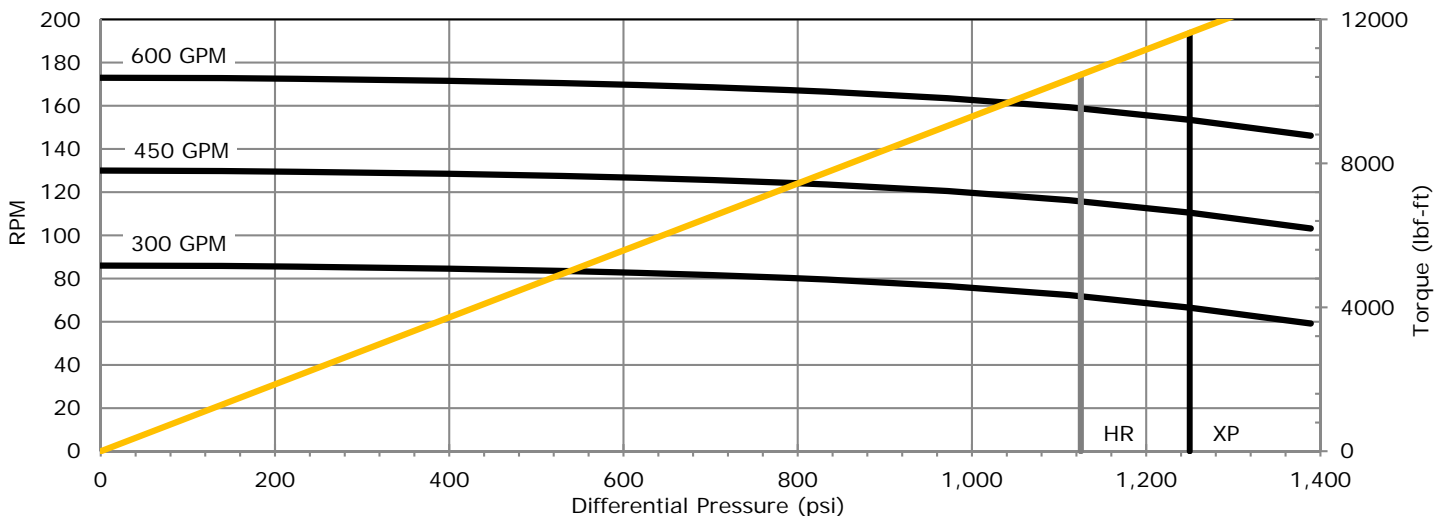
*Bend Setting not recommended for Rotary Drilling

Predicted Build Rates (Fixed) – Degrees/100ft

Bend Setting	Slick Hole Size			Stabilized Hole Size		
	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
Deg						
0.78	4.0	3.2	-	5.6	5.9	6.8
1.15	7.0	6.1	2.1	8.3	8.5	9.5
1.50	9.8	8.9	4.9	10.8	11.0	12.0
1.75	11.8	10.9	6.9	12.6	12.8	13.8
1.83	12.5	11.6	7.6	13.2	13.4	14.4
2.00	13.8	12.9	8.9	14.4	14.6	15.6
2.12	14.8	13.9	9.9	15.3	15.5	16.5
2.25*	15.8	14.9	10.9	16.2	16.4	17.4
2.38*	16.9	16.0	12.0	17.2	17.4	18.4
2.50*	17.8	16.9	12.9	18.0	18.2	19.2

*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.