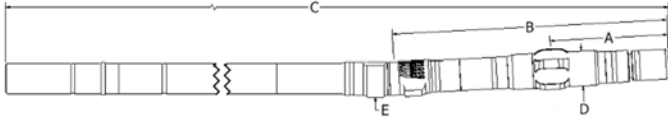


RVMA-71 : 4/5 Lobe 7.0 Stage



Dimensions

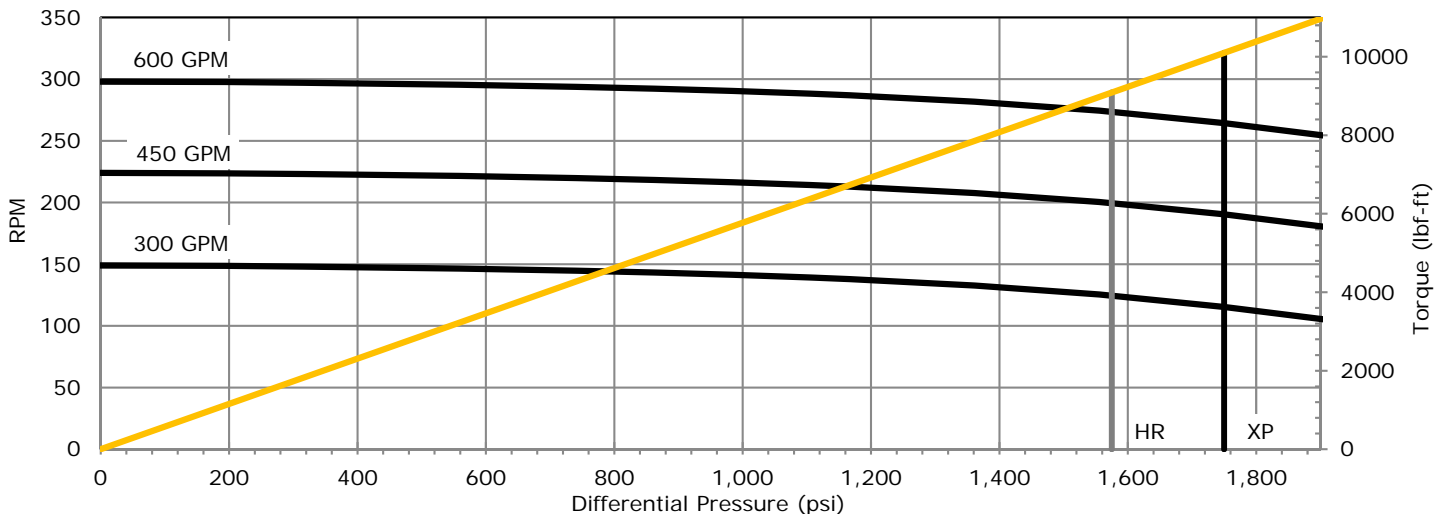
Bit to Stabilizer Center	A	27 in
Bit to Bend, ABH	B	63 in
Bit to Bend, Fixed	B	52 in
Bit to Top Sub	C	326 in
Body OD, Slick	D	7.13 in
Body OD, Stabilizer	D	7.88 in
Pad Radius, ABH	E	4.11 in
Pad Radius, Fixed	E	3.90 in
Bottom Connection	4-1/2 REG Box 6-5/8 REG Box 4-1/2 IF Pin	
Top Connection	4-1/2 IF 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	1,580	1,740 psi
Max Torque	9,090	10,000 lbf-ft
Stall Torque	13,630	15,000 lbf-ft
Rotation	0.497	0.497 rev/gal
Flow Range	300-600	300-600 gpm
Speed Range	149-300	149-300 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		
	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
Deg	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
0.39	2.8	2.1	1.2	2.8	2.7	3.6
0.78	5.8	5.1	1.8	5.8	5.3	6.2
1.15	8.6	7.9	4.6	8.6	7.9	8.6
1.50	11.3	10.5	7.3	11.3	10.5	10.9
1.83	13.8	13.1	9.8	13.8	13.1	13.1
2.12	16.0	15.3	12.0	16.0	15.3	15.0
2.38*	18.0	17.2	14.0	18.0	17.2	16.7
2.60*	19.6	18.9	15.7	19.6	18.9	18.2
2.77*	20.9	20.2	17.0	20.9	20.2	19.3
2.90*	21.9	21.2	17.9	21.9	21.2	20.1
2.97*	22.5	21.7	18.5	22.5	21.7	20.6
3.00*	22.7	22.0	18.7	22.7	22.0	20.8

*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	8 1/2	8 3/4	9 7/8	8 1/2	8 3/4	9 7/8
0.78	3.8	3.0	-	5.3	5.5	6.4
1.15	6.6	5.8	2.0	7.9	8.1	9.0
1.50	9.3	8.5	4.6	10.3	10.5	11.4
1.75	11.2	10.4	6.6	12.0	12.2	13.1
1.83	11.8	11.0	7.2	12.6	12.8	13.7
2.00	13.1	12.3	8.5	13.8	13.9	14.8
2.12	14.0	13.2	9.4	14.6	14.8	15.7
2.25*	15.0	14.2	10.4	15.5	15.7	16.6
2.38*	16.0	15.2	11.3	16.4	16.6	17.4
2.50*	16.9	16.1	12.3	17.2	17.4	18.3

*Bend Setting not recommended for Rotary Drilling