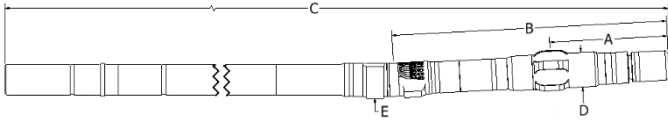


RVEN-70 : 7/8 Lobe 6.8 Stage



Dimensions

Bit to Stabilizer Center	A	27 in (0.7 m)
Bit to Bend, ABH	B	66.3 in (1.7 m)
Bit to Bend, Fixed	B	50 in (1.3 m)
Bit to Top Sub	C	382 in (9.7 m)
Body OD, Slick	D	7.0 in (178 mm)
Body OD, Stabilizer	D	7.5 in (191 mm)
Pad Radius, ABH	E	3.625 in (92 mm)
Pad Radius, Fixed	E	3.75 in (95 mm)
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	
Top Sub Float Bore	4R	

Recommended Operating Limits

Max WOB	117,000 lbf (52,000 daN)
Max Overpull, Backream	169,000 lbf (75,200 daN)
Max Overpull, Re-Run	325,000 lbf (144,600 daN)
Max Overpull, POOH	630,000 lbf (280,000 daN)

Performance Details

HP

Max Diff Pressure	1,600 psi (11,000 kPa)
Max Torque	13,600 lbf-ft (18,400 N-m)
Stall Torque	21,400 lbf-ft (29,000 N-m)
Rotation	0.300 rev/gal (0.08 rev/L)
Flow Range	300-700 gpm (1140-2650 lpm)
Speed Range	90-210 rpm

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

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	3.6	3.1	0.7	5.8	5.9	6.4
0.78	6.0	5.4	3.0	7.9	8.0	8.6
1.15	8.1	7.6	5.2	9.9	10.0	10.6
1.50	10.2	9.7	7.2	11.8	11.9	12.5
1.83	12.2	11.6	9.2	13.6	13.7	14.3
2.12	13.9	13.4	10.9	15.2	15.3	15.9
2.38*	15.4	14.9	12.5	16.6	16.7	17.3
2.60*	16.7	16.2	13.8	17.8	17.9	18.5
2.77*	17.7	17.2	14.8	18.7	18.8	19.4
2.90*	18.5	18.0	15.5	19.4	19.5	20.1
2.97*	18.9	18.4	15.9	19.8	19.9	20.5
3.00*	19.1	18.6	16.1	20.0	20.1	20.6

*Bend Setting not recommended for Rotary Drilling

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

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
0.78	5.8	5.2	2.2	8.1	8.2	8.8
1.15	8.0	7.3	4.3	10.2	10.3	10.9
1.50	10.0	9.3	6.3	12.2	12.3	12.9
1.75	11.4	10.8	7.8	13.7	13.8	14.3
1.83	11.9	11.2	8.2	14.1	14.2	14.8
2.00	12.9	12.2	9.2	15.1	15.2	15.8
2.12	13.6	12.9	9.9	15.8	15.9	16.4
2.25*	14.3	13.6	10.7	16.5	16.6	17.2
2.38*	15.1	14.4	11.4	17.2	17.4	17.9
2.50*	15.8	15.1	12.1	17.9	18.1	18.6

*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.

