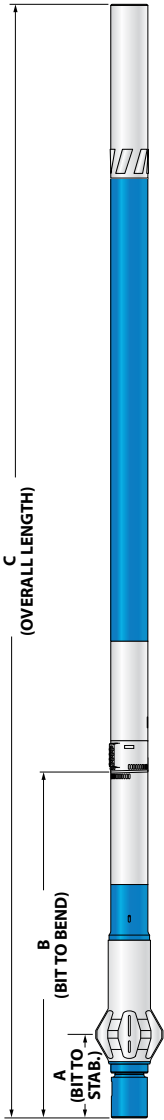


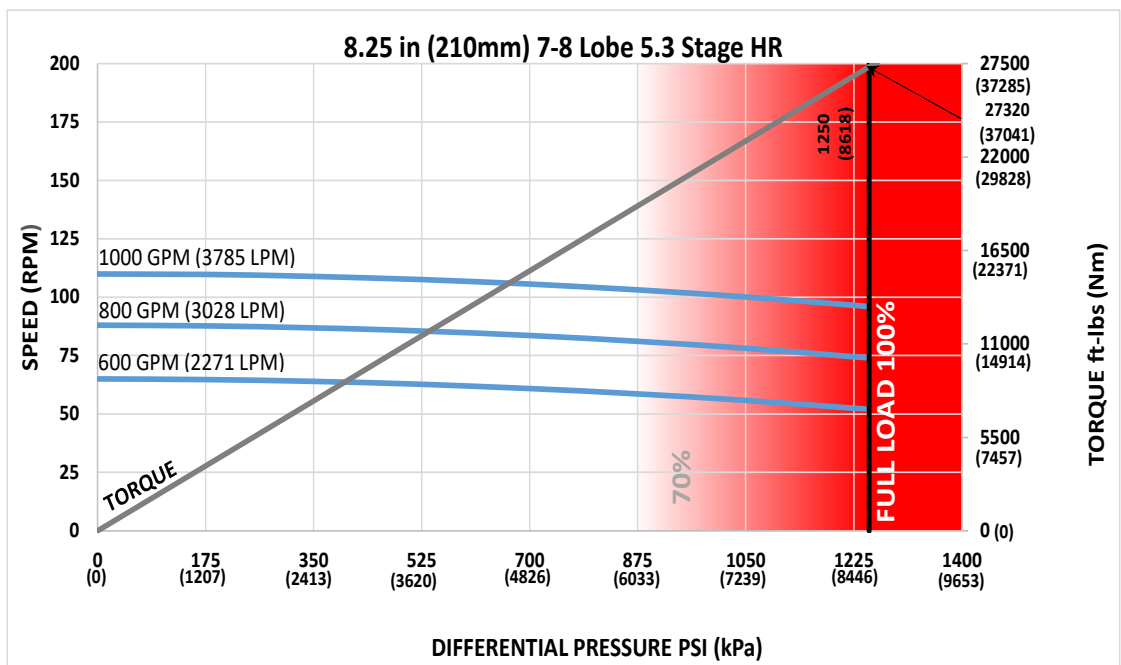
# 8 in (203mm) Bottom w/ 8.25 in (210mm) 7-8 Lobe 5.3 Stage HR SERIES 1



<b>Bit Size Range</b>	9-7/8 - 12-1/4 in	251 - 311 mm
<b>Bit Box Connection</b>	6-5/8 REGULAR	
<b>Dynamic Bearing Load On/Off Bottom</b>	162510 lbf	72300 daN
<b>Static Bearing Load On/Off Bottom</b>	573485 lbf	255100 daN
<b>Max. Overpull (For Re-run)</b>	554100 lbf	246500 daN
<b>Absolute Overpull</b>	923500 lbf	410800 daN
<b>Adjustable Makeup Torque</b>	40000 ft-lbs	54200 Nm
<b>Stab/Thread Protector Makeup Torque</b>	30000 ft-lbs	40700 Nm
<b>A = Bit to Stabilizer (Centre)</b>	22.9 in	0.58 m
<b>B = Bit to Bend</b>	<b>Adjustable</b>	86.7 in / 2.2 m
	<b>Fixed</b>	72.3 in / 1.84 m
<b>C = Overall (With Dump Sub)</b>	452.7 in	11.5 m
<b>Weight</b>	5021 lb	2277 kg

<b>Lobe Configuration</b>	7-8 Lobe 5.3 Stage HR	
<b>Displacement (No Load)</b>	0.11 rev/gal	0.03 rev/l
<b>Max. Differential (Full Load)</b>	1250 psi	8618 kPa
<b>Max. Torque</b>	27320 ft-lbs	37041 Nm
<b>Max. Power</b>	499 HP	372 kW

Flow Rate		Speed
GPM	LPM	RPM
600	2271	52 - 65
800	3028	74 - 88
1000	3785	96 - 110



Possible damage may occur when motor is run higher than 70% of Maximum Differential Pressure.

### ADJUSTABLE BUILD RATE

Hole Size	SLICK				STABILIZED			
	9-7/8 (251mm)	10-5/8 (270mm)	11-1/2 (292mm)	12-1/4 (311mm)	9-7/8 (251mm)	10-5/8 (270mm)	11-1/2 (292mm)	12-1/4 (311mm)
<b>BEND ANGLE</b>	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
0.39	-	-	-	-	1.8	2.1	-	-
0.78	1.9	0.7	-	-	3.6	3.9	4.2	4.5
1.15	3.9	2.7	1.3	0.1	5.3	5.6	6.0	6.3
1.50	5.9	4.7	3.3	2.0	6.9	7.2	7.6	7.9
1.83	7.7	6.5	5.1	3.9	8.5	8.8	9.1	9.4
2.12	9.3	8.1	6.7	5.5	9.8	10.1	10.5	10.8
2.38	10.8	9.6	8.2	6.9	11.0	11.3	11.7	12.0
2.60	12.0	10.8	9.4	8.2	12.1	12.4	12.7	13.0
2.77	12.9	11.7	10.3	9.1	12.9	13.2	13.5	13.8
2.90	13.7	12.5	11.0	9.8	13.7	13.8	14.1	14.4
2.97	14.1	12.8	11.4	10.2	14.1	14.1	14.5	14.8
3.00	14.2	13.0	11.6	10.4	14.2	14.2	14.6	14.9

Note: Stabilizers are 1/8" undergauge

### FBH BUILD RATE

Hole Size	SLICK				STABILIZED			
	9-7/8 (251mm)	10-5/8 (270mm)	11-1/2 (292mm)	12-1/4 (311mm)	9-7/8 (251mm)	10-5/8 (270mm)	11-1/2 (292mm)	12-1/4 (311mm)
<b>BEND ANGLE</b>	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
1.25	4.1	2.7	1.0	-	6.0	6.3	6.7	7.0
1.50	5.5	4.0	2.4	1.0	7.2	7.5	7.9	8.2
1.75	6.9	5.4	3.8	2.4	8.5	8.8	9.1	9.4
2.00	8.2	6.8	5.2	3.8	9.7	10.0	10.3	10.6
2.25	9.6	8.2	6.6	5.2	10.9	11.2	11.5	11.8
2.50	11.0	9.6	8.0	6.5	12.1	12.4	12.8	13.1

This information is for reference only. Build rates are theoretical calculations using three-point geometry and new motor builds. Actual rate predictions will depend on formation characteristics, bit profiles, and WOB.

For custom motor configurations and build rates, please contact your DYNOMAX office.

**FISHING DIMENSIONS**

USC - IMPERIAL (Lengths, Diameters = in)  
SI - METRIC (Lengths = m, Diameters = mm)



EXTERNALS		USC	SI
END CAP	A	5.1	0.13
BEARING HOUSING	B	7.1	0.18
PISTON HOUSING	C	14.0	0.36
STABILIZER SHOULDER	D	--	--
KICK/FIXED HOUSING	E	27.6	0.70
BIT TO BEND (ADJUSTABLE)	F1	40.0	1.02
ADAPTOR HOUSING (ADJUSTABLE)	G1	45.0	1.14
BIT TO BEND (FIXED)	F2	33.5	0.85
ADAPTOR HOUSING (FIXED)	G2	42.7	1.08
STATOR START	H	57.3	1.46
STATOR END	I	137.3	3.49
OVERALL LENGTH	J	157.4	4.00
BIT BOX Ø	K	2.88	73.2
END CAP/BEARING HOUSING Ø	L	2.88	73.2
THREAD PROTECTOR Ø	M	--	--
PISTON HOUSING Ø	N	2.88	73.2
KICK/FIXED HOUSING Ø	O	2.88	73.2
PAD (ADJUSTABLE) Ø	P1	3.10	78.7
PAD (FIXED) Ø	P2	3.13	79.5
ADJUSTABLE MANDREL PIN Ø	Q	1.71	43.4
ADAPTOR HOUSING Ø	R	2.88	73.2
ADAPTOR PIN Ø	S	2.04	51.7
STATOR TUBE OUTER Ø	T	2.88	73.2
STATOR TUBE INNER Ø	U	2.38	60.5
ROTOR CATCH SUB BLADE Ø	V	3.13	79.4



INTERNALS		USC	SI
BIT BOX	A	8.8	0.22
THRUST SHOULDER	B	24.1	0.61
WASHPIPE START	C	29.4	0.75
HEX END	D	40.3	1.02
BEARING ASSEMBLY ADAPTOR	E	59.2	1.50
BAA CAP	F	75.0	1.91
ROTOR ADAPTOR CAP	G	105.2	2.67
ROTOR START	H	114.0	2.90
ROTOR END	I	406.0	10.31
CATCH STEM	J	422.0	10.72
BIT BOX Ø	K	7.75	196.9
MANDREL Ø	L	6.25	158.8
THRUST Ø	M	4.75	120.7
WASHPIPE LARGE Ø	N	5.75	146.1
WASHPIPE SMALL Ø	O	5.00	127.0
BEARING ASSEMBLY ADAPTOR Ø	P	5.81	147.6
DRIVESHAFT Ø	Q	3.38	85.9
ROTOR ADAPTOR Ø	R	5.81	147.6
ROTOR MAJOR DIA. Ø	S	5.51	140.0
ROTOR CATCH STEM Ø	T	4.38	111.3

This information is for reference only. Assemblies are displayed in an "Adjustable Configuration"

Rotor Catch and Rotor Catch Float Sub Lengths may vary based on configuration, and use of Dump Subs or combination Rotor Catch and Float Housings.

If any additional information is required, please contact your local DYNOMAX office.