

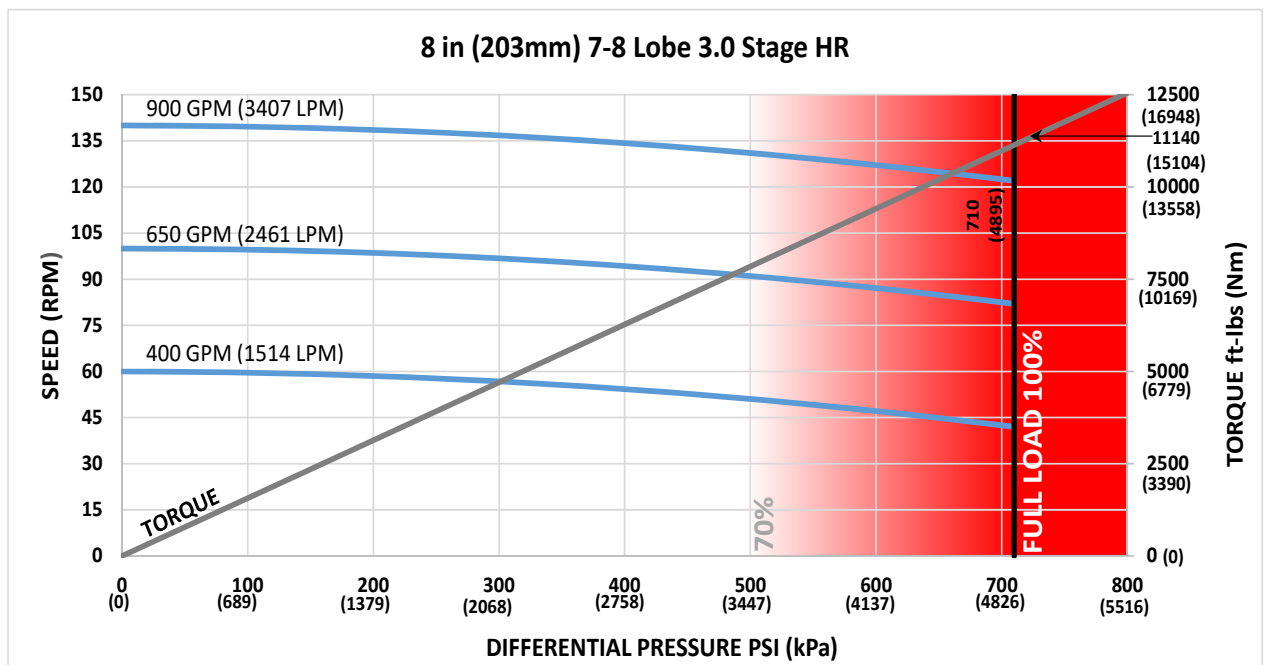
9.62 in (244mm) Bottom w/ 8 in (203mm) 7-8 Lobe 3.0 Stage HR SERIES 1



Bit Size Range	12-1/4 - 17-1/2 in	311 - 445 mm
Bit Box Connection	6-5/8 or 7-5/8 REGULAR	
Dynamic Bearing Load On/Off Bottom	240975 lbf	107200 daN
Static Bearing Load On/Off Bottom	852600 lbf	379300 daN
Max. Overpull (For Re-run)	741100 lbf	329700 daN
Absolute Overpull	1235100 lbf	549400 daN
Adjustable Makeup Torque	60000 ft-lbs	81300 Nm
Stab/Thread Protector Makeup Torque	38000 ft-lbs	51500 Nm
A = Bit to Stabilizer (Centre)	20.1 in	0.51 m
B = Bit to Bend	Adjustable 87.4 in Fixed 87.3 in	2.22 m
C = Overall (With Dump Sub)	317.1 in	8.05 m
Weight	4069 lb	1846 kg

Lobe Configuration	7-8 Lobe 3.0 Stage HR	
Displacement (No Load)	0.16 rev/gal	0.04 rev/l
Max. Differential (Full Load)	710 psi	4895 kPa
Max. Torque	11140 ft-lbs	15104 Nm
Max. Power	259 HP	193 kW

Flow Rate		Speed
GPM	LPM	RPM
400	1514	42 - 60
650	2461	82 - 100
900	3407	122 - 140



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

ADJUSTABLE BUILD RATE

Hole Size	SLICK				STABILIZED			
	12-1/4 (311mm)	14 (356mm)	16 (406mm)	17-1/2 (445mm)	12-1/4 (311mm)	14 (356mm)	16 (406mm)	17-1/2 (445mm)
BEND ANGLE	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
0.39	0.6	-	-	-	4.9	6.4	8.2	-
0.78	3.7	-	-	-	7.2	8.8	10.5	11.8
1.15	6.7	2.7	-	-	9.4	11.0	12.7	14.0
1.50	9.5	5.6	1.1	-	11.5	13.1	14.8	16.1
1.83	12.2	8.2	3.7	0.4	13.5	15.0	16.8	18.1
2.12	14.5	10.6	6.1	2.7	15.3	16.8	18.5	19.8
2.38	16.6	12.6	8.1	4.8	16.8	18.3	20.1	21.4
2.60	18.3	14.4	9.9	6.6	18.3	19.7	21.4	22.7
2.77	19.7	15.8	11.3	7.9	19.7	20.7	22.4	23.7
2.90	20.8	16.8	12.3	9.0	20.8	21.5	23.2	24.5
2.97	21.3	17.4	12.9	9.5	21.3	21.9	23.6	24.9
3.00	21.6	17.6	13.1	9.8	21.6	22.1	23.8	25.1

Note: Stabilizers are 1/8" undergauge

FBH BUILD RATE

Hole Size	SLICK				STABILIZED			
	12-1/4 (311mm)	14 (356mm)	16 (406mm)	17-1/2 (445mm)	12-1/4 (311mm)	14 (356mm)	16 (406mm)	17-1/2 (445mm)
BEND ANGLE	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
1.25	8.1	4.2	-	-	10.1	11.6	13.3	14.6
1.50	10.1	6.2	1.7	-	11.5	13.1	14.8	16.1
1.75	12.1	8.2	3.7	0.3	13.0	14.6	16.3	17.6
2.00	14.1	10.2	5.7	2.3	14.5	16.1	17.8	19.1
2.25	16.1	12.2	7.7	4.3	16.1	17.6	19.3	20.6
2.50	18.1	14.2	9.7	6.3	18.1	19.1	20.8	22.1

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	10.8	0.27
BEARING HOUSING	B	21.3	0.54
PISTON HOUSING	C	32.1	0.82
STABILIZER SHOULDER	D	44.6	1.13
KICK/FIXED HOUSING	E	59.5	1.51
BIT TO BEND (ADJUSTABLE)	F1	87.4	2.22
ADAPTOR HOUSING (ADJUSTABLE)	G1	95.5	2.43
BIT TO BEND (FIXED)	F2	87.3	2.22
ADAPTOR HOUSING (FIXED)	G2	95.4	2.42
STATOR START	H	119.6	3.04
STATOR END	I	279.6	7.10
OVERALL LENGTH	J	317.1	8.05
BIT BOX Ø	K	9.00	228.6
END CAP/BEARING HOUSING Ø	L	9.62	244.3
THREAD PROTECTOR Ø	M	10.75	273.1
PISTON HOUSING Ø	N	9.62	244.3
KICK/FIXED HOUSING Ø	O	9.62	244.3
PAD (ADJUSTABLE) Ø	P1	10.13	257.3
PAD (FIXED) Ø	P2	10.13	257.3
ADJUSTABLE MANDREL PIN Ø	Q	5.60	142.2
ADAPTOR HOUSING Ø	R	9.62	244.3
ADAPTOR PIN Ø	S	5.65	143.5
STATOR TUBE OUTER Ø	T	8.00	203.2
STATOR TUBE INNER Ø	U	6.25	158.8
ROTOR CATCH SUB BLADE Ø	V	8.25	209.6
ROTOR CATCH SUB Ø	W	8.00	203.2



INTERNALS		USC	SI
BIT BOX	A	10.0	0.25
THRUST SHOULDER	B	25.1	0.64
WASHPIPE START	C	30.8	0.78
HEX END	D	39.7	1.01
BEARING ASSEMBLY ADAPTOR	E	57.3	1.46
BAA CAP	F	75.8	1.93
ROTOR ADAPTOR CAP	G	109.3	2.78
ROTOR START	H	119.1	3.03
ROTOR END	I	272.1	6.91
CATCH STEM	J	288.1	7.32
BIT BOX Ø	K	9.00	228.6
MANDREL Ø	L	7.75	196.9
THRUST Ø	M	5.53	140.5
WASHPIPE LARGE Ø	N	7.00	177.8
WASHPIPE SMALL Ø	O	5.75	146.1
BEARING ASSEMBLY ADAPTOR Ø	P	7.10	180.3
DRIVESHAFT Ø	Q	3.89	98.8
ROTOR ADAPTOR Ø	R	7.10	180.3
ROTOR MAJOR DIA. Ø	S	5.19	131.8
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.