

# 7 in (178mm) Bottom w/ 6.75 in (171mm) 7-8 Lobe 3.0 Stage MUD LUBE

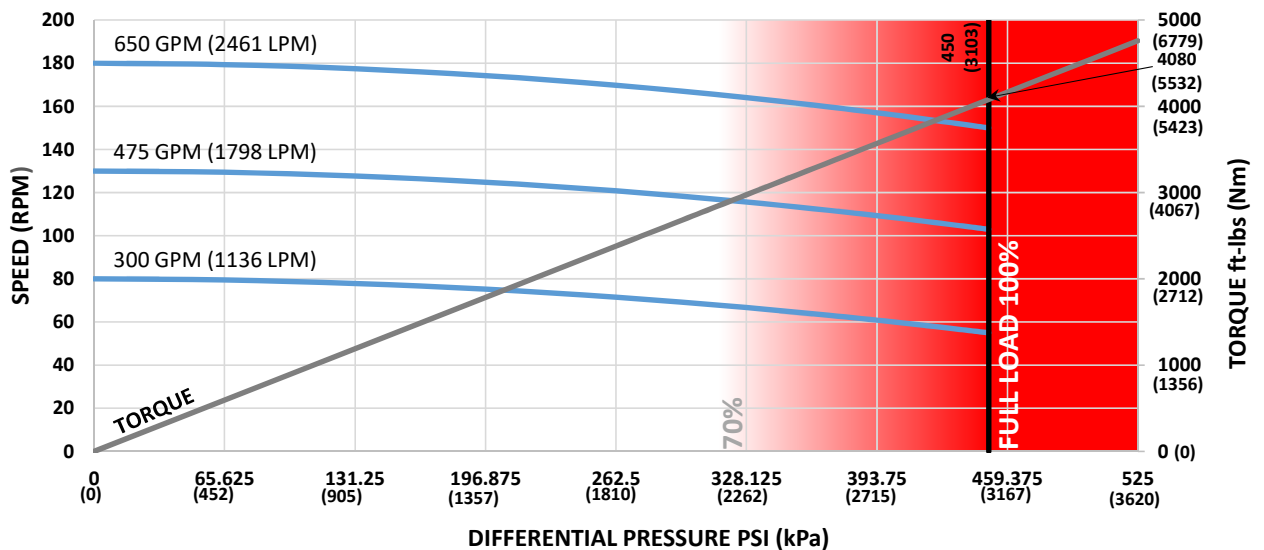


<b>Bit Size Range</b>	8-1/2 - 9-7/8 in	216 - 251 mm
<b>Bit Box Connection</b>	4-1/2 REGULAR	
<b>Dynamic Bearing Load On/Off Bottom</b>	100357 lbf	44600 daN
<b>Static Bearing Load On/Off Bottom</b>	355612 lbf	158200 daN
<b>Max. Overpull (For Re-run)</b>	432800 lbf	192500 daN
<b>Absolute Overpull</b>	721400 lbf	320900 daN
<b>Adjustable Makeup Torque</b>	25000 ft-lbs	33900 Nm
<b>Stab/Thread Protector Makeup Torque</b>	12000 ft-lbs	16300 Nm
<b>A = Bit to Stabilizer (Centre)</b>	20.36 in	0.52 m
<b>B = Bit to Bend</b>	Adjustable 65.8 in	1.67 m
	Fixed 54.6 in	1.39 m
<b>C = Overall (With Dump Sub)</b>	253.8 in	6.45 m
<b>Weight</b>	2018 lb	915 kg

<b>Lobe Configuration</b>	7-8 Lobe 3.0 Stage	
<b>Displacement (No Load)</b>	0.27 rev/gal	0.07 rev/l
<b>Max. Differential (Full Load)</b>	450 psi	3103 kPa
<b>Max. Torque</b>	4080 ft-lbs	5532 Nm
<b>Max. Power</b>	117 HP	87 kW

Flow Rate		Speed
GPM	LPM	RPM
300	1136	55 - 80
475	1798	103 - 130
650	2461	150 - 180

## 6.5 & 6.75 in (165 & 171mm) 7-8 Lobe 3.0 Stage



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

### ADJUSTABLE BUILD RATE

Hole Size	SLICK				STABILIZED			
	8-1/2 (216mm)	8-3/4 (222mm)	9-7/8 (251mm)	9-7/8 (251mm)	8-1/2 (216mm)	8-3/4 (222mm)	9-7/8 (251mm)	9-7/8 (251mm)
<b>BEND ANGLE</b>	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
0.39	1.8	0.8	-	-	3.9	4.2	5.8	5.8
0.78	5.8	4.8	0.5	0.5	7.0	7.3	8.9	8.9
1.15	9.5	8.6	4.3	4.3	9.9	10.3	11.9	11.9
1.50	13.1	12.1	7.9	7.9	13.1	13.0	14.6	14.6
1.83	16.5	15.5	11.2	11.2	16.5	15.6	17.2	17.2
2.12	19.4	18.5	14.2	14.2	19.4	18.5	19.5	19.5
2.38	22.0	21.1	16.8	16.8	22.0	21.1	21.6	21.6
2.60	24.3	23.3	19.1	19.1	24.3	23.3	23.3	23.3
2.77	26.0	25.1	20.8	20.8	26.0	25.1	24.7	24.7
2.90	27.3	26.4	22.1	22.1	27.3	26.4	25.7	25.7
2.97	28.1	27.1	22.8	22.8	28.1	27.1	26.3	26.3
3.00	28.4	27.4	23.1	23.1	28.4	27.4	26.5	26.5

Note: Stabilizers are 1/8" undergauge

### FBH BUILD RATE

Hole Size	SLICK				STABILIZED			
	8-1/2 (216mm)	8-3/4 (222mm)	9-7/8 (251mm)	9-7/8 (251mm)	8-1/2 (216mm)	8-3/4 (222mm)	9-7/8 (251mm)	9-7/8 (251mm)
<b>BEND ANGLE</b>	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
1.25	9.9	8.8	3.8	3.8	11.4	11.7	13.4	13.4
1.50	12.4	11.3	6.3	6.3	13.5	13.9	15.5	15.5
1.75	15.0	13.9	8.9	8.9	15.6	16.0	17.6	17.6
2.00	17.5	16.4	11.4	11.4	17.7	18.1	19.7	19.7
2.25	20.1	19.0	14.0	14.0	20.1	20.2	21.8	21.8
2.50	22.6	21.5	16.5	16.5	22.6	22.3	23.9	23.9

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
LOWER HSG FLOW REST.	A	14.2	0.36
BEARING HOUSING START	B	19.0	0.48
STABILIZER SHOULDER	C	35.9	0.91
BEARING HOUSING END	D	43.2	1.10
BIT TO BEND (ADJUSTABLE)	E1	65.8	1.67
ADAPTOR HOUSING (ADJUSTABLE)	F1	71.3	1.81
BIT TO BEND (FIXED)	E2	54.6	1.39
ADAPTOR HSG (FIXED)	F2	64.7	1.64
STATOR START	G	95.8	2.43
STATOR END	H	220.8	5.61
OVERALL LENGTH	I	253.8	6.45
BIT BOX $\phi$	J	7.00	177.8
LOWER HOUSING FLOW RESTRICTOR $\phi$	K	7.15	181.6
THREAD PROTECTOR $\phi$	L	7.85	199.4
BEARING HOUSING $\phi$	M	7.15	181.6
KICK OR FIXED HSG $\phi$	N	7.15	181.6
KICK PAD $\phi$ (ADJUSTABLE)	O1	7.38	187.5
KICK PAD $\phi$ (FIXED)	O2	7.38	187.5
ADJ MANDREL PIN $\phi$	P	4.22	107.2
ADAPTOR HOUSING $\phi$	Q	7.15	181.6
ADAPTOR HOUSING PIN $\phi$	R	4.8	121.9
STATOR TUBE OUTER $\phi$	S	6.75	171.5
STATOR TUBE INNER $\phi$	T	5.50	139.7
ROTOR CATCH SUB BLADE $\phi$	U	7.00	177.8
ROTOR CATCH $\phi$	V	6.81	173.0



INTERNALS		USC	SI
BIT BOX	A	9.0	0.23
LOWER SHAFT FLOW RESTRICTOR DIAMETER	B	23.9	0.61
COMPRESSION NUT	C	33.9	0.86
BEARING ASSEMBLY ADAPTOR	D	41.1	1.04
BAA ADAPTOR CAP	E	56.8	1.44
ROTOR ADAPTOR CAP	F	88.6	2.25
ROTOR START	G	97.2	2.47
ROTOR	H	215.7	5.48
CATCH STEM	I	233.2	5.92
BIT BOX $\phi$	J	7.00	177.8
FLOW RESTRICTOR $\phi$	K	5.50	139.7
MANDREL $\phi$	L	4.36	110.7
COMPRESSION NUT $\phi$	M	5.30	134.6
BEARING ASSEMBLY ADAPTOR $\phi$	N	5.00	127.0
DRIVESHAFT $\phi$	O	3.00	76.2
ROTOR ADAPTOR $\phi$	P	5.00	127.0
ROTOR MAJOR $\phi$	Q	4.52	114.8
ROTOR CATCH HEAD $\phi$	R	3.19	81.0

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.