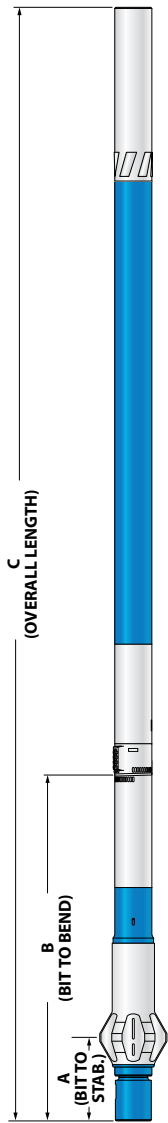


# 4.75 in (121mm) Bottom w/ 5 in (127mm) 2-3 Lobe 9.0 Stage HR MUD LUBE

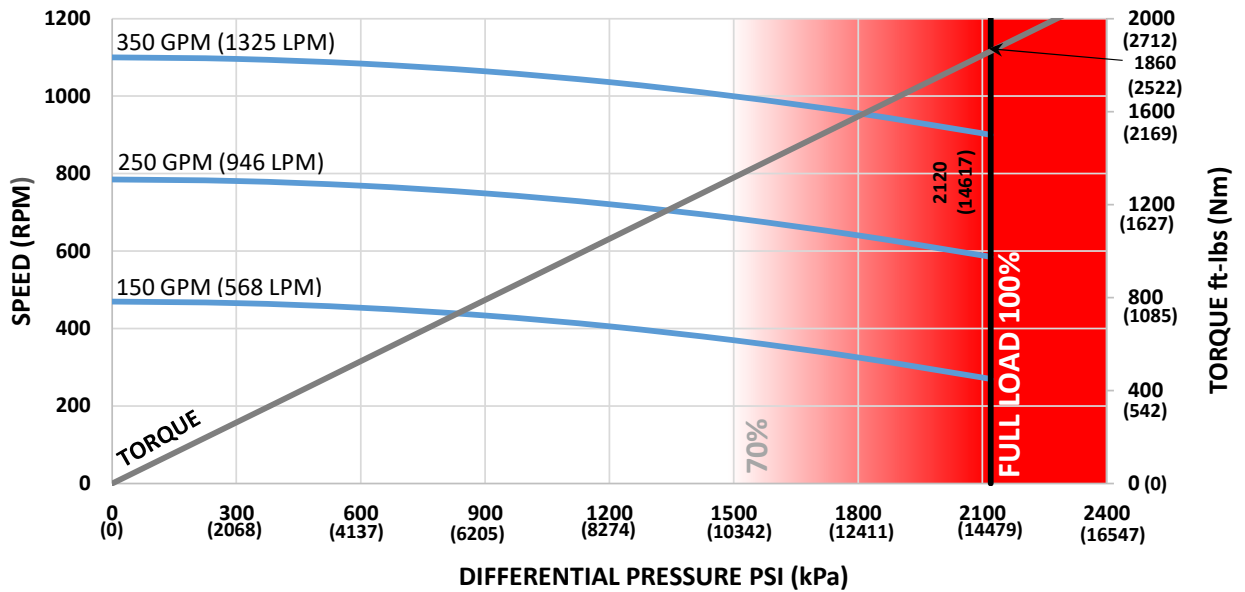


Bit Size Range	5-5/8 - 6-3/4 in	143 - 171 mm
Bit Box Connection	3-1/2 REGULAR	
Dynamic Bearing Load On/Off Bottom	47300 lbf	21000 daN
Static Bearing Load On/Off Bottom	103500 lbf	46000 daN
Max. Overpull (For Re-run)	184700 lbf	82200 daN
Absolute Overpull	369300 lbf	164300 daN
Adjustable Makeup Torque	10000 ft-lbs	13600 Nm
Stab/Thread Protector Makeup Torque	6000 ft-lbs	8100 Nm
A = Bit to Stabilizer (Centre)	14.74 in	0.37 m
B = Bit to Bend	Adjustable	55.6 in / 1.41 m
	Fixed	46.8 in / 1.19 m
C = Overall (With Dump Sub)	307.3 in	7.81 m
Weight	1142 lb	518 kg

Lobe Configuration	2-3 Lobe 9.0 Stage HR	
Displacement (No Load)	3.16 rev/gal	0.83 rev/l
Max. Differential (Full Load)	2120 psi	14617 kPa
Max. Torque	1860 ft-lbs	2522 Nm
Max. Power	319 HP	238 kW

Flow Rate		Speed
GPM	LPM	RPM
150	568	270 - 470
250	946	585 - 785
350	1325	900 - 1100

## 5 in (127mm) 2-3 Lobe 9.0 Stage HR



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

### ADJUSTABLE BUILD RATE

Hole Size	SLICK				STABILIZED			
	5-7/8 (149mm)	6 (152mm)	6-1/8 (156mm)	6-3/4 (171mm)	5-7/8 (149mm)	6 (152mm)	6-1/8 (156mm)	6-3/4 (171mm)
BEND ANGLE	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
0.39	0.3	-	-	-	1.8	2.0	2.1	-
0.78	3.6	3.1	2.6	0.3	4.6	4.7	4.8	5.4
1.15	6.6	6.2	5.7	3.4	7.2	7.3	7.4	8.0
1.50	9.5	9.1	8.6	6.3	9.7	9.8	9.9	10.4
1.83	12.3	11.8	11.4	9.0	12.3	12.1	12.2	12.8
2.12	14.7	14.2	13.8	11.4	14.7	14.2	14.2	14.8
2.38	16.9	16.4	15.9	13.6	16.9	16.4	16.1	16.6
2.60	18.7	18.2	17.8	15.4	18.7	18.2	17.8	18.2
2.77	20.1	19.6	19.2	16.9	20.1	19.6	19.2	19.4
2.90	21.2	20.7	20.3	17.9	21.2	20.7	20.3	20.3
2.97	21.8	21.3	20.8	18.5	21.8	21.3	20.8	20.8
3.00	22.0	21.6	21.1	18.8	22.0	21.6	21.1	21.0

Note: Stabilizers are 1/8" undergauge

### FBH BUILD RATE

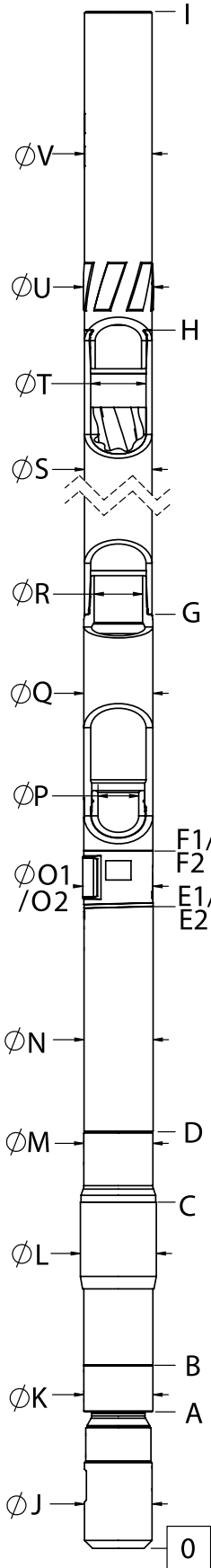
Hole Size	SLICK				STABILIZED			
	5-7/8 (149mm)	6 (152mm)	6-1/8 (156mm)	6-3/4 (171mm)	5-7/8 (149mm)	6 (152mm)	6-1/8 (156mm)	6-3/4 (171mm)
BEND ANGLE	Degrees per 100 Feet (30m)				Degrees per 100 Feet (30m)			
1.25	7.0	6.5	5.9	3.2	8.2	8.4	8.5	9.0
1.50	9.1	8.6	8.0	5.3	10.1	10.2	10.3	10.9
1.75	11.2	10.6	10.1	7.4	11.9	12.0	12.1	12.7
2.00	13.3	12.7	12.2	9.5	13.7	13.8	14.0	14.5
2.25	15.3	14.8	14.3	11.6	15.6	15.7	15.8	16.3
2.50	17.4	16.9	16.3	13.6	17.4	17.5	17.6	18.2

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.

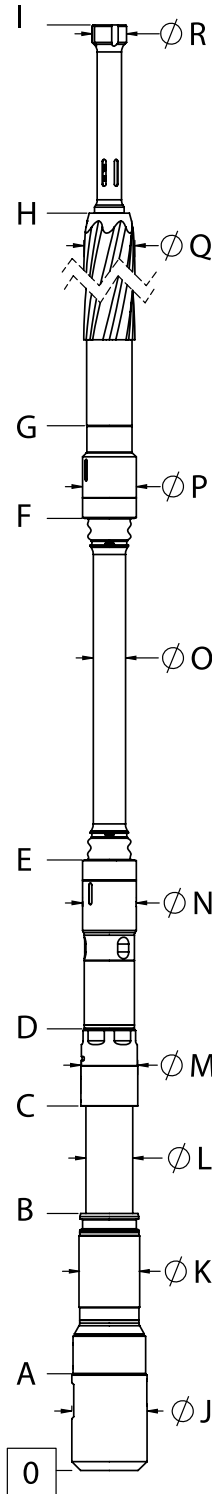
For custom motor configurations and build rates, please contact your DYNOMAX office.

**FISHING DIMENSIONS**

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



EXTERNALS		USC	SI
LOWER HSG FLOW REST.	A	11.3	0.29
BEARING HOUSING START	B	14.0	0.36
STABILIZER SHOULDER	C	26.0	0.66
BEARING HOUSING END	D	38.0	0.97
BIT TO BEND (ADJUSTABLE)	E1	55.6	1.41
ADAPTOR HOUSING (ADJUSTABLE)	F1	60.2	1.53
BIT TO BEND (FIXED)	E2	46.8	1.19
ADAPTOR HSG (FIXED)	F2	56.3	1.43
STATOR START	G	76.2	1.94
STATOR END	H	276.2	7.02
OVERALL LENGTH	I	307.3	7.81
BIT BOX Ø	J	4.71	119.6
LOWER HOUSING FLOW RESTRICTOR Ø	K	4.81	122.2
THREAD PROTECTOR Ø	L	5.50	139.7
BEARING HOUSING Ø	M	4.81	122.2
KICK OR FIXED HSG Ø	N	4.81	122.2
KICK PAD Ø (ADJUSTABLE)	O1	5.13	130.3
KICK PAD Ø (FIXED)	O2	5.13	130.3
ADJ MANDREL PIN Ø	P	2.81	71.4
ADAPTOR HOUSING Ø	Q	4.81	122.2
ADAPTOR HOUSING PIN Ø	R	3.35	85.1
STATOR TUBE OUTER Ø	S	5.00	127.0
STATOR TUBE INNER Ø	T	3.75	95.3
ROTOR CATCH SUB BLADE Ø	U	5.25	133.4
ROTOR CATCH Ø	V	5.00	127.0



INTERNALS		USC	SI
BIT BOX	A	8.0	0.20
LOWER SHAFT FLOW RESTRICTOR DIAMETER	B	18.1	0.46
COMPRESSION NUT	C	25.6	0.65
BEARING ASSEMBLY ADAPTOR	D	33.2	0.84
BAA ADAPTOR CAP	E	47.1	1.20
ROTOR ADAPTOR CAP	F	70.1	1.78
ROTOR START	G	76.0	1.93
ROTOR	H	270.0	6.86
CATCH STEM	I	281.9	7.16
BIT BOX Ø	J	4.71	119.6
FLOW RESTRICTOR Ø	K	3.66	93.0
MANDREL Ø	L	3.03	77.0
COMPRESSION NUT Ø	M	3.61	91.7
BEARING ASSEMBLY ADAPTOR Ø	N	3.58	90.9
DRIVESHAFT Ø	O	1.93	49.0
ROTOR ADAPTOR Ø	P	3.58	90.9
ROTOR MAJOR Ø	Q	2.54	64.4
ROTOR CATCH HEAD Ø	R	2.13	54.0

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.