

**General Dimensional Data** Motor: B5 Transmission: Articulated

A - Bit to Center of Stabilizer Blade	22.1 in (561 mm)
B - Bit to Bend	53 in (1346 mm)
C - Overall Motor Length	30.9 ft (9.4 m)
D - Max OD of Motor at Stabilizer Upset	5.38 in (136.7 mm)
E - Radius at Kickpad	2.95 in (74.9 mm)
Common Top Connection	XTF 39 or 3-1/2 IF
Common Bottom Connection	3-1/2 REG
Recommended Bit Sizes	6 in to 6-3/4 in (152.4 - 171.5 mm)
Estimated Weight	1800 lbs (816 kg)

**Motor Loads**

	Continuous Operation	Ultimate Loading
WOB - lbs (kg)	50,000 (22,680)	-
Backreaming - lbs (kg)	19,000 (8,620)	-
Bit Overpull* - lbs (kg)	112,000 (50,800)	458,000 (207,745)
Body Overpull* - lbs (kg)	270,000 (124,740)	650,000 (294,840)

**\*While Not Operating**

Continuous Loads - Lay motor down if exceeded  
 Ultimate Loads - Motor may part if exceeded

**Power Section Specifications**

Lobes: 5/6

Flow Range	200 - 400 gpm (757 - 1,514 lpm)	Max Recommended Pressure	2,900 psi (200 bar)
Speed Ratio	1.12 rev/gal (.296 rev/l)	Torque Slope	2.4 ft-lb/psi (47.19 Nm/bar)
No Load Bit Speed	225 - 450 rpm	Torque @ Max Recommended Pressure	6,960 ft-lbs (9,436 Nm)
No Load Pressure Drop	600 psi (41.36 bar)	Power @ Max Recommended Pressure	399 hp (297 kW)

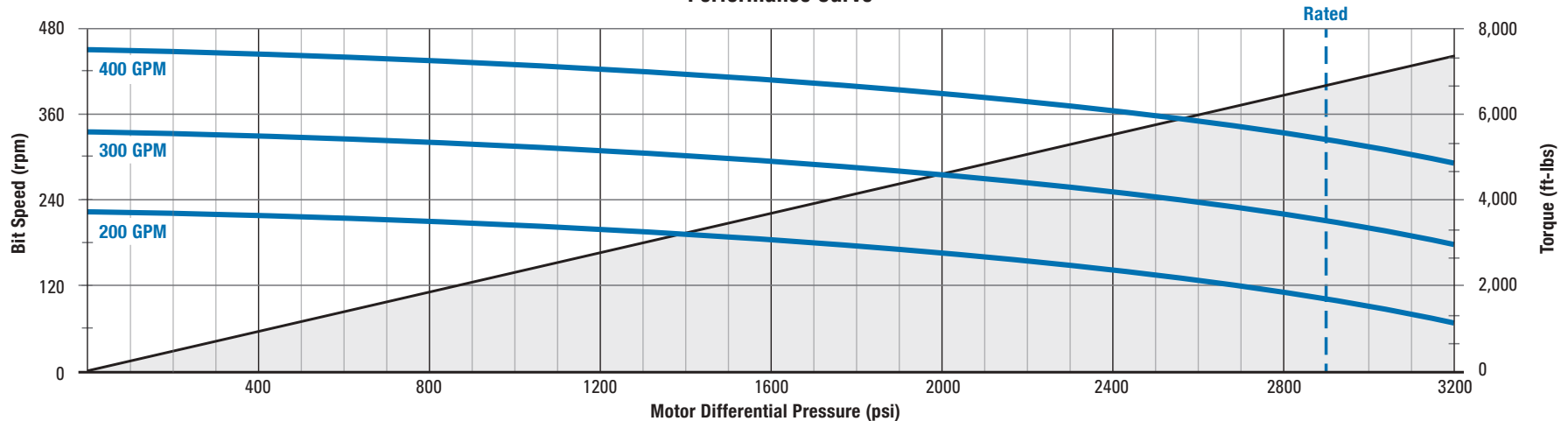
**Predicted Build Rates**

Degrees / 100 ft (30 m)

Bend Angle	Slick Motor Hole Size (in)			Stabilized 1/8" UG Hole Size (in)			Stabilized 1/4" UG Hole Size (in)		
	6	6-1/2	6-3/4	6	6-1/2	6-3/4	6	6-1/2	6-3/4
1.50	8.6	6.7	5.7	9.2	8.9	8.7	5.1	4.8	4.6
1.75	10.7	8.7	7.7	11.6	11.3	11.1	7.4	7.1	7.0
1.83	11.4	9.4	8.4	12.3	12.0	11.9	8.2	7.9	7.7
2.00	12.8	10.8	9.8	13.9	13.6	13.5	9.8	9.5	9.3
2.12	-	11.8	10.8	15.1	14.7	14.6	10.9	10.6	10.4
2.25	-	12.9	11.9	16.3	16.0	15.8	12.8	11.8	11.7
2.38	-	13.9	12.9	-	17.2	17.0	13.4	13.1	12.9
2.50	-	14.9	13.9	-	18.3	18.2	16.9	16.5	16.4
3.00	-	-	18.1	-	-	-	19.2	18.9	18.7

\*This condensed Build Rate table is the result of a theoretical geometry analysis of the motor and is presented as guideline for job design and planning. Due to the extensive variability in drilling BHA design, formation characteristics and other external factors, BICO cannot guarantee the values stated in the Build Rate table.

**Performance Curve**



Disclaimer: The Performance Curve and Performance Data published by BICO Drilling Tools are based on recorded dynamometer data at surface temperature (72 degF) on a standard fit configuration between rotor and stator, with clean water, and are presented as a reference to the potential power of the power section and or motor. Downhole conditions such as highly elevated bottom hole temperatures and different drilling/intervention fluids shall require adjusted loose fits that may produce reduced power during surface (dynamometer) testing and will achieve the expected torque and speed values when reaching planned conditions. Contact BICO for the adjusted performance curves.