

**General Dimensional Data** Motor: G2 Transmission: Articulated

A - Bit to Center of Stabilizer Blade	21.8 in (554 mm)
B - Bit to Bend	50.5 in (1283 mm)
C - Overall Motor Length	26.5 ft (8.1 m)
D - Max OD of Motor at Stabilizer Upset	6.81 in (173 mm)
E - Radius at Kickpad	3.5 in (89 mm)
Common Top Connection	4-1/2 IF or XH
Common Bottom Connection	4-1/2 REG
Recommended Bit Sizes	7-7/8 in to 8-3/4 in (200 - 222.3 mm)
Estimated Weight	2200 lbs (998 kg)

**Motor Loads**

	Continuous Operation	Ultimate Loading
WOB - lbs (kg)	48,000 (21,772)	-
Backreaming - lbs (kg)	20,000 (9,072)	-
Bit Overpull* - lbs (kg)	180,000 (81,650)	620,000 (281,230)
Body Overpull* - lbs (kg)	470,000 (213,190)	860,000 (390,090)

**\*While Not Operating**

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

**Power Section Specifications**

Lobes: 7/8

Flow Range	200 - 600 gpm (757 - 2,271 lpm)	Max Recommended Pressure	1,500 psi (103.4 bar)
Speed Ratio	.29 rev/gal (.077 rev/l)	Torque Slope	8.75 ft-lb/psi (170.06 Nm/bar)
No Load Bit Speed	56 - 168 rpm	Torque @ Max Recommended Pressure	13,125 ft-lbs (17,795 Nm)
No Load Pressure Drop	500 psi (34.47 bar)	Power @ Max Recommended Pressure	330 hp (246 kW)

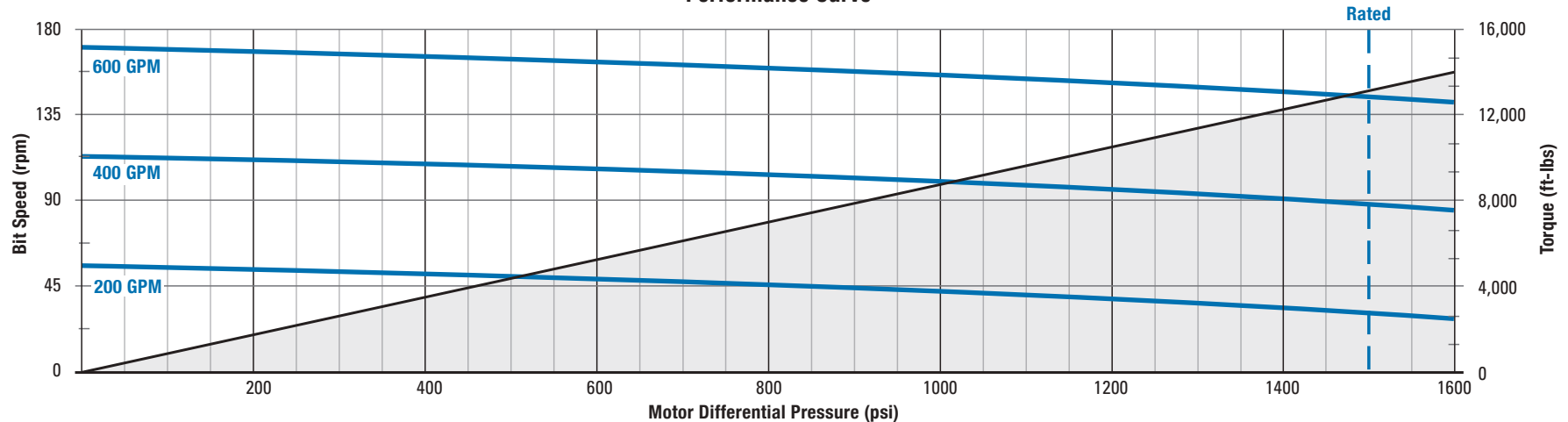
**Predicted Build Rates**

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)		
	7-7/8	8-1/2	8-3/4	7-7/8	8-1/2	8-3/4	7-7/8	8-1/2	8-3/4
1.50	7.5	5.3	4.4	10.7	10.6	10.8	9.9	9.7	9.8
1.83	10.0	7.8	6.9	13.4	13.0	13.0	12.6	12.2	12.1
2.00	11.3	9.1	8.2	-	14.4	14.2	14.0	13.6	13.4
2.12	12.2	10.0	9.1	-	15.4	15.2	-	14.6	14.4
2.38	14.1	11.9	11.0	-	-	17.3	-	16.7	16.5
2.60	-	13.6	12.7	-	-	-	-	-	18.4

\*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.