

General Dimensional Data		Motor: B5	Transmission: Articulating
A - Bit to Center of Stabilizer Blade		15.9 in (404 mm)	
B - Bit to Bend		39.9 in (1013 mm)	
C - Overall Motor Length		14.3 ft (4.4 m)	
D - Max OD of Motor at Stabilizer Upset		3.50 in (88.9 mm)	
E - Radius at Kickpad		1.9 in (48.3 mm)	
Common Top Connection		2-7/8 REG	
Common Bottom Connection		2-7/8 REG	
Recommended Bit Sizes		4-1/8 in to 5-1/2 in (104.8 - 139.7 mm)	
Estimated Weight		372 lbs (169 kg)	

Motor Loads

	Continuous Operation	Ultimate Loading
WOB - lbs (kg)	17,000 (7,710)	-
Backreaming - lbs (kg)	7,000 (6,890)	-
Bit Overpull* - lbs (kg)	77,000 (50,800)	138,000 (62,600)
Body Overpull* - lbs (kg)	96,000 (43,450)	176,000 (79,830)

*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	110 - 230 gpm (416 - 871 lpm)	Max Recommended Pressure	1,000 psi (68.94 bar)
Speed Ratio	1.34 rev/gal (0.35 rev/l)	Torque Slope	2.00 ft-lbs/psi (39.30 Nm/bar)
No Load Bit Speed	147 - 308 rpm	Torque @ Max Recommended Pressure	2,000 ft-lbs (2,712 Nm)
No Load Pressure Drop	400 psi (27.58 bar)	Power @ Max Recommended Pressure	107 hp (80 kW)

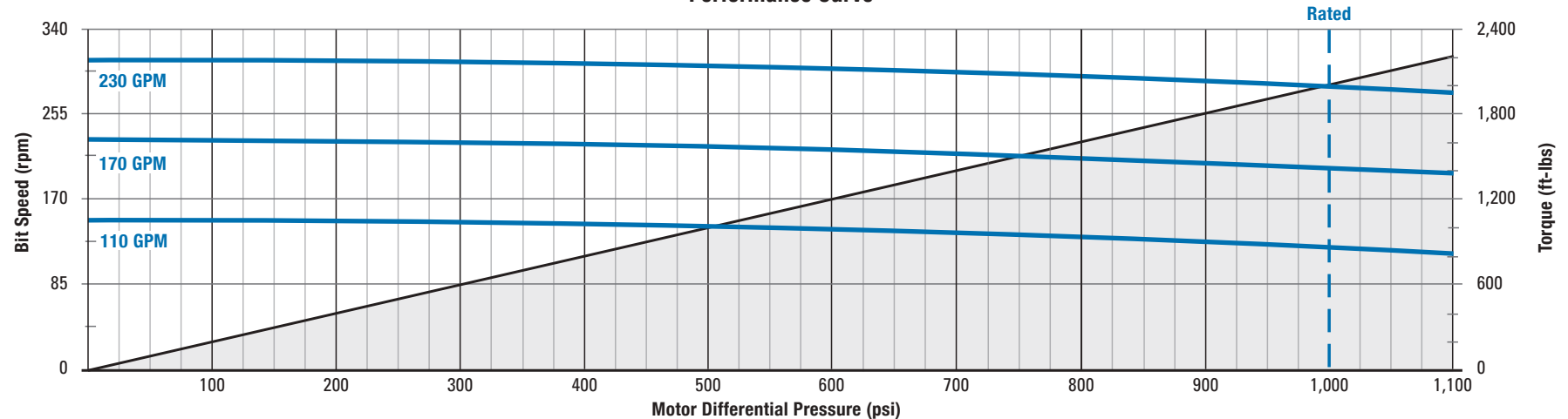
Predicted Build Rates

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)		
	4-1/8	4-1/2	4-3/4	-	-	-	-	-	4-3/4
1.04	15.3	11.7	9.3	-	-	-	-	-	14.6
1.37	20.6	17.0	14.6	-	-	-	-	-	18.8
1.69	25.7	22.1	19.7	-	-	-	-	-	24.8
2.00	30.6	27.0	24.6	-	-	-	-	-	29.6
2.57	39.7	36.1	33.7	-	-	-	-	-	42.0
2.83	43.3	40.2	37.8	-	-	-	-	-	46.2
3.28	51.1	47.8	45.7	-	-	-	-	-	53.1
3.76	58.4	55.2	53.0	-	-	-	-	-	56.5
4.00	62.1	58.8	56.7	-	-	-	-	-	61.3

*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.