

General Dimensional Data

Motor: B5

| | |
|---|---|
| A - Bit to Center of Stabilizer Blade | 47.3 in (1201 mm) |
| B - Bit to Bend | 114.1 in (2898 mm) |
| C - Overall Motor Length | 33.1 ft (10.1 m) |
| D - Max OD of Motor at Stabilizer Upset | 11 in (279.4 mm) |
| E - Radius at Kickpad | 5.3 in (134.6 mm) |
| Common Top Connection | 6-5/8 REG |
| Common Bottom Connection | 6-5/8 or 7-5/8 REG |
| Recommended Bit Sizes | 12-1/4 in to 17-1/2 in (311.2 - 444.5 mm) |
| Estimated Weight | 5772 lbs (2618 kg) |

Motor Loads

| | Continuous Operation | Ultimate Loading |
|---------------------------|----------------------|-----------------------|
| WOB - lbs (kg) | 127,000 (57,600) | - |
| Backreaming - lbs (kg) | 58,000 (26,300) | - |
| Bit Overpull* - lbs (kg) | 288,000 (130,600) | 1,506,000 (683,000) |
| Body Overpull* - lbs (kg) | 1,062,000 (481,720) | 2,295,000 (1,040,990) |

*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 | 400 - 900 gpm (1,514 - 3,407 lpm) | Max Recommended Pressure | 1,500 psi (103.4 bar) |
| Speed Ratio | .19 rev/gal (.049 rev/l) | Torque Slope | 16.5 ft-lbs/psi (325.25 Nm/bar) |
| No Load Bit Speed | 74 - 167 rpm | Torque @ Max Recommended Pressure | 24,750 ft-lbs (33,556 Nm) |
| No Load Pressure Drop | 500 psi (34.47 bar) | Power @ Max Recommended Pressure | 509 hp (308 kW) |

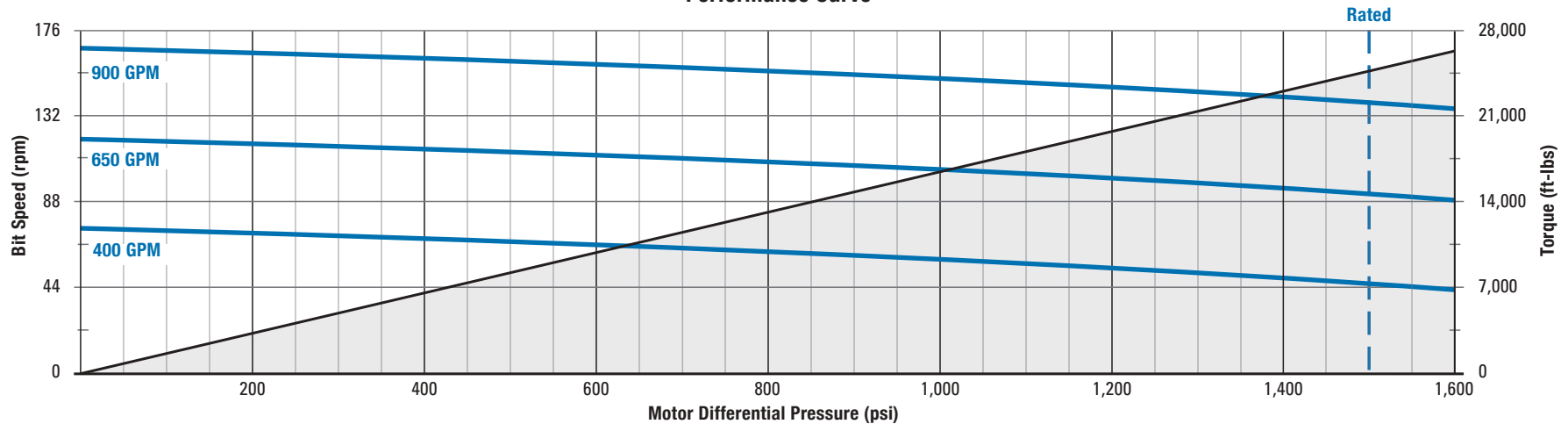
Predicted Build Rates

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) | | |
|------------|----------------------------|--------|--------|-----------------------------------|--------|--------|-----------------------------------|--------|--------|
| | 12-1/4 | 14-3/4 | 17-1/2 | 12-1/4 | 14-3/4 | 17-1/2 | 12-1/4 | 14-3/4 | 17-1/2 |
| .78 | - | - | - | 3.6 | 4.4 | 5.3 | 3.3 | 4.1 | 5.0 |
| 1.15 | 3.1 | - | - | 5.3 | 5.9 | 6.8 | 5.1 | 5.6 | 6.5 |
| 1.50 | 4.7 | 2.2 | - | 7.2 | 7.3 | 8.2 | 7.0 | 7.0 | 7.9 |
| 1.83 | 6.3 | 3.7 | - | 9.1 | 8.6 | 9.5 | 8.8 | 8.3 | 9.2 |
| 2.12 | 7.7 | 5.1 | 2.3 | 10.7 | 9.8 | 10.6 | 10.4 | 9.6 | 10.3 |

*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.