5.00” SSS120-B5

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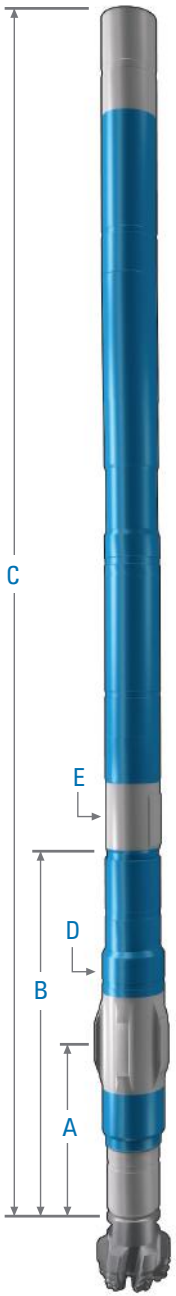


General Dimensional Data

Motor: B5 Transmission: Articulated

A - Bit to Center of Stabilizer Blade	24.4 in (620 mm)
B - Bit to Bend	48.3 in (1227 mm)
C - Overall Motor Length	30.3 ft (9.2 m)
D - Max OD of Motor at Stabilizer Upset	5.13 in (130.3 mm)
E - Radius at Kickpad	2.60 in (66 mm)
Common Top Connection	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	1730lbs (785 kg)

Motor Loads

	Continuous Operation	Ultimate Loading
WOB - lbs (kg)	40,000 (19,960)	–
Backreaming - lbs (kg)	15,000 (6,800)	–
Bit Overpull* - lbs (kg)	105,000 (47,630)	425,000 (192,775)
Body Overpull* - lbs (kg)	212,000 (96,160)	525,000 (238,135)

***While Not Operating**
Continuous Loads - Lay motor down if exceeded
Ultimate Loads - Motor may part if exceeded

Power Section Specifications

Lobes: 6/7

Flow Range	150 - 350 gpm (568 - 1,325 lpm)	Max Recommended Pressure	2500 psi (172.4 bar)
Speed Ratio	.69 rev/gal (.182 rev/l)	Torque Slope	3.92 ft-lb/psi (77.08 Nm/bar)
No Load Bit Speed	104 - 242 rpm	Torque @ Max Recommended Pressure	9,800 ft-lbs (13,287 Nm)
No Load Pressure Drop	600 psi (41.36 bar)	Power @ Max Recommended Pressure	349 hp (260 kW)

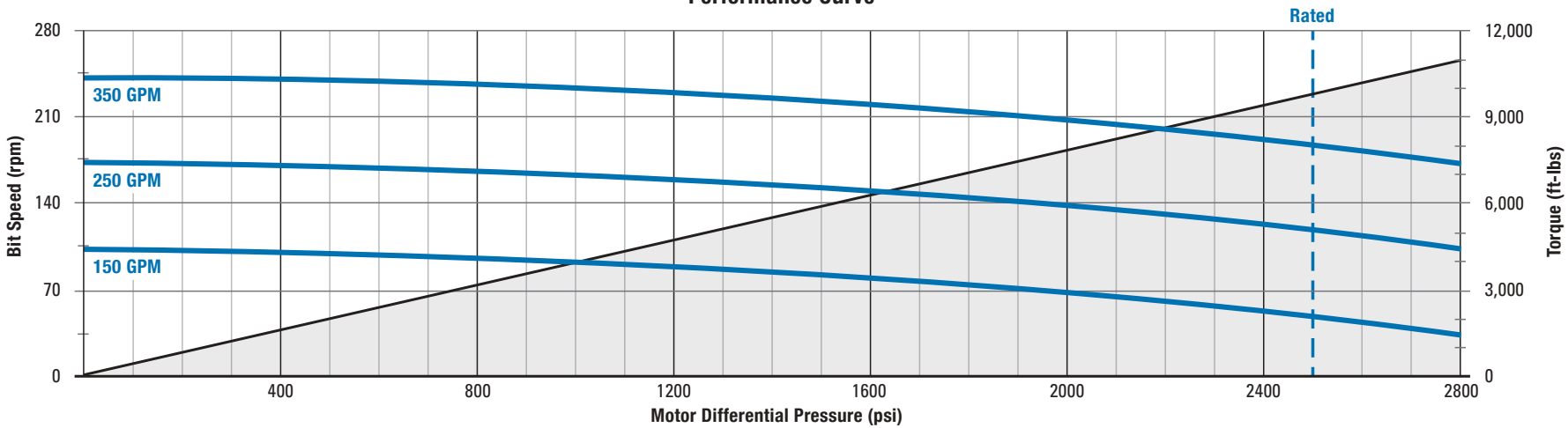
Predicted Build Rates

Degrees / 100 ft (30 m)

	Slick Motor Hole Size (in)			Stabilized 1/8” UG Hole Size (in)			Stabilized 1/4” UG Hole Size (in)		
Bend Angle	6	6-1/2	6-3/4	6	6-1/2	6-3/4	6	6-1/2	6-3/4
1.50	9.4	7.2	6.1	9.8	9.5	9.3	6.1	5.8	5.6
1.75	11.5	9.3	8.2	12.2	11.9	11.7	8.5	8.2	8.0
1.83	12.2	10.0	8.9	13.0	12.6	12.5	9.3	8.9	8.8
2.00	13.6	11.4	10.3	14.6	14.3	14.1	10.9	10.6	10.4
2.12	14.7	12.4	11.3	15.8	15.4	15.3	12.1	11.7	11.5
2.25	–	13.5	12.4	–	16.7	16.5	13.3	13.0	12.8
2.38	–	14.6	13.5	–	17.9	17.7	14.5	14.2	14.0
2.50	–	15.7	14.6	–	–	18.9	15.7	15.4	15.2
3.00	–	–	18.8	–	–	–	–	20.1	20.0

*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.