

## Rotary Steerable System Driver Motor Features

BICO Drilling Tools has designed and implemented key features and configuration requirements into its motors to maximize performance and reliability when run with a Rotary Steerable System.

### 1) Optimum Radial Bearing Clearance

Tailored to accommodate the specific hydraulic requirements of RSS tools, **BICOBEST Drive** features a strict clearance window on its radial bearings. This guarantees maximum flow to the RSS to properly operate the tool, while also greatly reducing the bending stresses imparted on critical components of the motor.

### 2) Ultra-High Strength Flexshaft Transmission

Engineered for efficient power transfer to the BHA, **BICOBEST Drive** delivers maximum torsional capacity to the RSS through an Ultra-High strength one-piece flexshaft. This key design feature also increases the overall tensile capacity of the motor to support the added weight below it while decreasing the fatigue points by reducing internal connections.

### 3) Pin-Down Driveshaft

No crossover is needed when running **BICOBEST Drive** as our driveshafts feature the necessary pin connections. This solution moves the load closer to the radial bearings, reducing the bending stress of the BHA and thus minimizing the risk of failure.

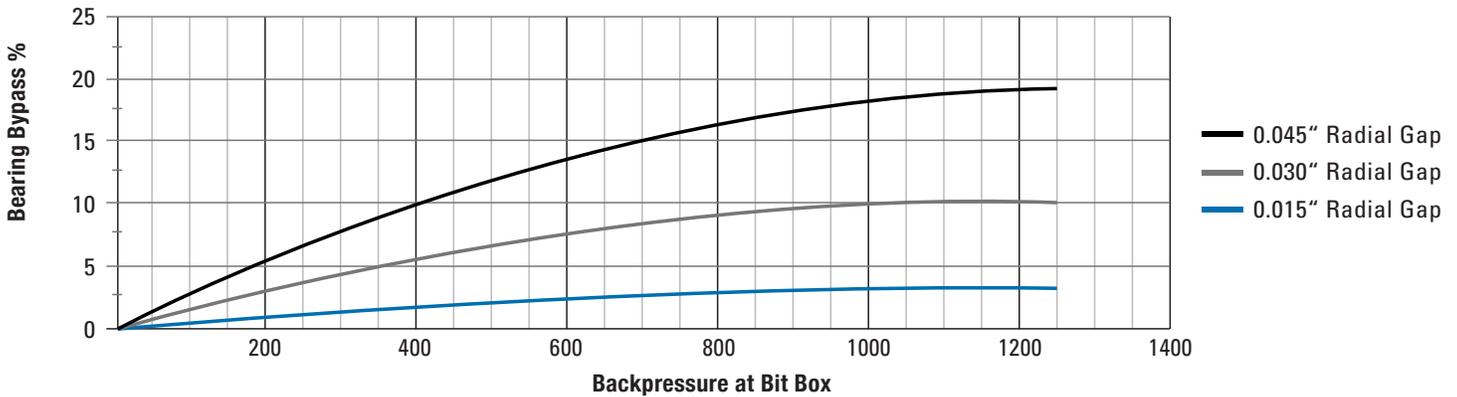
### 4) EVEN WALL® Power Sections

BICO motors combine proprietary lower ends with our industry leading **EVEN WALL®** High Performance power sections. The **BICOBEST** product line offers peak performance in the toughest applications, while the **BICOBRUTE** product line provides a cost effective solution for applications that are less demanding.

## Flow Bypass Estimation

The charts below can be used as a reference for estimating the fluid bypass based on different radial bearing fit scenarios and backpressure values.

**Bearing Bypass vs. Backpressure at Bit Box**



**Bearing Bypass vs. Radial Bearing Fit**

