Vector Series 55RS Drilling Motor

The Vector™ Series 55RS drilling motor is designed specifically for RSS motor assist applications.

The driveline incorporates a bearing mandrel made of high strength alloy steel that is designed to withstand extreme bending stresses and provide exceptional torque handling capability. The extended mud lubricated thrust stack supports the mandrel over its length and enables the bearing assembly in handling high axial loads. The assembly also features upper and extended lower radial bearing sections significantly enhancing the motor's capacity to absorb and manage sideloading when compared to conventional designs.

Coupled with the hybrid flex shaft, which facilitates torque transfer to the bearing mandrel via. flat faces at the pivot joint on one end and with the other end connected directly to the rotor - the Series 55RS drilling motor provides superior torsional load capability and increased motor reliability.

The ability to run in high temperature and varied mud system applications makes this tool durable and compatible for extended drilling hours. With a robust mandrel catch system that greatly minimizes the possibility of LIH scenario, the Series 55RS bearing pack technology encompasses all the features needed making it an ideal choice for RSS motor assist applications.

Size	5¼ in.	5½ in.	6½ in.	7¼ in.	9⅝ in.
Bit to Center of Stabilizer	26 in.	27 in.	28.5 in.	32.2 in.	51 in.
Bit to Bend (ADJ)	n/a	n/a.	n/a	n/a	n/a
Bit to Bend (Fixed)	n/a	n/a	n/a	n/a	n/a
Bit to Stator	129.5 in.	130.3 in.	131.0 in.	158 in.	211.8 in.
Max WOB @ 100 RPM	115,000 lbf	118,000 lbf	121,300 lbf	165,000 lbf	396,000 lbf
Pull to Re-run	251,000 lbf	264,000 lbf	294,200 lbf	395,200 lbf	925,000 lbf
Pull to Yield	431,000 lbf	447,000 lbf	502,100 lbf	697,100 lbf	1,650,000 lbf
Bottom Connection	XT39, NC38	NC40, XT39	NC50	NC50	7⅝ in. REG

Features

- Hybrid FleXshaft
- Mud-lubricated bearing technology ideal for a wider range of temperatures and mud types
- Axial load supported by multiple rows of bidirectional bearings
- Provides extended operating hours
- Fully protected flow diverter prevents accelerated erosion
- Robust bit box catch system

Benefits

- Provides higher operating torque capability with increased reliability.
- Versatile; compatible with multiple drilling fluids.
- Ideal for higher bottom hole temperatures
- Allows for higher WOB and radial load capacity.
- Ideal for remote locations; easily serviced.

Applications

- Rotary steerable motor assist
- Hot hole
- Inverted mud systems