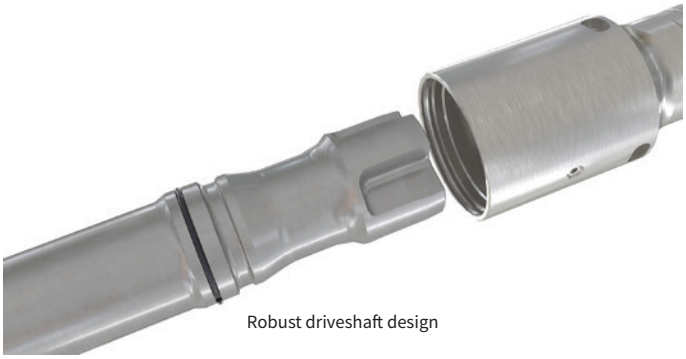
Vector Series 40H Bearing Pack

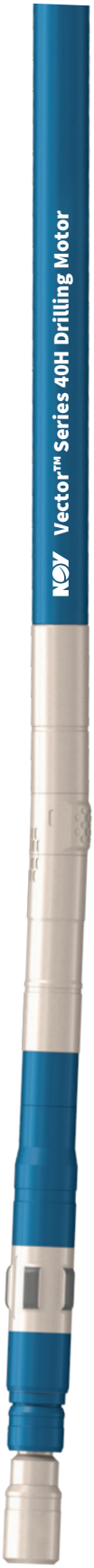
The Vector™ Series 40H bearing pack technology from NOV incorporates the next generation universal joint design. This patent-pending design of the driveshaft enables the motor to provide exceptional torque capability and reliability.

In addition, the bearing pack allows for higher weight-on-bit capacity, higher levels of radial loading, and the ability to run in high temperature applications.

The tool is designed with a mud-lubricated bearing stack composed of a series of high strength ball bearings that are radially supported over its entire length. Additionally, the patented twin torque nut separates the power section output torque from the compression of the bearings.



Robust driveshaft design



Technical Data

Size	5 in.	7 in.
Bit to Center of Stabilizer	24 in.	24 in.
Bit to Bend (adjustable)	63.2 in.	75.7 in.
Bit to Bend (FBH)	59.5 in.	67.7 in.
Bit to Stator	82 in.	97 in.
Max WOB @100 RPM	87,000 lbf	144,000 lbf
Pull to Re-run	159,000 lb	305,000 lb
Pull to Yield	432,000 lb	599,000 lb
Bottom Connection	3½ in. REG	4½ in. REG

Features

- Patented Twin Torque nut allows for higher torque power sections.
- Patent pending driveshaft design transfers torque via flat faces versus the traditional ball and socket driveshaft design.
- Mud-lubricated bearing technology ideal for a wider range of temperatures and mud types.
- Tensile or compression load is supported by multiple rows of bi-directional angular contact bearings.
- Provides extended operating hours.
- Optional tile flow restrictors.
- Pin-down bearing mandrel option available.

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.
- Robust for rotary steerable motor assist applications.

Applications

- Hot hole
- Inverted mud systems
- Vertical drilling
- Curve drilling
- Lateral drilling
- Rotary steerable motor assist