

PRODUCT REPORT



2011

RorMot nExt drilling motor

Positive displacement, hydraulically driven, down-hole drilling motor

Patents pending

iTechEnergy Group – Depiak Drilling Inc. (DDI)

Calgary, AB, Canada

www.itechenergy.com

DESCRIPTION/APPLICATION:

RorMot nExt drilling motor is a high-performance, high-temperature, hydraulic motor for drilling and well-cleaning operations.

RorMot and its novel design represent a technological leap forward from conventional elastomeric stator PDMs. Reliability and economy of use was a focus during the development of **RorMot**.

RorMot offers great operational flexibility that leads to large time and cost savings. It can be powered by dry nitrogen gas, natural gas with a high distillate content, gas-oil (a rubber attacking cutting solvent), acidizing solutions and inhibitors (incl. rubber-degrading pacifiers), naphtha, brine, and fresh water. In a single trip when drilling the **RorMot** power fluid can be changed from liquid to gas or acid be spotted if such a need arises. **RorMot** will not over-rev or suffer decompression problems and is ideal for underbalanced drilling applications.

RorMot has been designed to withstand prolonged exposure to high temperatures for extended periods.

RorMot motor features incorporate a modular design with oil filled and sealed bearings assembly.

RorMot motor rugged design and high torque capability makes the motor suitable for difficult drilling, milling, cutting, and under-reaming jobs which were previously not possible with conventional motors.

RorMot motor can be run on coiled tubing or small drilling strings.



FEATURES/BENEFITS:

- No limitation on the pumped medium (Dry Gas, Acid, Hydrocarbon-based solvents or any Mixtures)
- **RorMot** will not over-rev or suffer decompression problems and is ideal for underbalanced drilling applications.
- Resistant to High Temperature down-hole
- Torque proportional to Pressure Differential across Motor
- Torque independent from Shaft Rotation Angle
- Versatile Modular Design (Separate Power&Bearings Modules)
- Flow Rate is fully adjustable, independent of the Motor Torque (torque is based on the pressure differential rather than flow rate)
- Optimized power requirements and drilling performance
- High and Low Pumping Rates Capability
- Adjustable Drillbit Speed (RPM)
- Rugged Shock Resistant Design. **RorMot** is able to withstand tough drilling environments
- Economical in service

RorMot Mk. V - TECHNICAL DATA:

Tool Size*, in	2.875
Tool length*, ft	11
Weight*, lbs	200
Max. Weight on Bit, lb	6,000
Max. Over pull, lb	85,000
Flow Rate, GPM	Adjustable (50-200)
Stall Torque, lb·ft	600
Max. operating temp., deg F	450
Rotational speed, RPM	Adjustable
Pumping Medium	Dry Gas, Liquid or any combination including Acids

*Other dimensions possible in re-design