



CONTROLLABLE DRIVE ACTUATORS For Down Hole & Off Shore Equipment



Significant advantages have been realized in the field of oil exploration and other related industries by utilizing state of the art electromechanical components, rather than hydraulics, for advanced down hole tools. High reliability and compact design make CDA's rotary and linear controllable drive actuators ideal for these demanding applications.

The unparalleled performance at minimum diameter and volume of our standard modular components make our rotary and linear actuators ideal for high reliability tool applications which are exposed to hostile down hole environments. CDA's polyimide based insulation system, and high grade stainless steel construction motors, gearboxes, and rotary transducers, provide ideal controllable drive actuator solutions for rotary and linear systems used in down hole high temperature and pressure environment applications. Standard design features include class H225 insulation system, matched coefficient of expansion materials, and high strength gearing. The typical operational environment for our down hole applications include +200° C ambient temperature, at 20,000 psi of pressure. Higher operating temperatures and pressures are available on request.

Our entire product line is based on rugged modular design concepts. At the heart of our actuators are high performance, high capacity motors. We may configure any of our seven frame size motors as Brushless Permanent Magnet Motors, AC Induction Motors, or DC Stepper Motors. Any of these motors may be complimented with our equally durable rate or position transducers. Precision machining of the motor interface to the high strength gearing modules assures reliable, high efficiency performance and operation.

A distinct advantage of CDA's modular product line is the high torque and power output capacity within an extremely small diameter actuator package. This advantage makes our actuators ideal for down hole applications where diameter space is at a premium.

Custom windings, operational voltages, frequencies, motor drive configurations, and mechanical interface options increase design flexibility for tool design engineers who must work with line losses, space limitations, and limited electronic control options. In addition to the motor types listed above, CDA has developed a winding lay-in configuration which develops sinusoidal currents from square wave voltage sources. This technique allows simple electronic control of AC Induction Motors from DC voltage sources, allowing limited line connections, with inherent brushless motor reliability.

Customers Include:

- * ABB
- * Baker Hughes
- * Halliburton
- * National Oilwell Vector
- * Weatherford
- * Western Well Tool

Applications Include:

- * Core Sampling Drives
- * Weight on Bit Drives
- * Gas Lift Valve Drives
- * Perforations Drives
- * Pump Motors
- * Retractable Fail Safe Drives
- * Stage Lock Drives
- * Valve Position Transducers
- * Steerable Tools

For Further information, or product literature request, call CDA directly or email us at mail@cda-intercorp.com for an immediate response to your requirement needs.