Application Note



Multiple Axis Robotics

Benefits of Electric Actuators

The smooth and accurate motion of Exlar's linear actuators combined with today's servo technology makes multiple axis robotic applications easier to implement and more efficient than other actuation solutions.

Ideal Replacement for Fluid Power Actuators

Forget fluid pumps and oil leaks. Installation and maintenance of an Exlar electro-mechanical control system is nearly trouble-free, more robust than ball screw systems and considerably less expensive than a fluid based system.

With the force of hydraulics and the speed of pneumatics, Exlar's linear actuators offer an integrated, compact, high performance package. Additionally, the integrated design and elimination of fluid power makes the system virtually maintenance-free.

Exlar Products

Exlar actuators differ from other actuators on the market with the use of a high performance satellite planetary roller screw. Fully utilizing the physics of power and motion, roller screws are unmatched at converting rotary torque into linear motion. Unlike acme or ball screws, roller screws are capable of carrying heavy loads, allowing rotational speeds in excess of 5000 rpm for thousands of hours in the most arduous conditions. This makes roller screws the ideal choice for demanding, continuous-duty environment.

GSX Series linear actuators provide smooth and accurate motion in a compact, completely sealed package.





Robotic High Pressure Hydro Stripping System

Compatible with Other Manufacturers' Drives

Our completely sealed package offers all of the flexibility of servo motion control, including extraordinary accuracy and repeatability, highly responsive motion and simple set-up. And, with Exlar, it is factory tested and configured to operate with nearly any servo amplifier on the market.

The combination of superior technology and expert design provides you with benefits that cannot be attained with other actuation methods.



Six Degree of Freedom Motion Simulator

The Exlar Advantage

- All-electric solution
- •Exceptionally fast responses to command signal changes
- Highly accurate and repeatable control
- •Extremely long life hundreds of millions of inches of travel
- Compatible with nearly any servo amplifier
- Virtually maintenance free operation
- Optimize your application with Exlar Actuators.

Visit <u>www.exlar.com</u> for complete product information or call us at 952-500-6200. You may also email us at info@exlar.com.

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