

EAS-I ACTUATOR (ELECTRONIC ADVANCED SUB-SYSTEM, INTEGRATED)



Texas Hydraulics EAS-i Actuator sets an industry standard for motion control: a fully integrated, self-contained electro-hydraulic system engineered for efficiency, flexibility, and precision. Designed to integrate multiple functions through a single pair of pressure & tank lines. The EAS-i Actuator streamlines installation and operation in a wide variety of applications such as Out-and-Down outriggers, and Excavator mechanisms.

Core Features:

- **On-Board Electronic Controller:** Embedded controller enables autonomous, programmable operation.
- · Custom Designed Hydraulic Cylinder: Engineered to precisely match your application requirements.
- Integrated Input System: Allows for both primary and secondary inputs for sophisticated control.
- Easily Programmable Logic Controller: Adapts the system for function synchronization, sequencing, and work envelope management.
- Hydraulic Integrated Circuit (HIC) Valve Manifold: Utilizes combinations of proportional flow control, and load holding pressure control into a system for superior accuracy.
- Closed-Loop Feedback: Optional position sensing transducer, or proximity sensors, provide highly accurate monitoring of position.
- · System Communication: Seamless integration with main control systems via various CANbus protocol options.

Key Advantages:

- · Eliminates need for "Cat-Track" hose management mechanisms by utilizing a pair of pressure and tank lines to proportionally control all downstream actuations via solenoid cartridge valving.
- Simplified Electro-Hydraulic System: Fewer hoses and leak points, shorter wiring harness, fewer parts to purchase and inventory, easier installation and reduced assembly time.
- Plug-and-Play Solution: Factory-tested and ready for rapid deployment.
- Flexibility & Modularity: Adaptable to different environments and application needs.
- Improved Performance & Efficiency: Proportional flow control valves reduce heat generation and energy loss.
- Enhanced Stiffness & Control: Valve integration places valves directly on the actuator improving control dynamics.
- Reduced Maintenance: Designed for easy troubleshooting, repair, and long-term reliability.
- Optimized Inventory: Innovative design incorporates key system features to decrease purchased part inventory, simplifying both supply chain management as well as installation labor.

Optional Features:

- · Parallel/Series System Capability: Ideal for coordinated multiple-cylinder applications (e.g., out-down, lift/steer, rotate/tilt).
- Advanced Feedback Devices: Select sensors for position, velocity, temperature, and pressure.
- · Modular Configuration: Every unit is custom designed to integrate only the system functions needed for a lean solution with less complexity and inventory requirements.
- Electronic Cushion/Velocity Control: Position sensing enables fine control of acceleration and deceleration.

Ideal Applications Utilities: Bucket trucks, aerial work platforms, cable handling, line maintenance. Material Handling: Forklifts, conveyors, lifts, automated guided vehicles. **Road Service:** Emergency vehicles, road maintenance machinery. Oil & Gas: Drilling equipment, rig automation, pipeline actuation. Agriculture: Harvesters, sprayers, balers. **Defense, Transportation:** Mobile platforms, specialized carrying systems.

Technical Specifications	
Feature	Description
Operating Voltage	Customizable per application
Pressure Feedback	Integrated sensor option available
Temperature Feedback	Integrated sensor option available
Position, Velocity, Cycle Feedback	Yes – integrated via sensors
Data Communications	CANopen, SAE J1939 are popular options
Cylinder Sizing	Designed to conform with application requirements
Valve Types	Load holding, proportional flow, directional, pressure controls
System Configuration	Parallel and/or series connections with modular expansion possible

Ordering & Support

Contact our application engineering team to configure your EAS-i Actuator system:

Email: inquiry@texashyd.com | Website: www.texashydraulics.com



