Servo Power Units

Electrically Powered Servo Power Units for use with Customer Cylinders

Kyntronics Servo Power Units (SPU) are an ideal solution for those instances where the All-In-One SMART Electro-Hydraulic Actuator (SHA) is not able to fit in the available space. The SPU provides many of the same benefits available in the SHA including precise position, speed and force control, energy efficiency, minimal fluid and compact size.

The SPU connects to a customer-supplied cylinder through robust quick connect fittings. The SPU can be located close to the cylinder reducing footprint and hose length and it operates both linear cylinders and rotary actuators.

The SPU is a cost-effective upgrade from a traditional hydraulic power unit in both industrial and mobile applications. It’s power-on-demand feature significantly reduces energy usage and the totally sealed design eliminates maintenance.

Advantages

• Provides energy saving power-on-demand and high efficiency unlike traditional hydraulic power units.
• Totally sealed design eliminates fluid changes and maintenance.
• Has built-in precision servo control of position, force and speed.
• Compact size allows the SPU to be located very close to the cylinder reducing losses and improving control.
• Ideal in rugged applications that damage and cause pre-mature failure with screw-type actuators.
• Simple integration with common networks, including CanBus, Ethernet, Modbus and others.

All-In-One Servo Power Units Including Motor & Drive

Standard Features:

• Precise servo control using external position sensor and integral pressure transducer
• Power-on-Demand, efficient operation saves energy
• Works with most any double-acting linear cylinder or rotary actuator
• Standard ISO 16028 3/8” cylinder connections
• Up to 10.3 GPM (43.2 LPM) at 3,000 PSI
• Adjustable relief valves (extend and retract)
• Input power: 240,460 VAC or 24,36,48,60,80 VDC (or up to 600 VDC using a DC bus)
• Smooth control; eliminates abrupt flow changes and stress on hoses / connections
• Dynamic Braking for smooth control with an over-riding load
• Field-Bus Network Connectivity
Optional Features:
- Motor mounting adaptor and coupling for customer-supplied motors
- Locking Solenoid Valves (extend and/or retract)
- Counterbalance Valves (extend and/or retract)
- Pressure Transducers (extend and/or retract)
- Float Mode
- Multiple Servo Power Unit Systems Also Available

Servo Power Unit All-In-One Control Configurations
- Subpanel configuration for mounting in customer enclosure (shown).
- All-In-One Control in enclosure with Integral HMI.
- Multiple axis controller package (subpanel or enclosure).

Servo Power Unit Product Specifications - All-In-One with Motor & Drive

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<tr>
<th>Pump Size</th>
<th>Gallons Per Minute</th>
<th>Liters Per Minute</th>
<th>Max Working Pressure (psi)</th>
<th>Max Working Pressure (bar)</th>
<th>Required <strong>Torque (Nm)</strong></th>
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Notes:
* Not offered as an All-In-One solution - customer supplied motor & drive configuration only
**Torque Information for customer-supplied motor & drive instances
- Can be used with most any double-acting cylinder / rod combination
- The factory requires the rod & cylinder diameter and stroke length to properly size
- Cylinders are required to be filled with the factory standard fluid following the factory's procedure
- This is a Representative Sample of the Servo Power Unit Product Range, Consult Factory for Additional Models
- For additional information on the Operational Performance of Servo Power Units, consult https://www.kyntronics.com/products/servo-power-units/overview or sales@kyntronics.com to speak with an Engineer

About Kyntronics
All Kyntronics actuation products are made in the USA. With vast knowledge in industrial, aerospace and medical industries, our in-house team of mechanical, electronics and software engineers have hundreds of years of engineering experience. Customer-centric, we thrive on ‘solving the unsolvable’ application problems while working with customers worldwide.

To speak with an Engineer and discuss your application, please contact us at sales@kyntronics.com and discover how the SMART Electro-Hydraulic Actuator can improve your machines and processes.