

Sytronix Variable Speed-Pump Drives

New Demands Require New Technology—Historically, machine systems have been designed to operate continuously at maximum performance capacity, even though it was only required for a portion of each cycle. Today, increasing energy prices and workplace environmental regulations have engineers rethinking their designs and focusing on systems that reduce energy consumption and factory noise.

Sytronix servo-driven pump drive systems address these challenges. They combine the reliability of high-performance hydraulics and the responsiveness of energy-efficient servo drives and motors.

Sytronix is the abbreviation for:

Smart interplay of **Hydraulics** and **Electronics**, **x**: interplay of hydraulics and electronics.

Sytronix is a servo-driven pump drive system that delivers demand-driven pump flow and can therefore provide closed-loop control of pressure, volume, position, and force and can also limit the pump displacement.



Benefits

Easy Integration

- Flexible control functions easily integrate into system
- Advanced diagnostics and condition monitoring help avoid cost-intensive machine failures

Energy Consumption

- Energy savings of 30-80% through demand-driven flow and pressure supply
- Decrease in CO2 emissions, reducing carbon footprint

Machine Life Time

- Reduction of friction losses leads to longer life time of bearings
- Less heat input into the oil results in better oil quality and longer life time of components

Noise Level

- Noise reduction through variable motor speed operation
- Cost savings due to less sound insulation

- Better compliance with industrial health and safety (OSHA)
- Higher employee satisfaction

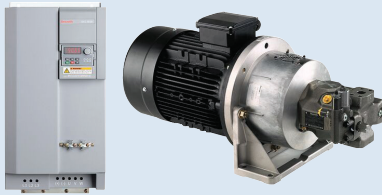
Reduced Footprint

- Motor, pump, and reservoir can be optimally utilized, thus smaller dimensions
- Hydraulic cooling system can be downsized or eliminated



Always the Right Sytronix System

DRn



Perfectly suited for retrofitting existing systems, as most DR and DRG pumps can be used. The DRn system produces an approximate power range of 4 kW (5 hp) and up. The system distinguishes itself with its good dynamics and high overload capacity.

- 4 to 160 kW
- High Control Quality
- High Overload Capacity
- Medium Dynamics

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Also suitable for retrofit in existing systems and applications with high performance demands on dynamics, performance, and control quality. These systems employ axial piston pumps with variable flow and variable pressure.

- 18.5 to 315 kW
- Multiple Pumps
- Optional HFC
- High Dynamics

FcP



Suitable for applications with constant pressure, controlled flow profiles, or flow with pressure override p/Q controls. The FcP system consists of a motor-pump unit with a standard asynchronous motor and a controller. The FcP product family covers the standard field performance – dynamics, precision, and scope of functions.

- 0.25 to 18.5 kW
- Standard Dynamics
- Very Low Noise Level

SvP



Couples well with plastics machines and press lines sectors. SvP systems achieve significant energy savings through the use of the high dynamics of servo motors (permanent magnets). Their capabilities include advanced electrical and electrohydraulic controls as well as axis control functions in both open and close hydraulic circuits requiring high dynamic performance.

- 9 to 80 kW
- Pressure and Flow Control
- Position Control
- Very High Dynamics

