

## 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 energy efficiency of powerful drives and electronics systems.

**Sytronix** is the abbreviation for:  
**S**mart interplay of **H**ydraulics and **E**lectronics,  
**x**: interplay of hydraulics and electronics.

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



## Benefits

### Noise Level

- Cost savings through variable speed reduced motor noise
- Cost savings due to less sound insulation
- Better compliance with industrial health and safety (OSHA)
- Higher Employee Satisfaction

### Energy Consumption

- Energy savings of 30-80% through demand-oriented 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

### Reduced Footprint

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

### Easy Integration

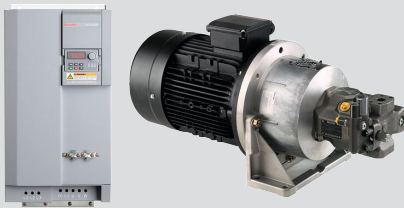
- Flexible control functions easily integrate into system
- Advanced diagnostics and condition monitoring help avoid cost intensive machine failures

**Discover your potential energy savings.**

**Visit [morrell-group.com/sytronix](http://morrell-group.com/sytronix) or call 248-373-1600 for a demo.**

# Always the Right Sytronix System

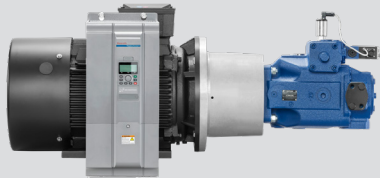
## DRn



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 Overload Capacity
- High Control Quality
- Medium Dynamics

## SY(H)DFEn



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
- Optional HFC
- Multiple Pumps
- High Dynamics

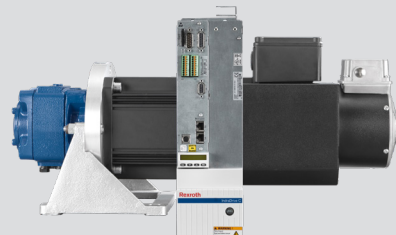
## FcP



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
- Very Low Noise Level
- Standard Dynamic

## 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 (performance 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
- Position Control
- Pressure and Flow Control
- Very High Dynamics

**E** Engineering Partner

**S** Systems Integrator

**V** Value-Added Distributor

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