xylem
Let's Solve Water

Supercharge your fixed speed system with a simple variable speed retrofit

Reduce energy usage by up to 70%

Series e-1510

HYDROVAR® RETROFIT

Bell & Gossett
a xylem brand

B-319B

Series e-1510 end suction pump with integrated variable speed retrofit kit

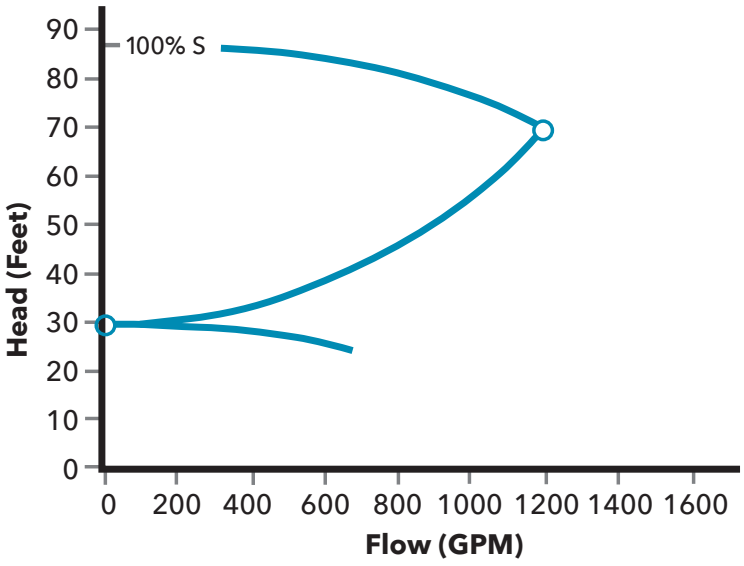
Supercharge your existing Series 1510 or e-1510 pump with the easy to install and commission Hydrovar field retrofit kit.

A curve control strategy with Hydrovar can easily reduce your energy usage by up to 70% and extend the life of your existing Series 1510 or e-1510 pump.

The Hydrovar controller is a combination of a variable frequency drive and a programmable logic controller (PLC) in one compact package, and is mounted on the fan cover of a TEFC motor. Drives are pre-programmed with patented pump specific software, designed for centrifugal pumps. They match pump output to a wide range of system conditions while protecting the pump, the motor and the pumping system.

Sensored Control Curve Operation Made Easy

The supplied sensors make it simple to implement a control curve strategy by wiring directly to pump suction and discharge. Curve control can dramatically reduce energy usage vs a fixed speed pump system by lowering pump speed at low flows to adjust for lower friction losses. While best used in a system with low diversity, curve control can still deliver significant savings to any application when compared to a fixed speed application. Sensored Control Curve operation is similar to sensorless but accuracy is much higher due to the precision sensors.



Easy. Efficient. Hydrovar.

Easy to install

The Hydrovar has been designed to easily accommodate both new and retrofit installations. A newly added wiring harness includes a separated wiring chamber with a dedicated cover. This makes connection plug-and-play simple, and it provides safe, easy access to the wiring while protecting the unit's electronic components. The clip-and-work mounting further simplifies the direct motor mounting process.

Easy to commission and operate

A new start-up menu walks you through every step of the Hydrovar's commissioning process, and its larger LCD display shows an expanded range of parameters on each page, making it faster and easier to set up. In addition, the start–up menu provides an expanded range of pre-programmed parameters for standard motors; simply select your motor size and the Hydrovar takes care of the rest.

Easy to integrate

The new Hydrovar was designed to electronically integrate with your existing building management system. It comes standard with BACnet capability and offers the convenience of wireless communication through an optional WiFi card. What's more, the drive's I/O capabilities can be significantly expanded with the addition of the premium card option.

Features

- **Input Supply:** 1Ø Input 208/230 volt 2 - 5 hp
  3Ø Input 208/230 volt 2 - 15 hp
  3Ø Input 460 volt 2 - 30 hp
  (208 – 240V ± 10%, 15 – 70 hz)
  (380 – 460V ± 10%, 15 – 70 hz)
- **Motor Requirements:** 3 phase, TEFC, 208 – 230V or 460V, 0 – 60 hz, Class F insulation, NEMA design A or B
- Motor mount to fan cover of TEFC motor for a packaged unit with a small footprint.
- Maximum ambient temperature 104°F
- **Indoor enclosure:** NEMA 1. Avoid excessive dust, corrosives, salts and direct sunlight.
- **Display:** Large LCD display. Easy to read pump language, pump on, system pressure, fault codes and system conditions are displayed.
- Control up to 8 pumps in parallel.
- **Control:** Analog input control (4 – 20mA) two point control based on pressure, flow or differential pressure.
- **Alternate Input:** Up to two transducers may be used with each controller. These may be pressure, flow, differential pressure, temperature or other 4 – 20mA signals.
- Remote start/stop via switch input (low water, low pressure, etc.) and emergency stop.
- Dry relay contacts available for pump run and fault.
- **Protection:** Over/Under voltage, motor overload, short circuit, ground fault, programmable no/low flow shut-down, low suction pressure, pump run-out.
- MODBUS® and BACnet MS/TP as standard.
- Advanced motor control to reduce heating and extend the lifetime of the motor.
- Embedded THDi filter for better electricity quality from the grid, extending the lifetime of the equipment.
- **Pressure Transducer:** 316 SS, 17-4 PH stainless steel, 1/4" NPT connection, shielded two wire cable, 0 – 150 psi range. Included with drive.

Service and support from the most trusted name in the industry – Bell & Gossett.

The Bell & Gossett name has always stood for uncompromising quality and dependability. That's evident in the way every one of our centrifugal pumps is built and backed by our outstanding customer service and support team.

ESP systemwize

Your local Bell & Gossett representative is available any time and is an experienced professional with a wealth of technical expertise. In addition to expert system and product application assistance and a wide product inventory warehoused locally, we offer ESP-Systemwize® software selection program.

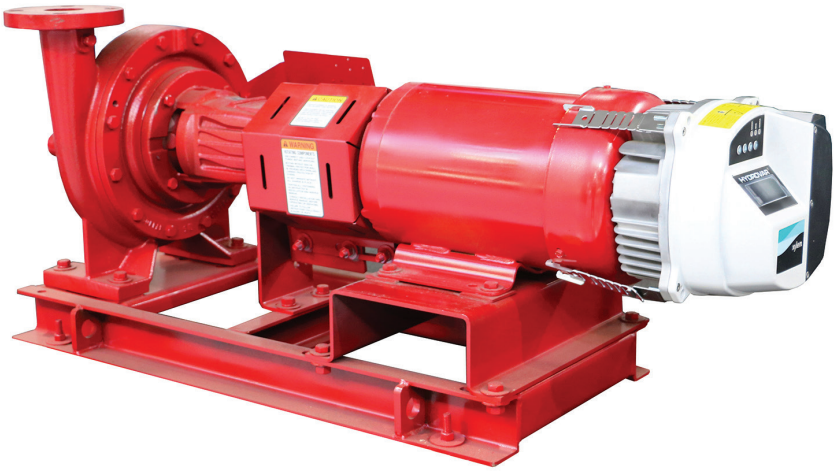
ESP-Systemwize is a Bell & Gossett web-based software that helps you design HVAC systems accurately, effectively and very quickly. You get fast, precise equipment selection, pump performance curves and equipment schedules, submittals, specifications replacement parts and more.

ESP-Systemwize includes:

- Centrifugal Pumps
- Air/Dirt Separators
- Drives and Controls
- Expansion Tanks
- Heat Exchangers
- PIC Valves
- Replacement Parts
- Suction Diffuser and Triple Duty Valve
- Wastewater/Stormwater

With more than a 100 years' experience as an industry leader, we know how to design, build, and support centrifugal pumps. Our hallmarks are excellence and dependability.

We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.



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