



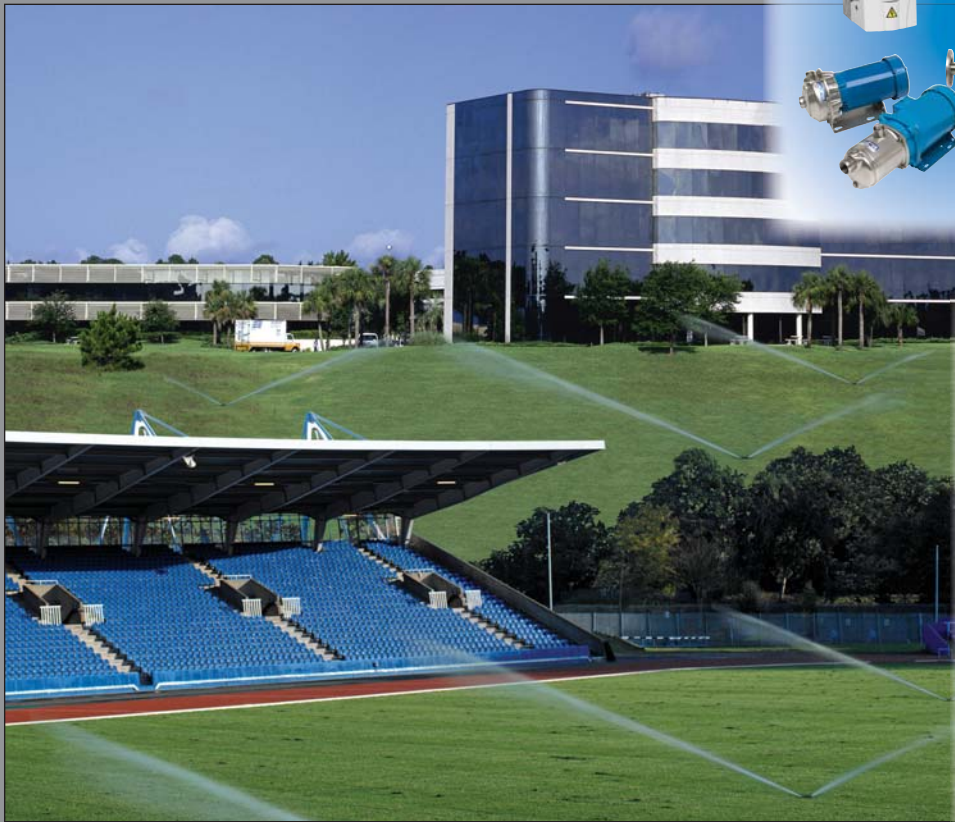
# ITT

Commercial Water

## Goulds Pumps

### AQUAVAR®

World's First Pump Mounted Micro-processor Variable Speed Controller



Goulds Pumps is a brand of ITT Corporation.

[www.goulds.com](http://www.goulds.com)

*Engineered for life*



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## GOULDS PUMPS Commercial Water



The **AQUAVAR** is the world's first pump mounted, microprocessor based pumping system controller.

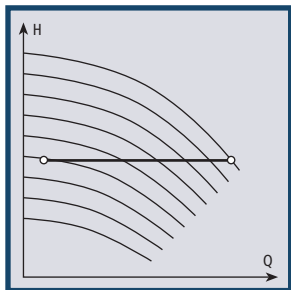
The **AQUAVAR** does more than just change motor speed. It truly manages your pump performance to match a wide range of system conditions and requirements. By combining the latest variable frequency drive technology and our patented pump control software, we have created an extremely versatile centrifugal pump controller. The **AQUAVAR** can be used in virtually any centrifugal pumping system with varying flow or pressure demand.



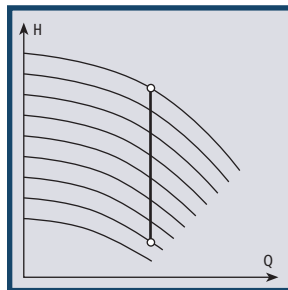
Just enter your requirements on the convenient touch pad following the instructions in the LCD display. English, French, German and Spanish language displays are built in.

Do you need more than one pump? The **AQUAVAR** can link up to four pumps in parallel and automatically control sequencing, lead-lag change over and adjust system pressure without an external control panel. Plus, an RS-485 interface allows it to talk to the outside world of other microprocessor devices.

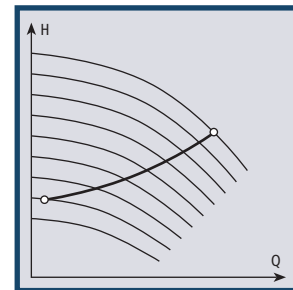
Meet your system requirements for . . .



control for constant pressure



control for constant flow



control to system curve

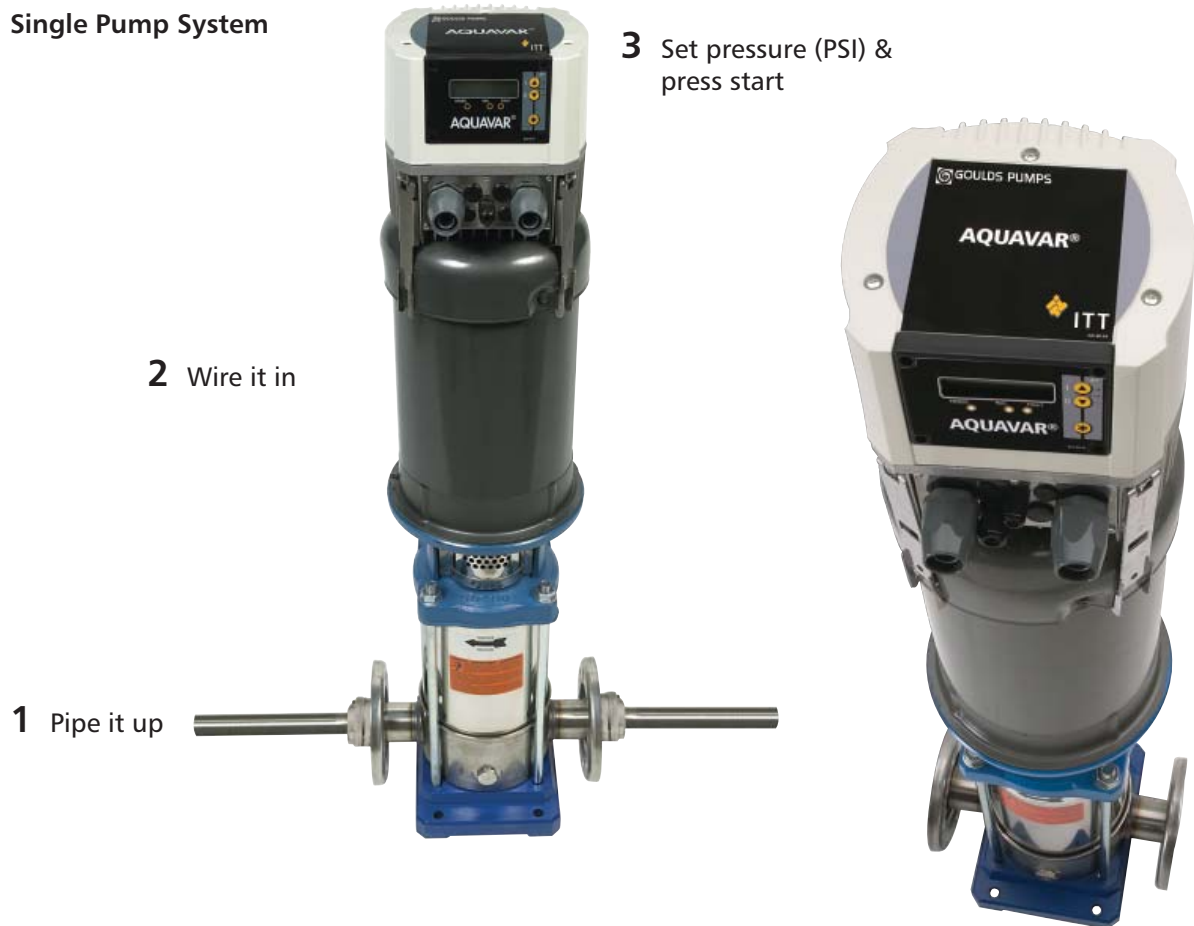


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**GOULDS PUMPS**  
Commercial Water

## The AQUAVAR is easy to use:

### Single Pump System



2 Wire it in

1 Pipe it up

3 Set pressure (PSI) & press start

### Multi-Pump System (2-4)

- Step 1 Plumb to headers
- Step 2 Plug each to fuse or breaker disconnect and connect interface cable
- Step 3 Set pressure (PSI) and multi-pump mode on pump #1
- Step 4 Set pump address and multi-pump mode for other pumps
- Step 5 Press start





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## The AQUAVAR is typically needed for:

- Water Supply Boosting
- Water Treatment and Processing
- OEM Systems
- Irrigation Systems
- Wash Systems
- HVAC Applications
- Reverse Osmosis and Filtration
- Process Water



# AQUAVAR

## The AQUAVAR system components are:

- Fully programmable AQUAVAR Pump Controller
- Pressure Transducer with Shielded Cable
- Small Pressure Tank (Supplied Separately)
- Pump and Motor Combination (Supplied Separately)





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**GOULDS PUMPS**  
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The **AQUAVAR** is also available in the following wall mounted configuration:



## **AQUAVAR CPC**

*The **AQUAVAR CPC** (Centrifugal Pump Controller) from ITT Corporation incorporates the latest state-of-the-art **AQUAVAR** software technology, with over 10 years of experience providing variable speed pump controllers.*

*The **AQUAVAR CPC** combines the pump specific **AQUAVAR** programming with upgraded features to allow more flexibility with your pumping installation. It's the next generation in variable speed pump controllers.*

## **AQUAVAR CPC** (Centrifugal Pump Control)

### Features

- Single Phase Input, 200-240 Volt, up to 50 HP
- Three Phase Input, 200-240 Volt, up to 100 HP
- Three Phase Input, 380-460 Volt, up to 550 HP
- Three Phase Input, 575 Volt, up to 150 HP
- Pump protection built into standard program (run-out, shut-off, broken pipe).
- Adjustable pressure point control.
- Short circuit / motor protection.
- Multi-pump control for up to 4 pumps (without additional control panels).\*\*
- Automatic reset of faults.
- Modbus / SCADA compatible.
- Multicontrol of up to 3 additional "slave" pumps with one Aquavar.\*
- Line impedance built in for input power quality.
- Pressure transducer with shielded cable included.

\* **NOTE:** Slave pumps require additional starter panel supplied by operator.

\*\* Aquavar required for each pump.







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## GOULDS PUMPS Commercial Water

### Why the AQUAVAR Variable Speed Pump Controller?

#### ENERGY SAVINGS\*

**A**djusts the speed of the pump motor according to system demand. This can provide up to 70% energy consumption savings with centrifugal pumps. Original equipment cost can realize a payback from KWH savings!

#### LESS WEAR DURING OPERATION

**T**he AQUAVAR provides a soft start and stop according to programmable settings. This allows a reduction in starting loads and stresses for both pump and motor, increasing wear life.

#### REDUCE NECESSARY EQUIPMENT

**W**ith the AQUAVAR system you can eliminate the need for expensive control panels. Eliminate the need for bypass, orifice valves. System components are reduced.



#### LOW STARTING CURRENT

**R**educes high starting current and peaks with soft start, and smooth operation according to pump logic control. Adjustable to suit your system needs.

#### REDUCE WATER HAMMER

**I**ntegral pump control software and soft starting reduces water hammer associated with starts/stops of typical pump systems.

#### MULTI-PUMP CONTROL

**C**ontrols up to four AQUAVAR controlled pumps. Lead/lag, alternation and automatic sequencing without additional panels or equipment.

\*NOTE: Energy savings based on many variables. Actual savings amount may vary.



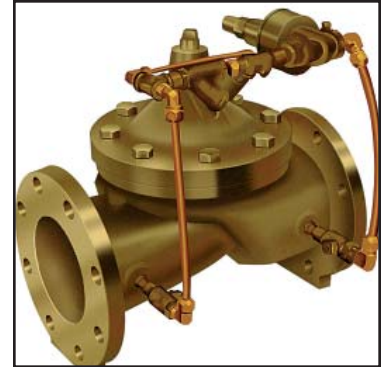
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## GOULDS PUMPS Commercial Water

### G&L Series AQUAVAR Eliminates:



Separate Control Panels and Drives



By-pass Lines and Control Valves



Jockey Pumps and Specialized Motors



Separate Microprocessor Sequencing Systems



Large Supply Tanks

Separate Purchased Pressure Transducer and Cable





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OTHER VARIABLE SPEED PUMP CONTROLLERS ARE AVAILABLE FOR DIFFERENT APPLICATIONS:



**AQUAVAR CPC**



**BALANCED FLOW  
SUBMERSIBLE  
CONTROLLER**



**AQUABOOST**



**AQUABOOST II**



**G&L SERIES AQUAFORCE™  
PUMP STATION**



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