ITT

Goulds Pumps

Variable Speed
Product Line

GOULDS PUMPS

Goulds Pumps is a brand of ITT
Residential and Commercial Water.

www.goulds.com

Engineered for life

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Variable Speed Product Line

Since 1997, Goulds Pumps has been providing variable speed pump control solutions to its customers. The first product was the AQUAVAR® variable speed controller. Today, Goulds Pumps offers a wide range of capabilities for the variable speed pump control market. Our philosophy has not changed: To provide quality, variety and systems solutions for our pump customers.

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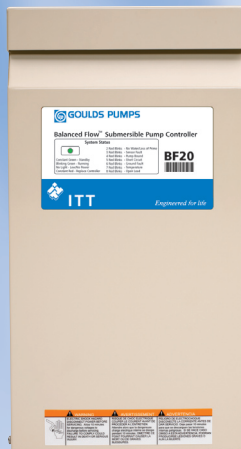
Our variable speed products include the following:

1 AQUAVAR (Commercial / Municipal Applications).

Pump mounted version is the flagship of the Goulds Pumps Variable Speed Product Line. Initial launch was 1997 for the North American market. Since then, thousands of satisfied installations have been made into the Commercial and Industrial Markets. Some features include:

- Single phase input, 208-230 volt, 2 through 10 HP.
- Three phase, 208-230 volt units, 2 through 10 HP.
- Three phase, 460 volt, 5 HP, up to 15 HP.
- Motor mounted capability to a standard TEFC pump motor.
- Multi-Pump control up to 4 AQUAVAR controlled pumps. Additional panels or starters are NOT required. Connection made via the RS485 on each AQUAVAR.
- NEMA 4 enclosure.
- Pressure transducer and shielded cable included.
- Integral variable frequency drive with pump control logic. Designed exclusively for centrifugal pumps!
- Easy programming in pump language.
- Motor required is a three phase standard AC induction type. Inverter duty not required.
- Pump protection from run-dry, dead-head, cavitation and run-out.
- Relay contacts available for PUMP RUN, FAULT LIGHT.
- Analog output 0 – 10 Vdc for monitoring system pressure.
- UL, cUL approvals.
- Hardware included.
- LCD keypad and display on unit (display can be remote mounted on latest version).

2 AQUAVAR CPC (Commercial / Municipal Applications)

Latest generation of the Aquavar® series of Variable Speed Pump Controllers. This unit is offered in a wall or floor mounted design up to 550 HP, 460 volt, single phase input up to 50 HP, 208-230 volt and three phase 208-230 volt up to 100 HP! The latest software provides more versatility and flexibility with centrifugal pump applications than ever before! With the original Aquavar and the Aquavar CPC, Goulds Pumps provides the pump professional with more options for a complete variable speed pumping system. Features and benefits include:

- Single phase input up to 50 HP* 208-230 volt.
- Three phase 208-230 volt input up to 100 HP.
- Pump protection built in! Protects based on RUN-DRY, "DEAD-HEADING", CAVITATION and "RUN-OUT" conditions.
- Motor protection built in! Protects based on OVERCURRENT, OVER/UNDER VOLTAGE, PHASE LOSS, SHORT CIRCUIT, GROUND FAULT, OVERTEMPERATURE.
- Built-in line choke. Similar to a line reactor, it provides the equivalent of 3 - 5% impedance against transient voltage spikes and surges. Reduces harmonic distortion.
- EMC/RFI filters reduce drive noise interference and emissions.
- Multi-Pump without additional PLC's or controls. Automatic Lead-lag and alternation up to four (4) Aquavar controlled pumps.
- Fieldbus compatible. MODBUS® is standard protocol with SCADA networks.
- Fixed speed control relays. Control up to three fixed speed pumps with one Aquavar CPC with programmable relays (starter panel extra).
- Help text and programming "Wizards" to assist with set up.
- Pressure transducer with shielded cable included.
- Compatible with other Aquavar software for multi-pump.
- UL, cUL, CE approvals.
- NEMA 1 standard design (indoor), with NEMA 12 and outdoor enclosures available.
- Preventative maintenance reminders.
- Dual pressure control with programmable differential pressure starting.

*Always check motor full load amps compared to drive rating.

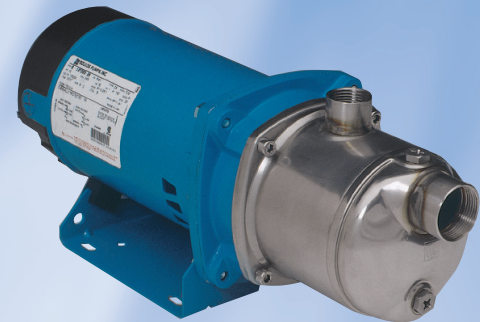## 3 AQUABOOST I (Residential/ Commercial Applications)

Packaged system. First generation of small residential type variable speed pump controllers. Sizes up to 3 HP (10 Amp), this unit provides constant pressure and speed control to smaller pumps, primarily used for residential markets. Typical system includes the pump/motor, controller, wiring/conduit, Goulds Pumps air diaphragm tank 2 gallon, pipe tee, pressure gauge, pipe plugs, pressure transducer and motor thermal sensor.

- Single phase input ONLY, 230 volt, ±15% tolerance.

- 1, 2 and 3 HP (10 Amp rating).

- 3 phase, 230 volt motor required.

- Preset for 50 psi at factory.

- Field programmable up to 80 psi.

- Flows up to 53 GPM (3AB1).

- Ambient temperature 104º F maximum.

- Indoor/outdoor rated.

- Cooling fan.

- Input/output wire with flexible conduit included.

- UL, cUL, CE approvals.

- Low suction pressure protection.

- Pump run-out protection.

- Sensor fault.

- Over/under voltage, short circuit, ground fault, overload amps.

- Signal lights, pump run, pump fault, pump stopped.

- External control program/troubleshooting device (sold separately).

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4 AQUABOOST II (Residential, Commercial Applications)

Pre-packaged system that includes: pump/motor, pressure tank, pressure transducer, piping tee, pressure gauge, wiring with flexible conduit. Self diagnostic variable speed controller is the next generation of constant pressure. Sold as stand alone unit or with packaged system.

- Single phase input voltage ONLY, 208 – 230 volt, ±15% tolerance.

- Maximum amperage on motor is 16.6 Amps with 5 HP controller.

- Motor must be three phase, 208 – 230 volt, ±10%.

- Flows up to 110 GPM, with 5 HP pump.

- Pressure factory set for 50 psi.

- Field programmable pressure setting up to 80 psi, total system.

- Outdoor rated, NEMA 3R enclosure, rain-tight.

- UL, cUL, CE approvals.

- FCC compliant for interference.

- Signal lights for pump running, faults, stopped.

- Self-diagnostic, plug-in display not needed.

- Field setting for booster pumps.

- Wall mounted with convection air cooling.

- Maximum ambient temperature 104º F.

- Electrical efficiency above 95%.

- Simple and quick installation.

5 BALANCED FLOW™ (Residential, Submersible)

The Balanced Flow™ is a variable speed, constant pressure controller designed exclusively for submersible well pumps! It provides smooth control for residential submersible water systems which typically uses a larger tank and switch. The controller monitors the pressure in the system and adjusts the pump speed to maintain a constant pressure. The Balanced Flow (BF) also monitors the motor current draw, voltage, temperature and loss of pressure.

Its design is simple, rugged and made exclusively for the water well market!

Turn a conventional system with large tank and switch into a premium constant pressure control system using the Balanced Flow controller. Now with a standard 3 year warranty!

- Standard sizes 2, 3 and 5HP.

- Single phase input voltage 208-240 Volt.

- Requires 3 phase submersible motor.

- Reduces motor cable wire size.

- More room for easy cable/wire connections.

- Larger wiring terminals.

- Outdoor rated painted steel enclosure, NEMA 3R.

- Ambient temperatures up to 122° F

- Lightning and power surge protection. *

- Auto cooling fan with filter

- Easy to adjust pressure control pushbuttons.

- Provides motor protection on long motor leads.

- Flashing LED for troubleshooting and status.

- Includes pressure sensor and shielded cable.

- 3 year standard warranty with optional 5 year.

- Adjustable current overload protection to match motor Service Factor SFA.

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Residential, Commercial and Municipal

Whatever your application; whether it is for above ground booster systems or controlling a 4" submersible pump, Goulds Pumps brand of high quality pumps and controls are behind you with over 100 years of experience.

Ask your authorized Goulds Pumps distributor or check us out on the web at www.goulds.com.

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