

DIAPHRAGM METERING PUMPS

A dosing pump is a small, positive displacement pump. It is designed to pump a very precise flow rate of a chemical or substance into either a water. A dosing pump will deliver this precise flow rate of chemical or other product by a number of different methods but it generally involves drawing a measured amount into a chamber and then injecting this volume of chemical into the pipe or tank being dosed. A dosing pump is generally quite small and is powered by either a small electric motor or air actuator. They are controlled either by an external control system or more commonly an internal pump controller that can alter the flow rate, the on/off function and also things like alarms and warnings for run dry, degassing and low product levels.



SOFT STARTER

Soft Starter is a controller with thyristors used for torque-controlled soft starting and stopping of three-phase squirrel cage asynchronous motors. It offers soft starting and deceleration functions along with machine and motor protection functions, as well as functions for communicating with control systems. These functions are designed for use in the most common applications for centrifugal pumps, fan, compressors and conveyors, which is primarily to be found in construction, food and beverage and chemical industries.



GRUNTECH CONTROLLER

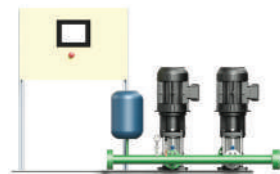
Gruntech Controller is a complete set of electrical device that allow the user to save energy to any electric motor driven equipment by adjusting its power consumption based on the actual demand.

- Plug and play operation based on customer application
- Manual or automatic operation with % energy savings display
- Complete with electrical safety devices and switches



BOOSTER PUMP SYSTEMS

Booster pump systems are fully assembled, tested and ready for installation pressure dependent pump with common base and controller. It maintains and adapts to the pressure needed by the process or machine. It has 1 running and 1 stand-by pumps and can also be running simultaneously dependent on actual demand. Pumps, inlet/outlet pipe, bladder tank, controller and related accessories are mounted on common frame for easy transport and installation.



LEVEL SENSOR

Level sensors detect the level of water or liquids that exhibit an upper free surface. Substances that flow become essentially horizontal in their containers because of gravity. The substance to be measured can be inside a container or can be in its natural form. The level measurement can be either continuous or point values. Continuous level sensors measure level within a specified range and determine the exact amount of substance in a certain place, while point-level sensors only indicate whether the substance is above or below the sensing point. Generally the latter detect levels that are excessively high or low.



ELECTROMAGNETIC FLOW METER

Electromagnetic flow meter (mag flow meter) is a volumetric flow meter which does not have any moving parts and is ideal for water or wastewater applications or any dirty liquid which is conductive or water based. This instrument measures fluid flow by the voltage induced across the liquid by its flow through a magnetic field. A magnetic field is applied to the metering tube, which results in a potential difference proportional to the flow velocity perpendicular to the flux lines. The physical principle at work is electromagnetic induction.



Electromagnetic flow meters are ideal for applications where low-pressure drop and low maintenance are required.

END SUCTION CENTRIFUGAL PUMP

Centrifugal pumps are used to transport fluids by the conversion of rotational kinetic energy to the hydrodynamic energy of the fluid flow. The rotational energy typically comes from an engine or electric motor. The fluid enters the pump impeller along or near to the rotating axis and is accelerated by the impeller, flowing radially outward into a diffuser or volute chamber (casing), from which it exits.



End suction centrifugal pumps should be designed in accordance to DS EN 1733 / DIN 24255 standard. This pumps have great advantages in interchangeable parts, high quality and low cost.

VARIABLE FREQUENCY DRIVE (VFD)

Variable Frequency Drive used in electro-mechanical drive systems to control AC motor speed and torque by varying motor input frequency and voltage. VFDs are used in applications ranging from small appliances to large compressors and pumps. Most of the Industrial plants electrical energy is consumed by electric motors which can be more efficient when using VFDs.

VFDs can help improve equipment performance and reduce operating cost by optimizing energy consumption and user comfort.



MULTI-STAGE VERTICAL PUMP

Multi-stage vertical pumps are non-self priming centrifugal pump, the pumps are available with standard motor, the inlet and outlet are located at the pump bottom at the same plane (inline type). All pumps are equipped with a maintenance-free cartridge type mechanical seal.

The multistage vertical pumps robust and high efficiency design ensure long service life and low cost of operation. It can be found in many applications from residential pressure boosting, water supply in the highest buildings in the world, filter pumping, boiler feeding and industrial applications where high pressure is needed.



ULTRASONIC FLOW METER

An ultrasonic flow meter is a type of flow meter that measures the velocity of a fluid with ultrasound to calculate volume flow. Using ultrasonic transducers, the flow meter can measure the average velocity along the path of an emitted beam of ultrasound, by averaging the difference in measured transit time between the pulses of ultrasound propagating into and against the direction of the flow.



The ultrasonic flow meter uses the proven clamp-on transit-time correlation technique. The ultrasonic transducers are simply clamped onto the outside of the pipe and never come in contact with the fluid.



OUR PARTNERS :



GRUNTECH WATER SOLUTION

Water is a vital part of the manufacturing process. Gruntech has the complete solution for your needs. From design, audit, installation, servicing, system improvement and training. We can supply and support your requirements of pumps, instruments, demand base controllers, soft starters, variable frequency drives (VFD) and up to the sophisticated centralized control and monitoring systems of your water line.