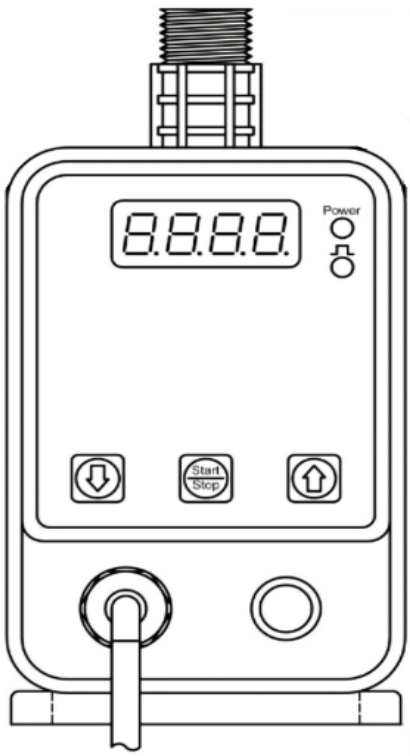
Instruction Manual

H Series

Electromagnetic Metering Pump



For file reference, please record the following data:

Model No:_____

Serial No:_____

Installation Date:_____

Installation Location:_____

Thank you for purchasing HAOSH metering pump. Before installing and starting to use this equipment, please read this manual carefully and we will not be liable for any damages caused by failure to follow this manual The contents of this manual are subject to change without notice.

Warranty Period and Coverage

[1] Upon arrival, please make sure that the product you receive is not damaged, and that the number ofaccessories and spare parts is complete. If damage occurs during delivery, please contact us immediately according to the warrantyregulations.

[2] The warranty period is one year from the date of delivery.
[3] During the warranty period, the manufacturer will repair or replace the parts free of charge if the parts fall off or are defective due to improper design and manufacture under the user's normal conditions of use.

[4] The user is responsible for the cost of repair or replacement in the following cases:
The product is out of warranty
It has been misused or stored incorrectly
Use of non-manufacturer specified, inferior grade parts
Damage caused by repairs or modifications not made by the manufacturer or the manufacturer'sdesignee.
Damage caused by fire, earthquake or other natural disasters.

[5] The manufacturer assumes no responsibility for products manufactured according to the user's standards, using raw materials specified by the user.

[6]The manufacturer assumes no responsibility for corrosion of the product due to chemical reaction caused by the fluid being fed or corrosion of the product by the fluid itself. The selection of the product given by the manufacturer on the basis of the user's requirements is only a recommendation for use and does not bear any responsibility for the consequences of use.

[7] The cause of failure or damage should be made after detailed discussion between the user and the manufacturer's service engineer.

[8]The manufacturer does not compensate for different costs resulting from a disaster during the use of the product.

Maintenance

During the use of the product, if the user finds any abnormality, please stop the operation of the product immediately, check whether any parts are out of work (refer to the instruction manual), and contact the manufacturer or distributor for maintenance.

Qualified Operators Only

The pump must not be operated by untrained personnel. Pump operators must have a sufficient knowledge of the pump.

Protective Clothing

Always wear protective equipment when working near your pump. Refer to MSDS precautions from your solution supplier.

Ventilate

Dosing to xicorod or ousmedia may result poisonings. Ensure the operating site with good ventilation.

Fittings and Machine Threads

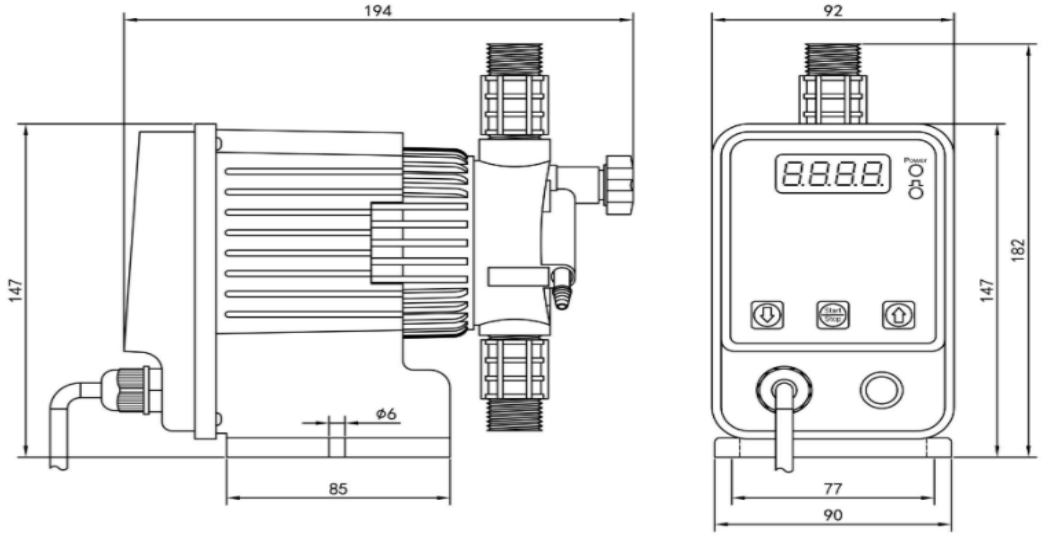
All fittings should be hand-tightened.

Excessive tightened can cause damage to the fittings or pump head. Teflontape may only be used on the NPT thread side of the injection check valve.

Make certain that all tubeis securely attached to fittings priortostart-up Check tube frequently for cracks and replace as necessary.

Product Introduction

Dimension Unit:mm



Model Introduction

Technical Data				
Model	Pressure (Bar)	Flow (L/H)	Power (W)	Connection Size
H0701	7	1	24	6*4mm
H0702	7	2	24	6*4mm
H0703	7	3	24	6*4mm
H0704	7	4	24	6*4mm
H0506	5	6	24	6*4mm
H0309	3	9	24	6*4mm
H0211	1.5	11	24	6*4mm

Liquid Ends Material		
Component	Standard	Optional
Pump Head	PP	/
Diaphragm	PTFE	/
Valve Body	PP	/
Valve Ball	Ceramics	PTFE
Valve Seat	PTFE	/
Valve Spring	Hastelloy	/
Seals	FPM	EPDM

This metering pump consists of two main parts, the control part (containing the electromagnetic integration module) and the touching part (in contact with the fluid to be added)

The contact tip section is compatible with most chemicals in common use. Given the variety of chemicals available on the market, we recommend that the user verify the compatibility of the chemical being pitched with the contact tip material.

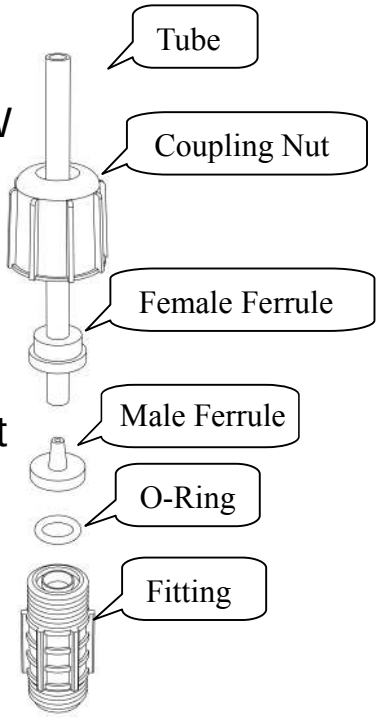
1.Technical Data

H series is a PTFE diaphragm-type metering pump,stroke speed can beadjusted.

Metering reproducibility:±2%

Electrical connection: 220V±10%, 50/60Hz

Type of enclosure: IP55 Insulation class:F Power:≤24W



2. Pump Location and Installation

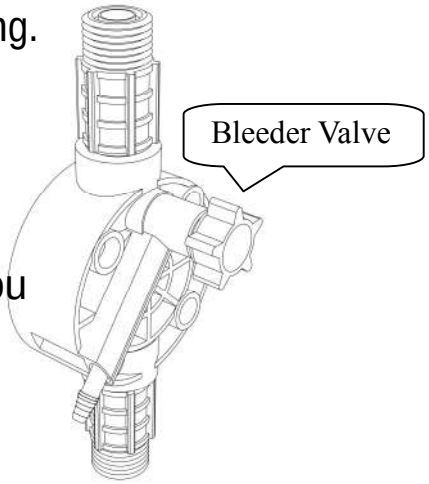
Locate pump in an area convenient to solution tank and electrical supply. The pump should be accessible for routine maintenance and must be mounted so that the suction and discharge valves are vertical.

① Insert Tube through Coupling Nut.

② Position the Female Ferrule about one inch from end of Tube

③ Push the Tube into the bottom of the Male Ferrule.

④ Firmly hand tighten the Coupling Nut onto the Fitting.



3. Start-up and Adjustment

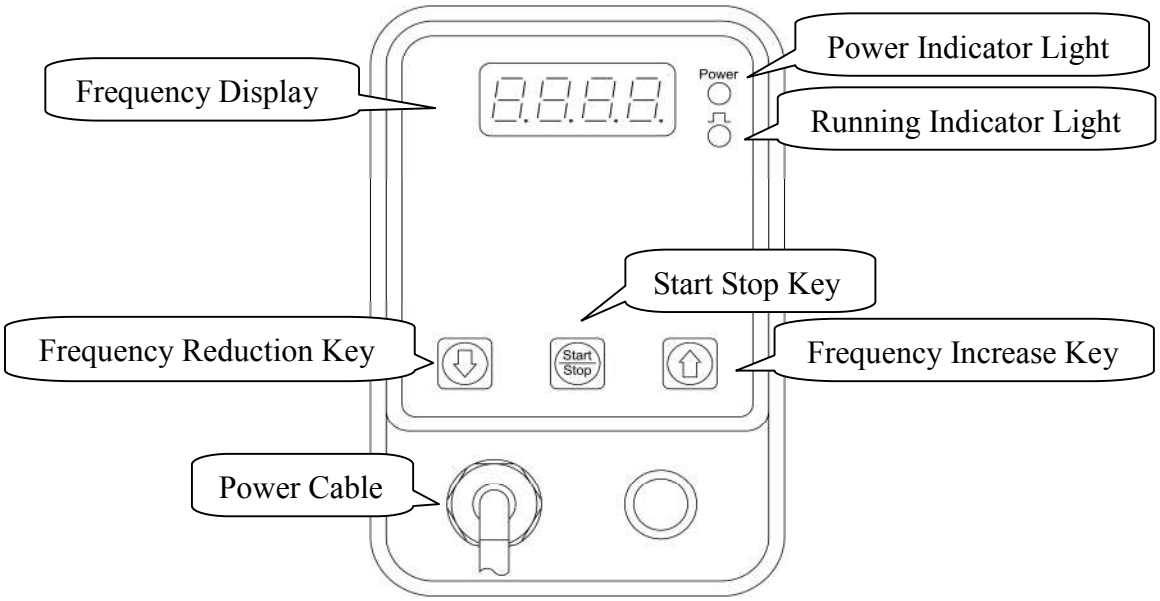
When all precautionary steps have been taken, the pump is mounted, and the tubeis securely attached, you may now start priming the pump.

① Plug in and switch the pump on.

② When pump is running, set the pump frequency to 180pulse/min

③ Open the Bleeder Valve anti clock wise appox.1turn，the suction tube should begin to fill with solution from the tank，a small amount of solution will begin todischarge out the by pass hose socket,once this happens,close the Bleeder Valve clockwise, the pump is now primed.

4. Flow Adjustment and Control Settings



Frequency Display: The first three digits display the working frequency of the pu mp, and the last one is the letter H. When the pump works normally, H isalways on,and when the pump stop running, H flashes.

Power Indicator Light: When the pump is powered on, the power indicator light is always on.

Running Indicator Light: When the pump is running, the running indicator light flashes continuously according to the running frequency of the pump.

Start Stop Key: To start or stop the pump,press once to change the start or stop state.

Frequency Reduction Key: Reduce the operating frequency of the pump to redu ce the delivery flow of the pump.

Frequency Increase Key: Increase the operating frequency of the pump to incre ase the delivery flow of the pump.

Trouble shooting

Trouble shooting	Causes of trouble	Methods of exclusion
Pumps work normally, but dosing is interrupted	The import and export valve is blocked	Clean the valve, if the obstruction cannot be removed, replace the valve with a new one
	Excessive suction height	Reposition the pump or barrel, thereby lowering the suction height
	High fluid viscosity	Reduce the suction height or use a pump with a greater flow rate
Insufficient Flow	Valve is leaking	Check the ring nut for looseness
	High fluid viscosity	Reduce the suction height or use a pump with a greater flow rate
	Local blockage of the valve	Clean the valve, if the obstruction cannot be removed, replace the valve with a new one
Excessive flow or instability	Siphoning at the discharge end occurs	Check that the injection valve is correctly installed. If the flow rate is insufficient, install a backpressure valve
	Clear PVC tubing was incorrectly used as the drain tube.	Use of opaque PE tubes
	Pump calibration is in error	Check pump flow at system pressure
Diaphragm breakage	Excessive back pressure	Check system pressure and check for clogged injection valves. Check for blockage between the drain valve and the injection point.
	Fluid runs out, pump idles	Check if the bottom valve filter is installed. If you want to stop the pump when the chemicals in the bucket are used up, please install a level meter
	Poorly protected diaphragm	Replace the diaphragm with a new one and ensure that it is installed correctly
Pump not starting properly	Under voltage	Check if the connection voltage matches the voltage marked on the nameplate

Note: Detailed instructions for use are attached.

The working voltage of the electromagnetic pump is 220V/50Hz, and it is absolutely not allowed to connect to 380V AC power, otherwise it will cause the circuit board to burn out; This pump can withstand a small amount of rated voltage, but to prevent damage to the pump, it is best not to connect the pump to an electrical power source that may generate voltage.

In order to reduce electric shock, the power socket of the metering pump must be well grounded, the earth wire and the zero wire should be separated, and the rubber cap of the pump head bolt should be covered, and the conversion socket should not be used.

Prolonged empty pumping is strictly prohibited (preferably no more than 3 minutes)

When the chemical to be added may react with water, such as concentrated sulphuric acid, the pump chamber must be drained before starting the pump (there is a small amount of water in the pump head at the factory).

The metering pump must not be used above the rated pressure (maximum working pressure). The rated pressure value is marked on the metering pump nameplate in bar (1 bar = 1 kg force/cm2 = 10 m water column). If the rated pressure is exceeded, the pump may be damaged;

The pump must not be installed in an environment where the temperature does not exceed 40°C and the relative humidity is not greater than 90%; the pump must not be installed in a place exposed to sunlight; the pump must not be placed in a place exposed to rain.

Select a place where the pump can be easily inspected and maintained, and secure the pump to prevent unnecessary vibration. Do not install the pump body horizontally or at an angle; the inlet/ outlet valves of the pump head must be kept perpendicular to the horizontal plane;

Confirm that the direction of the pump inlet and outlet pipelines is installed correctly, with the inlet valve of the pump facing vertically downwards and the outlet valve facing upwards. It is absolutely not allowed to connect in the opposite direction; The inlet and outlet valves cannot be interchanged. When cleaning the inlet and outlet valves, it is necessary to follow the steps shown in Figure 1 to disassemble and install them. If any of the parts inside are lost, the pump will not function properly; Ensure that the inlet/outlet valves are clean;

Quality Certificate

We hereby declare that this product have been inspected and complies with relevant quality and safety stipulations laid down by our company,a qualified product will be included in our warranty.

Product name: H Series Electronic Metering Pumps

Manufacturer signature: