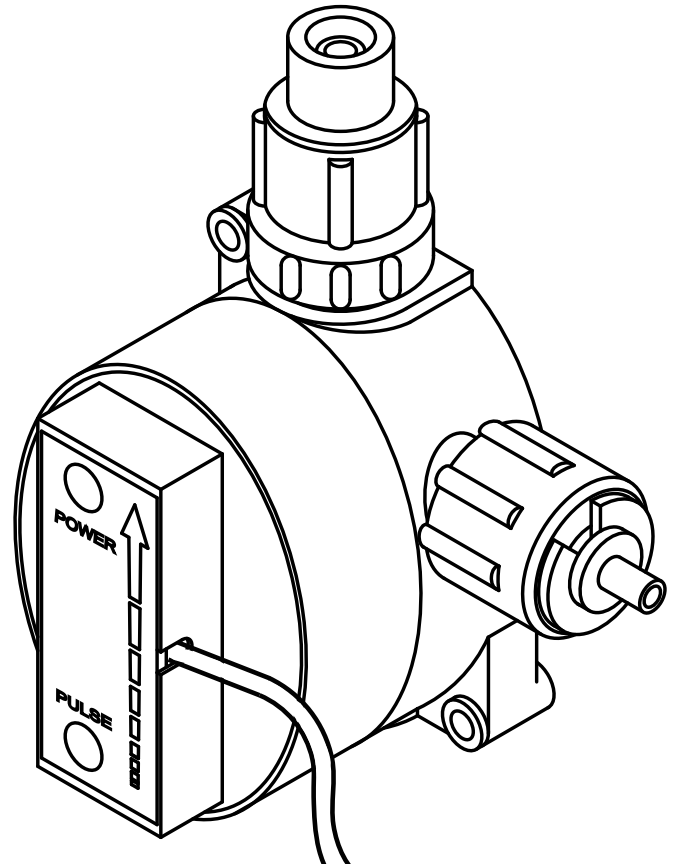


FloTracker

Pump Output Monitor

***Installation
Maintenance
Repair
Manual***



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FloTracker

Instruction and Maintenance Manual

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I. Introduction

This instruction manual covers all facets of operation of the Advantage Controls FloTracker, including mounting, electrical and plumbing connection, and start-up. Safety, maintenance and repair, warranty, and factory information are also provided. Please read this manual completely before proceeding. Observe safety protocols and heed all warnings and precautions.

Model Numbering

If purchased as a stand along item, FloTracker model numbers define the materials of construction. If ordered as part of a MicroTron pump, the pump model number will define materials of construction of the pump. To determine what features apply to your FloTracker, check the model number label located on the FloTracker.

FloTracker Model Number

FLT-R K V C 1

FloTracker Body Material

R = Ryton

K = Kynar

Check Valve Body Material

K = Kynar (PVDF)

M = Kynar Head w/ SS MNPT Valves*

S = 316SS*

Seat Material

V = Viton

F = Teflon

H = Hypalon

Check Ball

C = Ceramic

D = Ceramic single on discharge

S = Stainless

Tubing Connections

1 = 3/8" PE, models up to 150 psi

2 = 1/4" PE, 250 psi models

3 = 3/8" PE on 250 psi models

P = 1/4" MNPT

V = 3/8" Clear flexible suction tubing

* M and S Body options require P connection code and do not include tubing, foot, or injection fittings.

II. Unpacking

The Advantage FloTracker has been shipped to you as a complete package, ready for installation. If shipping carton shows any signs of damage, notify the shipping company immediately upon receipt. Advantage Controls cannot be held responsible for damage from shipping. Unpack the carton and insure that the following items are present:

1. FloTracker
2. Tubing Connectors
3. Instruction manual

III. Safety Considerations

Note: All FloTrackers are tested with water before leaving the factory. If the pumped solution is not compatible with water, disassemble the fluid end and dry before use.

A. Chemical Compatibility

FloTrackers are designed to work with most liquid chemicals. A chemical resistance chart is available for determining specific compatibility with a wide variety of chemicals. If you have further compatibility questions, contact Advantage Controls service department at 918-686-6211.

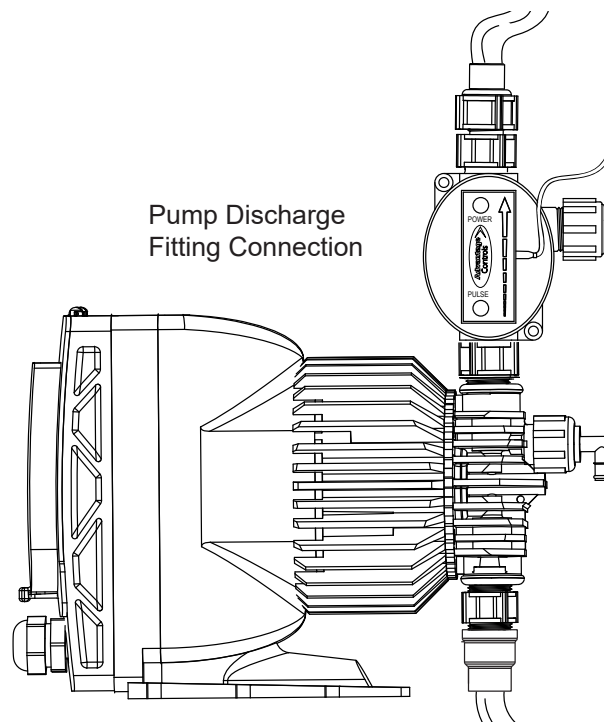
B. Safety Equipment and Preparation

Always wear the proper protective clothing and gear when working around chemicals and chemical metering pumps. Safety glasses, gloves, and aprons are critical in preventing accidental exposure to dangerous chemicals. Liquids under pressure can present a special hazard when a line or seal is punctured resulting in the spraying of chemical many yards away. If a chemical spill occurs, consult the Material Safety Data Sheet (MSDS) for specific instructions regarding the chemical being used.

IV. Installation

A. Mounted Directly onto a MicroTron Pump

The FloTracker mounts directly to the discharge side of a MicroTron metering pump's head using a special mounting fitting and a 1/4" MNPT nipple. This allows the FloTracker to be positioned at the desired rotation for best viewing.



B. Wall Mounting

The FloTracker has two mounting holes for easy wall mounting. It must be mounted vertically so the liquid flows up through the bottom connection point and out the top. A pressure relief valve on the side allows for any trapped air to be released with return tubing back to the chemical drum.

With the FloTracker securely mounted to a flat wall or panel surface in a vertical position, tubing or piping connections can be made. Connection sizes available are 1/4", 3/8" o.d. tubing or 1/4" MNPT.

Do not attempt to reduce tubing size. All tubing connections should be double checked to insure against leakage. If hazardous chemicals are being pumped, use shielding around discharge tubing.

NOTE: When cutting lengths of tubing for your installation, ensure a clean, square cut. Use short lengths of tubing and as few connections as possible.

Do not overtighten the tubing connectors. Tighten the fittings no more than 1/4 turn after the fitting contacts the seal. Hand tighten only. **Do not use a wrench or pliers** as they may damage the fittings. Do not use Teflon tape except on NPT fittings. **Be sure to observe applicable local plumbing codes.**



WARNING: Clear flexible tubing is not intended for pressurized use.

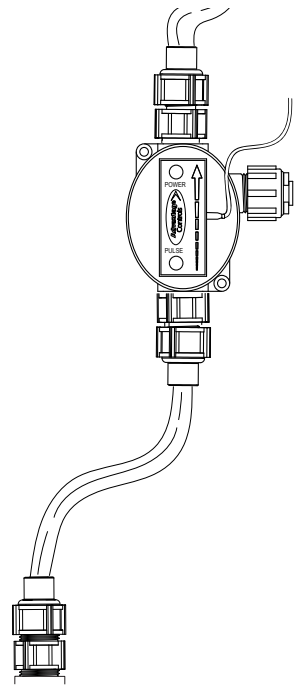
C. Electrical Connection

The FloTracker uses a three conductor cable to connect to a MicroTron pump or external controller such as the Advantage Controls' MegaTron to monitor it's signal. The incoming power supply to the FloTracker must be from 4.5 - 12 VDC, 20mA max.

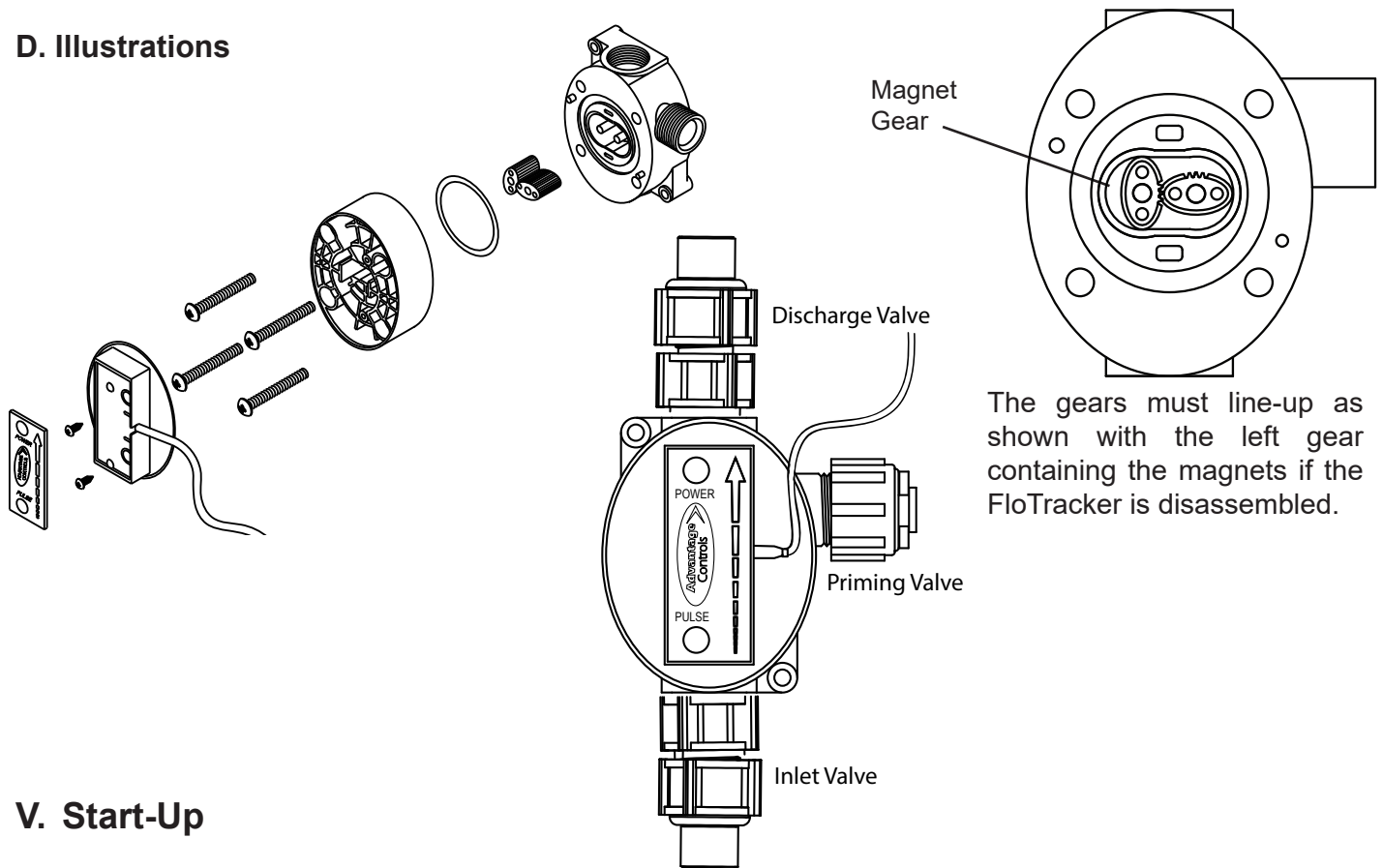
Wire Color Codes

Red = Power Supply (+4.5 to 12 VDC)
White = Signal
Black = Ground

Inline connection
for wall mounting



D. Illustrations



V. Start-Up

A. Operation

The FloTracker is a positive displacement flowmeter using elliptical gears that turn as fluid passes through them. The gears have a built-in magnet that generates an open collector pulse output as they rotate. This pulse output will be in the range of 3.0 to 3.5 mL (0.1 oz) per pulse.

B. Status LEDs

There is a Power LED and a Pulse LED on the FloTracker. The power LED indicates that the unit has power and the pulse LED indicates a contact closure. The Pulse LED may stay on while the pump is not pumping if the gears have stopped in a position that keeps the contact closed.

C. Priming

To insure proper operation, open the priming valve on FloTracker and turn on the pump at max stroke and speed, until liquid has completely filled the suction tubing, pump head and FloTracker. Close priming valve for normal operation and set speed and stroke to desired values.

VI. Maintenance

If the FloTracker is used within the designed flow and liquid specifications, there should be little need for maintenance. If a malfunction should occur in the pulse output, the following steps should be followed:

1. Remove the nameplate / LED cover. (see page 6)
2. Remove the two screws inside the sensor case.
3. Remove the four bolts that hold the body together.
4. Remove debris from gears. Check that the gears will rotate freely by gently rotating the right gear clockwise.
5. Align the gears so that the left gear housing the magnets is in a vertical position and the right gear is in a horizontal position. (see page 6)
6. Reassemble body, sensor case and nameplate.

VI. Manufacturer's Product Warranty

Advantage Controls warrants units of its manufacture to be free of defects in material or workmanship. Liability is limited to repair or replacement of any failed equipment or part proven defective in material or workmanship upon manufacturer's examination. Removal and installation costs are not included under this warranty. Manufacturer's liability shall never exceed the selling price of equipment or part in question.

Advantage disclaims all liability for damage caused by its products by improper installation, maintenance, use or attempts to operate products beyond their intended functionality, intentionally or otherwise, or any unauthorized repair. Advantage is not responsible for damages, injuries or expense incurred through the use of its products.

The above warranty is in lieu of other warranties, either expressed or implied. No agent of ours is authorized to provide any warranty other than the above.

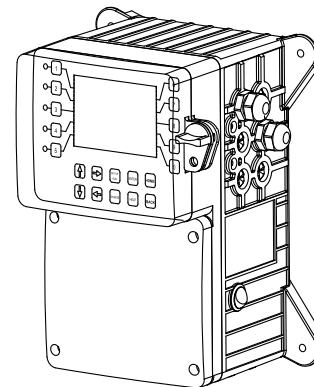
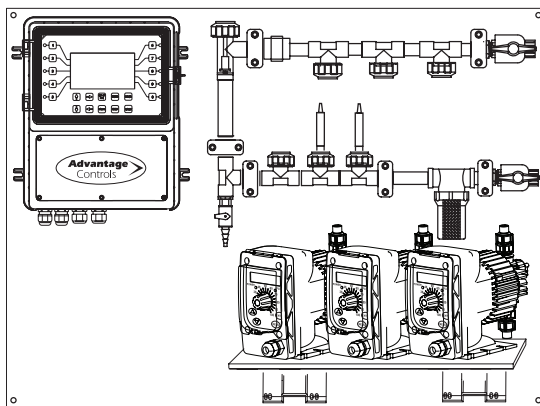
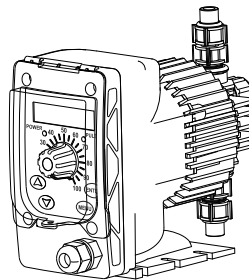
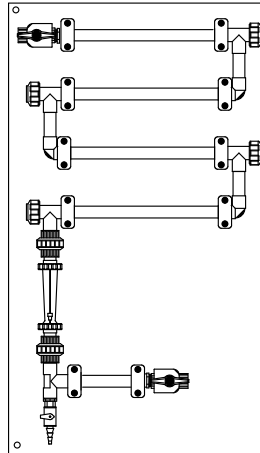
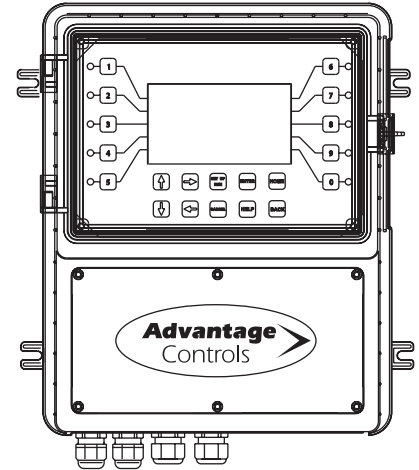
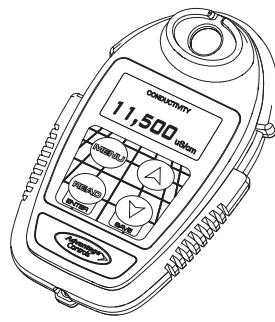
30 Day Billing Memo Policy

Advantage Controls maintains a unique factory exchange program to ensure uninterrupted service with minimum downtime. If your unit malfunctions, call 918-686-6211, and provide our technician with Model and Serial Number information. If we are unable to diagnose and solve your problem over the phone, a fully warranted replacement unit will be shipped, usually within 48 hours, on a 30 Day Billing Memo.

This service requires a purchase order and the replacement unit is billed to your regular account for payment. The replacement unit will be billed at current list price for that model less any applicable resale discount.

Advantage Controls can give you the *Advantage* in products, knowledge and support on all of your water treatment equipment needs.

- Cooling Tower Controllers
- Boiler Blow Down Controllers
- Blow Down Valve Packages
- Solenoid Valves
- Water Meters
- Chemical Metering Pumps
- Corrosion Coupon Racks
- Chemical Solution Tanks
- Solid Feed Systems
- Feed Timers
- Filter Equipment
- Glycol Feed Systems
- Pre Fabricated Systems



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