ISO 9001:2008 CERTIFIED COMPANY

FEATURES

- Batch control
- Regeneration control
- High/low flow rate monitoring
- Water usage monitoring

APPLICATIONS

- Cosmetics manufacturing
- Water treatment system maintenance
- Water leakage detection
- Precision refill of cooling towers & tanks

GENERAL INFORMATION

The FT500-Series is a batching flow processor with additional output controls. It is designed for use with Seametrics flow meters and flow sensors, as well as other manufactuer's products which have frequency output proportional to flow. In addition to batch functions, the FT500-Series indicates flow rate, and other data in large 3/8" (9.66 mm) digits on an easily-read, backlit display. Units of measure are user selectable, and range from milliliters per second to millions of gallons per day. The unit can be 110 Vac powered with a standard 3-wire cord (included), 220 Vac powered (optional), or DC powered through an internal terminal strip (battery not included).
An analog output of 4-20 mA is available both in active and passive loop configuration, and in 0-5 Vdc or 0-10 Vdc outputs, and can be used in applications such as flow rate logging. Two programmable pulse scaled outputs are also standard, and can be used, for example, to provide proportional chemical feed with a pulse-responsive metering pump.

The housing is supplied with two brackets for wall-mount applications, or the top/bottom housings can be easily separated and reassembled for panel-mount.

Seametrics

FEATURES

Cover Screws*

Display

Setting Keys

Indicator Lights

*Can be ordered cross-drilled for seal wire

SPECIFICATIONS*

Power	115 Vac, 50/60 Hz @ 125 mA, 12 Vdc @ 750 mA or 10-16 Vdc (220 Vac optional)
Temperature	32˚ - 130˚ F (0˚ - 55˚ C)
Enclosure	Precision cast aluminum, NEMA 4X, panel or wall mount configuration
Batch Outputs	Two form C (SPDT) relays, 115 Vac 6A max
Max Pulse Output	100 mA at 60 Vac/Vdc, opto-isolated, open-collector
Memory Type	Non-volatile EEPROM with auto-backup
Sensor Power	12 Vdc, 10 mA
Display	Totalizer = 8 digit Rate = 5 digit, backlit
Units	Volume = Gallons, cubic feet, cubic meters, millions of gallons, milliliters, fluid ounces, pounds, liters Time = Seconds, minutes, hours, days
Analog Output	4-20 mA passive opto-isolated; 4-20 mA active; 0-5 Vdc, or 0-10 Vdc
Sensor Input	1-1000 Hz, ESD protected, interfaces to current sinking sensor output
Environmental	NEMA 4X
Setup Memory	Non-volatile EEPROM, auto-backup

*Specifications subject to change • Please consult our website for current data (www.seametrics.com).

> FT520 Batch Controller

In Batch Processing Mode, the display indicates a flow rate on the top line, and one of three configurations on the bottom line: an accumulated total flow (resettable), accumulated batch flow, or batch process bar graph. The batch output is controlled via two relays. The main relay starts and stops the batch as a set, or the auxiliary "prewarn" relay can be used to operate a second valve. This allows increased accuracy by engaging a staged shut off at the end of the batch.

Settings are:
- SET Batch Size
- SET Prewarn Size
- SET Flow volume units
- SET Rate of flow in time base
- SET Decimal from whole numbers, to tenths, to hundreths
- SET K-factor
- SET Pulse (scaled) Output 1
- SET Pulse (scaled) Output 2
- SET 20 mA Rate for maximum estimated flow
- Clear Total

> FT520-84 Filter Regeneration

In Filter Regeneration Mode, the display indicates a flow rate on the top line, and one of two configurations on the bottom line: an accumulated total flow (resettable), or batch process remainder. The regeneration process is initiated by setting a target volume, a set value for regeneration time as well. A single relay or alternate relay setting allows control of either single tank or alternating dual tank systems.

Settings are:
- SET Flow volume units
- SET Rate of flow in time base
- SET Decimal for rate and total to two decimals
- SET K-factor
- SET Pulse (scaled) Output 1
- SET Pulse (scaled) Output 2
- SET 20 mA Rate for maximum estimated flow
- SET Regeneration Volume
- SET Regeneration Time in seconds (3 digits)
- SET Relay Mode to one or alternate relays
- Clear Total

> FT520-86 Flowrate Alarm

In Flowrate Alarm Mode, the display indicates a flow rate on the top line, and on the bottom line, an accumulated total flow (resettable). The user sets a minimum and maximum flow rate, and if the flow exceeds the min/max paramenter, relay1 or relay2 will close. The output relay will stay latched until the flow rate increases/decreases back between the min/max settings.

Settings are:
- SET Flow volume units
- SET Rate of flow in time base
- SET Decimal for rate and total to two decimals
- SET K-factor
- SET Pulse (scaled) Output 1
- SET Pulse (scaled) Output 2
- SET 20 mA Rate for maximum estimated flow
- SET Low Flow Alarm
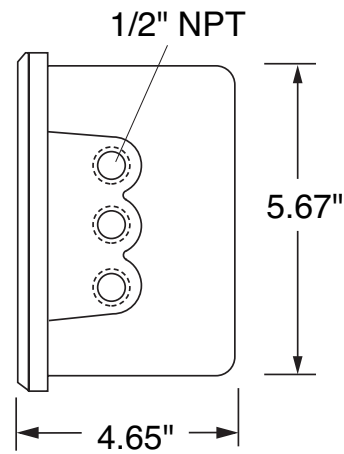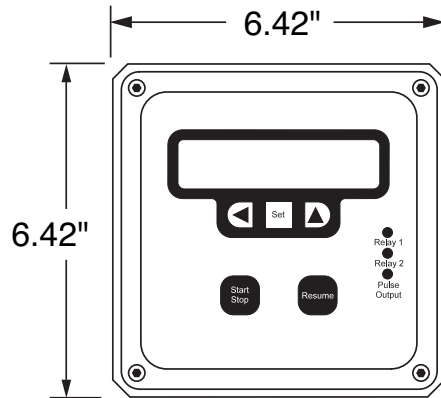- SET Hi Flow Alarm
- Clear Total

> FT522 Usage Monitor

In Usage Monitor Mode, the display indicates one of two configurations: an elapsed time and elapsed flow, and a flow rate and accumulated total flow (resettable). A time period is set to monitor for a set maximum total flow. If the total flow is reached within the set time, an output relay is closed. The output relay stays latched until the system either resets automatically after the set time, or is reset manually via Stop/Start. A reset condition clears the elapsed time and flow, but not the accumulated total flow.
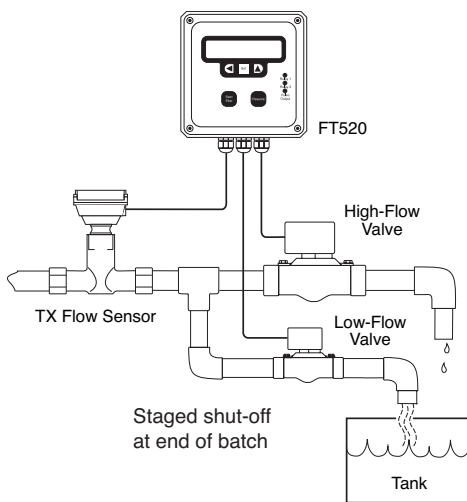
Settings are:
- SET Flow volume units
- SET Rate of flow in time base
- SET Decimal for rate and total to two decimals
- SET K-factor
- SET Pulse (scaled) Output 1
- SET Pulse (scaled) Output 2
- SET Time Period from 01-48 hours
- SET Alarm Reset to automatic or manual
- SET Alarm Point in Flow (8 digits)
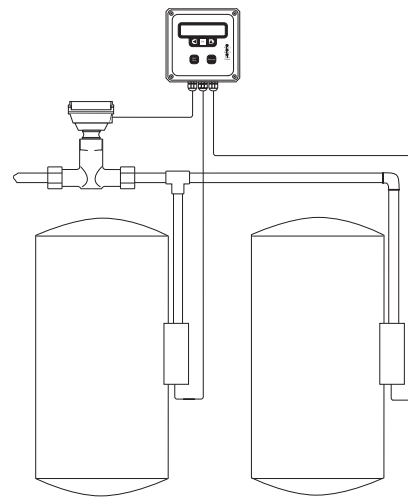- SET 20 mA Rate for maximum estimated flow
- Clear Total

DIMENSIONS

6.42"

6.42"

Relay 1
Relay 2
Pulse Output

Set

Start Stop

Resume

1/2" NPT

5.67"

4.65"

TYPICAL DUAL FLOW BATCH APPLICATION

FT520

High-Flow Valve

TX Flow Sensor

Low-Flow Valve

Staged shut-off at end of batch

Tank

ALTERNATING TANKS APPLICATION

HOW TO ORDER

MODEL	MOUNTING	OPTIONS
AC/DC Power, Rate/Total/Batch Indicator = **FT520** Usage Monitor = **FT522**	Wall mount = **W**	Regeneration Control = **-84 (FT520 Only)** Alarm Relay Output = **-86 (FT520 Only)** 220 vac Input **= -121**

CONTACT YOUR SUPPLIER

LT-65650012-E
3/29/10