

# FLOWtrol *Batch Controller*

## Features

- Start/Stop Buttons and Remote Inputs
- Programmable K-Factor
- Batch Total and Grand Total
- Two DPDT Relay Outputs for Two Stage Shut Off
- Pulse Input to 20 kHz Count Frequency

## Description:

The FLOWtrol is a batch controller intended for use with pulse producing flowmeters. The FLOWtrol offers control outputs consisting of DPDT Relays rather than SPDT Relays. The Flowtrol may be applied in existing applications seeking to expand their batching operations with compatible units.

The FLOWtrol was the fore runner to the BATCHtrol II. However, it lacks the rate display, analog input and Easy Preset capabilities now available in the BATCHtrol II. The BATCHtrol II is recommended for all new applications.

## Specifications:

**Display:** 8 digit, .55" high, 15 segment bright LED.

## Input Power:

- A) 115 VAC ±15% or 12 to 27 VDC
- B) 230 VAC ±15% or 12 to 27 VDC

**Current:** 280 mA DC max. or 5.3 VA at rated AC voltage.

## Output Power: (on AC powered units only)

+12 VDC @ 100 mA and separate isolated 12 VDC @ 100 mA to allow ±12 VDC or + 24 VDC, regulated ±5% worst case.

## Input: (count/start/stop/reset)

- High: 3 to 30 VDC
- Low: open or <1 VDC
- Impedance: 10 kΩ
- Frequency: 20 kHz max.

Inputs: Positive edge triggered, 3 μsec/61 μsec/5 msec selectable debounce filtering.

## Control Output: (preset and prewarn)

DPDT relay, 5 amp, 115 or 230 VAC

**Temperature:** 32° to 132°F (0° to 55°C)

**Humidity:** 0 to 90% (non-condensing)

**Memory:** EEPROM stores all program and count data for minimum of 10 years if power is lost.

**Dimensions:** See BATCHtrol II

**Approvals:** CE Approved, UL/CSA Pending

# KEPtrol F/C *Measures Net Flow of Boiler Fuel*

## Features

- Flow (A) - Flow (B) Displays Net Rate & Net Total
- Pulse Input to 10 kHz Count Frequency
- Separate K-Factors for A and B inputs
- Set Point Alarms
- NEMA 4X/IP65 Front Panel

## Description:

The KEPtrol F/C is a special version of the KEPtrol R/T designed to measure the net flow of boiler fuel. Separate K-Factors can be entered for A and B inputs. Two SPDT relay alarm outputs are standard. A scaled pulse output is standard for interfacing with remote devices. An analog output is available to interface with strip chart recorders.

## Specifications:

**Display:** 8 digit, .55" high, 15 segment bright LED.

## Input Power: (Internally Fused)

- A) 115 VAC ±15% or 12 to 27 VDC
- B) 230 VAC ±15% or 12 to 27 VDC

**Current:** 280 mA DC max. or 5.3 VA at rated AC voltage.

## Output Power: (on AC powered units only)

+12 VDC @ 100 mA and separate isolated 12 VDC @ 100 mA to allow ±12 VDC or + 24 VDC, regulated ±5% worst case. The DC Outputs are supplied with resettable fuses.

## Pulse Inputs:

- Thresholds: High: 3 to 30 VDC; Low: open or <1 VDC
- Impedance: 10 kΩ
- Frequency: 10 kHz max. (min. on/off 100 μsec.)

## Control Output:

- Open Collector: Sinks 250 mA max @ 30 VDC
- SPDT Relay: 10 amp, 115/240 VAC or 28 VDC

**Temperature:** 32° to 132°F (0° to 55°C)

ET: Extended Temperature -40° to 158°F (-40° to 70° C)

**Accuracy:** 100% over specified temperature range

**Humidity:** 0 to 90% (non-condensing)

**Memory:** EEPROM stores all data for min. of 10 years if power is lost.

**Dimensions:** See KEPtrol R/T

**Approvals:** CE Approved, UL/CSA Pending

## Ordering Information

Example	KFC8	A	3A	2	E	1 3
KEPtrol F/C	—	—	—	—	—	—
<b>Operating Voltage:</b>	—	—	—	—	—	—
A: 110 VAC ±15% or 12 to 27 VDC						
B: 220 VAC ±15% or 12 to 27 VDC						
<b>Control Inputs:</b>	—	—	—	—	—	—
*3A: STD Pulse 3-30 VDC 20 kHz Max.						
*3B: As 3A, with 4.7 KΩ pull up resistors						
<b>Control Outputs:</b>	—	—	—	—	—	—
1: Open Collector						
2: SPDT Relay 10A						
<b>Input Speed:</b>	—	—	—	—	—	—
*A: 0-40 CPS (Inputs 3A, 3B)						
*C: 0-400 CPS (Inputs 3A, 3B)						
*E: 0-10K CPS (Inputs 3A, 3B)						
*Dip switch selectable, all units can be field modified easily.						
<b>Options: (Multiple Options Available)</b>	—	—	—	—	—	—
1: RS232 Serial Interface						
2: RS422 Serial Interface						
3: 4-20 mA Output (Input 3A or 3B only)						
3X: 0-20 mA Output (Input 3A or 3B only)						
3Y: 0-5VDC Output (Input 3A or 3B only)						
3Z: 0-10VDC Output (Input 3A or 3B only)						
ET: Extended Temperature -40° to 158°F (-40° to 70° C)						
<b>ET not available with analog outputs</b>						
CSA: CSA Approved Unit (pending) ..... (consult factory)						

## Ordering Information

Example	FLO8	A	1
FLOWtrol	—	—	—
<b>Operating Voltage:</b>	—	—	—
A: 110 VAC ±15% or 12 to 27 VDC			
B: 220 VAC ±15% or 12 to 27 VDC			
<b>Options:</b>	—	—	—
1: RS232 Serial Interface			
2: RS422 Serial Interface			