

Batch Controller

BC110



BC110 Series

BC110 Series Batch Controller
2Line*16-Characte LCD Display
(LED Back light)

Batch Controller

BC110

General

Display

2-Line *16-character LCD display
with LED back Light

Display Update Rate 0.25-second

Decimal Points

Fully programmable for Rate and Total

Time Base

The Rate can be displayed in unit per second, per minute or per hour.

Data Retention

Set up parameters and totals stored in non-volatile memory with 10 years retention.

Operation Temperature

0 to 55°C

Power AC 110 or 220V / DC 24V

Power Consumption 6VA

Transducer Supply

DC 12V 50 mA max

Flow Inputs

Frequency(Pulse) Input

Frequency Range 0 to 5 kHz

Signal Type

sine wave, open collector, reed switch, proximity switch, voltage and current pulse

K-factor Range

0.0001 –9000000.0000(the pulse per units)

Analog Input

Inputs 4-20 mA or 1-5V option

Input Impedance

Current : 250 ohms

Voltage : 10K ohms

Accuracy 0.05%

Zero 0.0000 to 50000.0000

Span 0.0001 to 50000.0000

Cut-off Point

A low flow rate cut-off can be Programmed below which flow is not Registered. The cut-off is programmed as a percentage of span Relationship Linear or square root

End of Batch Output

Function

An End of Batch is defined as being when the batch quantity is reached, the flow has stopped and the signal timeout period has expired.

Output

Current sinking output transistor 50 mA, 30vdc max.(Pulse output is suitable for driving remote counter or PLC's)

Relay Output

Function Two stage valve control

Max. Switching Power 2000VA, 240W

Max. Switching Voltage AC250V, DC30V

Max. Switching Current 5 Amps

4-20mA Output

Function The flow rate is output.

Resolution 10-bit.

Accuracy Better than 0.1%

Maximum Load

500 ohms internally powered. 950 ohms from external 24V dc.

Isolation Non-isolated.

Enclosure

Dimension 48 mm(H) x 96 mm(W) x 125 mm(D)

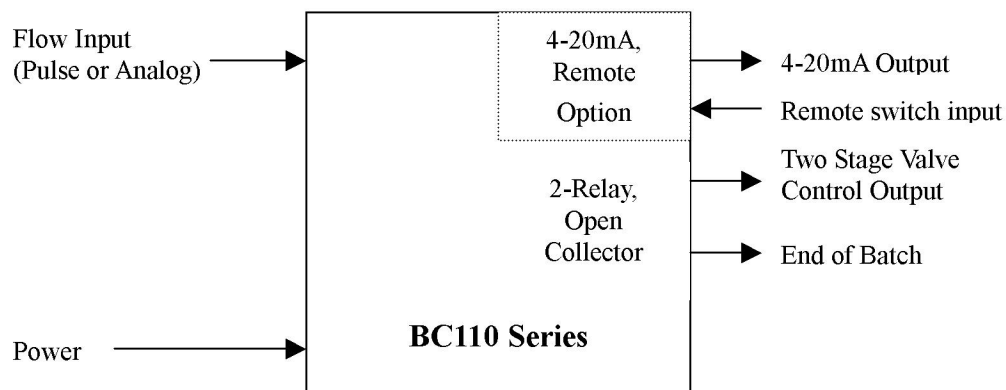
Material Polycarbonate and Aluminum

Cutting Size 45 mm x 92 mm(±0.2 mm)

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Block Diagram



Analog out put (4-20mA)



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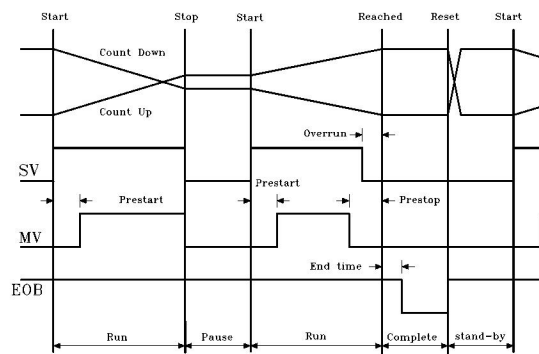
Batch Features

One or two stage valve control

Two output relays provide control for single or dual stage valve operation.

The first relay(SV) will energize at the start of the batch, and de-energize when the batch is complete.

The second relay(MV) can be programmed to energize at a set time or set quantity after the start, and to de-energize at a set quantity prior to completion of the batch. This feature enables a slow start-up and slow shut-down of the flow.



Manual Overrun Compensation

Based on previous batches, the BC100 series will be manually compensated for any overrun that may be caused by slow closing valves.

Signal Time Out

If the flow signal cuts out midway through a batch, the output relays are de-energized, and an alarm signaled via an open collector output.

Remote Start/Stop/Reset

Remote push-button switches can be connected to the rear terminal strip, to start, stop and reset batches.

Count Up/Down

The instrument can be programmed to count up from zero, or to count down from the batch quantity.

End of Batch

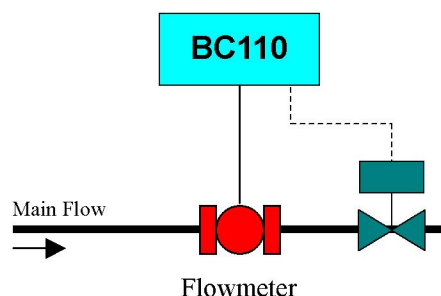
An End of Batch signal is provided via an open collector transistor output.

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Feature

- Batch count / accumulated total / flow rate
- Accepts 4-20mA and frequency flow inputs
- End of Batch signal output
- One or two stage valve control
- Slow start and slow stop



Over View

The BC110 series batch controller are designed to control one or two stage valve for batch process and are provide highly reliable results for the variety of industrial requirement.

The BC110 series has micro-processor inside, which makes it dependable and the controller also has pulse input such as sine wave, open collector, reed switch and even analog input.

The BC100 has two Relay. And two relay is can using one or two stage valve control.

The 4-20mA Output and remote switch as an option.

Ordering Information

MODEL	Order Code				Description
BC110 –					Basic Model Name
Sensor	P				Frequency Type Flow Meter Input
	A				4-20mA Analog Type Flow Meter Input
In/Output		0			Basic Model (No Option)
		1			4-20mA Analog Output
		2			Remote Switch Input
Power			A		AC 110V
			E		AC 220V
			D		DC 24V

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Dimension

