BC7 BATCH CONTROLLER

The BC7 will automatically deliver a preset quantity of liquid and display the flow rate and batch quantity.

Easy to use ✓
- Quick and easy to set up
- Press one button to start a batch
- Large easy to read displays
- Preset to your requirements

Automatically compensates for errors ✓
- Save time
- Reduce waste
- Reduce cost
- Improve product quality

Robust design ✓
- Tough aluminium case
- Splash proof front

No flow alarm ✓
- Safely shuts down if your flow is interrupted

Works with most flowmeters ✓

High quality manufacture ✓
- ISO 9001 certified company

Application

This instrument has a huge range of uses, from container filling to tanker loading.You can use it to deliver any preset quantity of liquid accurately and reliably.

Operation

To start a batch simply press the run button. One display will show you the batch count whilst the other can be set to show either the flowrate or the preset batch quantity.
You can use the BC7 in two ways.
1 : Single relay operation. The run button operates a relay to control a valve or pump, which is automatically shut off at the end of the batch.
2 : Dual relay operation where 2 relays can be used independently to control valves and pumps for slow start and slow stop applications.
Two LED's show you when either of the two relays are energised.

Installation and Set-up

The displays can be set for any units e.g. litres or gallons. The setup is easy using the keypad and a 'beep' is sounded with all keystrokes. The BC7 can be supplied preconfigured for your application. Operator access to the setup menu and any functions can be inhibited.

Features

Overrun compensation: The controller can automatically compensate for errors caused by slow acting valves and deliver exactly the volume you want.
No flow alarm: If there is a problem and the signal from the flowmeter stops an alarm will be given and the batch will be stopped.
Linearisation: The accuracy of your system can be improved by programming any flowmeter errors into the BC7.
There is a non resettable total to allow you to monitor long term usage.

Construction

The Batch Controller is in a standard ¼ DIN format to mount in a panel.
The front keypad is a sealed unit which provides you with a splash proof seal that is resistant to most chemicals.

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BC7 Batch Controller

Specification

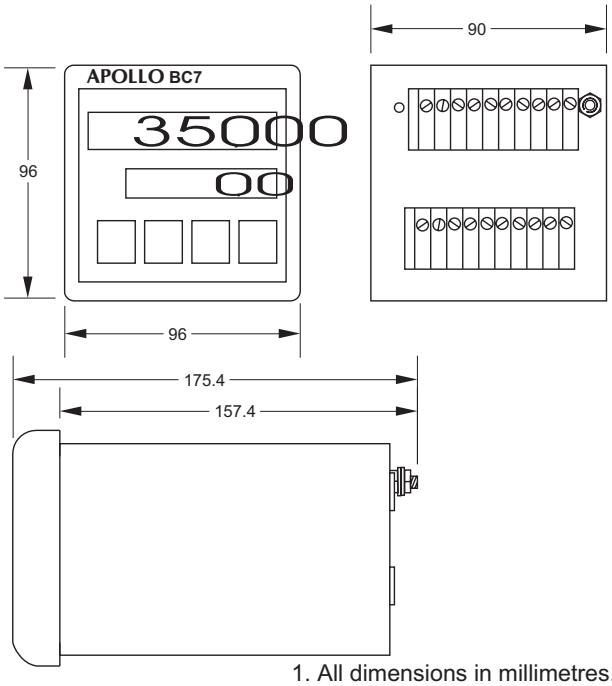
Construction:	Panel mounting instrument
Case	Black powder coated aluminium
Bezel	High impact phenolic plastic
Front keypad	Polyester
Protection	IP65 - bezel / face
Dimensions:	H 96mm X W 96mm X D 175.4mm
Panel Cut-out	92mm X 92mm
Weight	1.2 kgs
Power input:	
Mains	110 or 230 V AC 45-65 Hz
DC Supply	12 - 24 V DC
	300mA typical
Power output:	8 - 24 V DC 50mA
Display:	6 digit 14mm high LED
	6 digit 10mm high LED
Temperature Range:	0 - 45 ^{O}C
Connections:	2 rows of through panel screw terminals
Input signals:	Frequency range 0 to 5 kHz
1. Pick-off Coil	
Sine wave min.	7mV all frequencies
Sine wave max.	35V high frequency
	15V low frequency
2. Preamplifier	
Switch level	Low level < 8mA
	High level > 12mA
	Input current max.50mA
3. Switch	
Energising voltage	5V
Energising current	0.5 mA
4. Pulse	
Switch threshold	Selectable 2.5V or 1.4V
5. Proximity switch	Namur DIN 19234
Switch threshold	2.2V
Switch level	Low level < 1mA
	High level > 3mA
Outputs:	
Scaled pulse:	Open collector switch transistor
Pulse duration	50 msec
End of batch:	Open collector switch transistor
Sink current	100 mA
Pulse duration:	"On" until instrument reset
No flow alarm:	Open collector switch transistor
Sink current:	100 mA
Detection period:	Programmable 0 - 99 sec
Control Relay:	2 SPDT relays
Switching voltage:	250 V AC 30 V DC
Switching current:	8 A

Front Panel Controls:

"Run"	Activates the relays to start the batch.
"Stop"	If pressed during batching the process will be interrupted.The batch can then be continued by pressing the "RUN " key or the sequence can be aborted by pressing the "RESET" key.
"Reset"	The instrument batch quantity is reset.
"Batch Set"	Allows an operator to change the preset quantity.

LED Status lights:

Relay 1:	The red relay 1 LED lights when relay 1 is energised
Relay 2:	The red relay 2 LED lights when relay 2 is energised
Alarm:	The alarm LED lights when a no flow alarm condition has been detected.



1. All dimensions in millimetres.
2. Panel cut-out to be 92 x 92.

Apollo Flow Measurement Ltd, Charles Street, Walsall WS2 9LZ
Tel: 01922 645 647 Fax: 01922 640 326

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ISO 9001 Cert. FM 31709