FLUIDWELL
Accurate Liquid Management

Count on us.

Basic Batch Controller

with two control outputs

Advantages

- The B-Series is our most cost effective display but with all the benefits you may expect from a Fluidwell product: It's durable, reliable and very easy to operate. **Basic with a capital B!**
- Your crew is in control with our highly praised "know one, know them all" configuration structure, saving time, cost and aggravation.

Features

- Compact design.
- Displays preset value and running batch value simultaneously, total and accumulated total.
- Self-learning overrun correction.
- Durable IP65 (Type4) field, wall or meter mount enclosure.
- One 20mm and two 16mm knock-out hole cable entries.
- "Know one, know them all" configuration structure.
- Easy reading and programming with clear alphanumerical display.
- Clear 12mm(0.5") numeric digits and 7mm(0.3") alphanumeric digits.
- Bright LED backlight.
- Auto backup of settings and running totals.
- Lithium AA battery and 10 - 30V DC power supply.
- Sensor supply: 8.2V DC.

Outputs

- Two control outputs: for accurate valve control.

Inputs

- Ability to process the basic types of flowmeter signals: Namur, Reed-switch, NPN, PNP and Sine wave (coil).

Applications

- For basic batching, from small up to very large quantities. Just a simple single batch or repeating similar batches.
- The B-series offers you an economical solution for common industrial applications. Nothing more, nothing less.
- For intrinsically safe applications we offer our rugged, field mount F-Series indicators.
- For explosion proof applications we offer our E-Series indicators.
- For panel mount applications we offer our D-Series indicators.

General information

Introduction

The B-In-Control is a basic batch controller with two valve control outputs, offering exactly what is required for many applications. The operator can enter a batch quantity easily or execute repeating batches.
During the batch, the preset value is displayed as well as the batched (actual) quantity and the units of measurement. The automatic self-learning overrun correction ensures an accurate result after every batch.

Display

The main process information is displayed with 7 digits (12mm, 0.47") to show the actual batched value, total or accumulated total. The 7 alpha-numeric digits (7mm, 0.28") are used for the preset value and the clear setup menu. For good readings in full sunlight and darkness, the B-In-Control is provided with a bright backlight.

Configuration

The B-Series uses the same highly appreciated configuration structure of our Fluidwell product series. Each setting is clearly indicated with an alphanumerical description, which avoids confusing abbreviations. Once familiar with one B-series product, you will be able to program all models in all series without a manual. In other words: know one, know them all.

Flow meter input

The B-In-Control accepts the basic flowmeter input signals: Namur, Reed-switch, NPN, PNP and Sine wave (coil). The input signal type can easily be selected in the configuration menu.

Control outputs

Two digital outputs are available for accurate valve control. The output is a passive NPN signal.

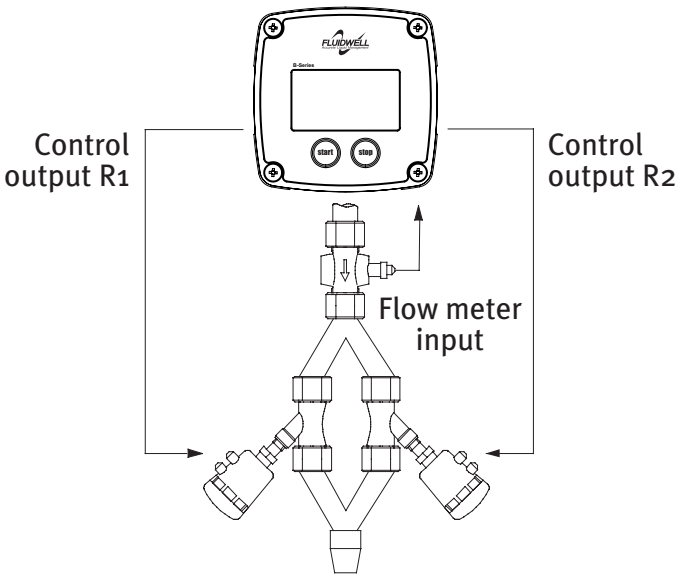
Power requirements

Two power inputs are available to supply the B-Series and sensor. The B-In-Control can be powered with a single 3,6V lithium AA battery. The basic 10 - 30V DC power supply can supply the B-In-Control including the backlight and offers an 8.2V DC sensor supply.

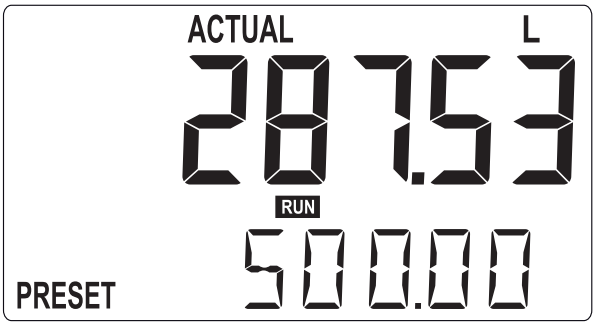
Enclosures

The smart design of the rugged IP65 (Type4) GRP enclosure ensures optimal advantages for various mounting possibilities. The B-In-Control can be field or wall mounted or directly on the flowmeter.

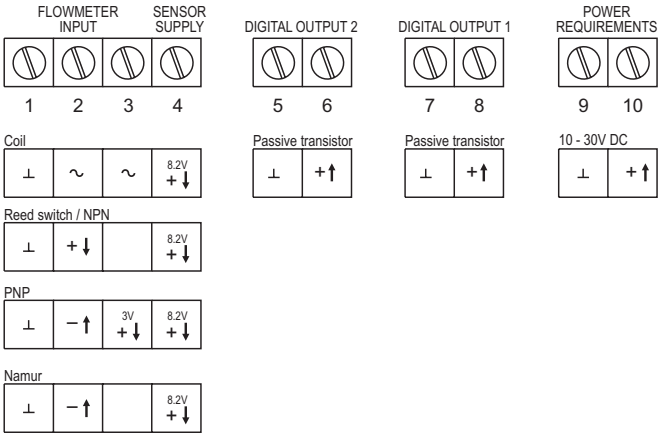
B-In-Control application overview



B-In-Control display example



B-In-Control terminal connections



Technical specification

General

Display	
Type	High intensity transflective numeric and alpha-numeric LCD, with white LED backlight.
Dimensions	54 x 29mm (2.13” x 1.14”).
Digits	Seven 12mm (0.47”) and seven 7mm (0.28”) digits. Various symbols and measuring units.
Refresh rate	During operation 8 times/sec, it will automatically switch to 1 time/sec after 30 sec without operation.

Operating temperature	
Ambient	-20°C to +60°C (-4°F to +140°F).

Power requirements	
Basic supply	10 - 30V DC. Standard consumption: Pmax. 60mW. With backlight: Pmax. 435mW. With backlight + sensor supply: Pmax. 735mW.
Note	The basic power supply will also supply the backlight or the 8.2V DC sensor supply.
Battery	1 x 3.6V AA Lithium battery - life-time depends upon settings and configuration - up to approx. 2 years.

Sensor excitation	
Terminal 3	3V DC for pulse signals and 1.2V DC for coil pick-up, Iout max. 100µA.
Note	This is not a real sensor supply. Only suitable for sensors with a very low power consumption like coils (sine wave).
Terminal 4	8.2V DC, Iout max. 10mA, requires 10-30V DC supply.

Terminal connections	
Type	Plug-in terminal strip. Wire max. 1.5mm².

Data protection	
Type	Non-volatile backup of all settings. Backup of running totals every minute. Data retention at least 10 years.
Pincode	Configuration settings can be pincode protected.

Directives & Standards	
EMC	Directive 2014/30/EU, FCC 47 CFR part 15.
Low voltage	Directive 2014/35/EU.
RoHS	Directive 2011/65/EU.
IP & NEMA	EN 60529 & NEMA 250.

Enclosure

General	
Material	GRP, IP65 (Type4), UV-resistant and flame retardant.
Window	Polyester foil, UV-resistant.
Sealing	EPDM gasket.
Control keys	Two industrial micro-switch keys.
Dimensions	92 x 92 x 60mm (3.62” x 3.62” x 2.36”) - W x H x D.
Weight	200 gram / 0.44 lbs.

Signal input

Flow meter sensor	
Pulse inputs	Coil / sine wave (sensitivity: 80mVpp), NPN, PNP, reed-switch, Namur.
Frequency	Minimum 0Hz - maximum 7kHz for total and flow rate. Maximum frequency depends on signal type and internal low-pass filter. E.g. reed-switch with low-pass filter: max. frequency 120Hz.
K-Factor	0.000010 - 9,999,999 with variable decimal position.
Low-pass filter	Available for reed-switch.

Signal outputs

Digital output	
Function	2 control outputs for accurate valve control.
Output type	Two passive transistor outputs (NPN) - not isolated. 300mA, max. 30V per output.

Operational

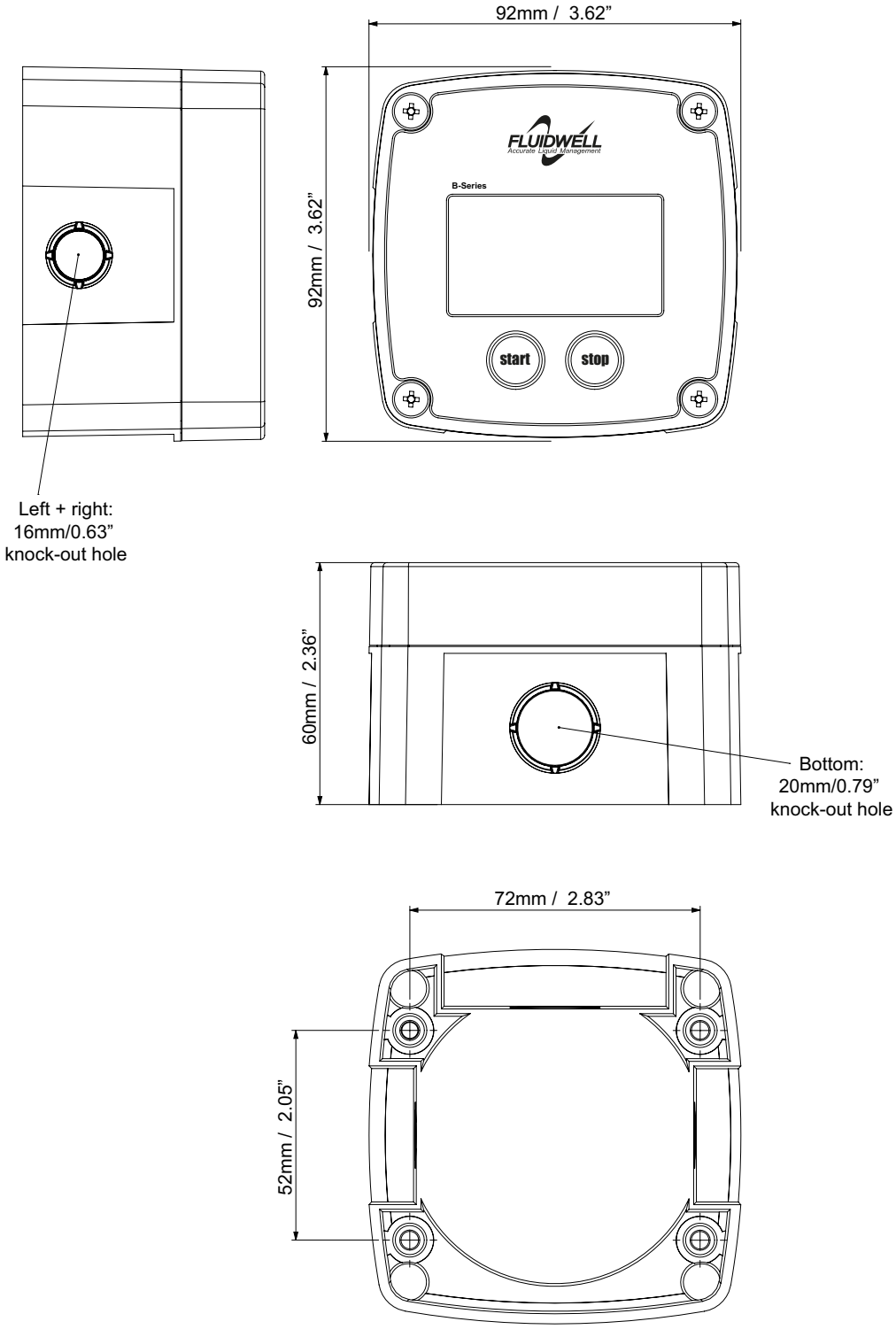
Operator functions	
Displayed functions	• Actual value (batched quantity) and preset value simultaneously. • Total. • Accumulated total. • Reset total by pressing the START-key twice.

Preset	
Digits	Seven 7mm (0.28”) digits.
Units	L, m³, US gal, igal, Oil bbl, kg, lb or none.
Decimals	0 - 1 - 2 or 3.

Total	
Digits	Seven 12mm (0.47”) digits.
Units / decimals	According to selection for preset.
Note	Total can be reset to zero.

Accumulated total	
Digits	Seven 12mm (0.47”) digits.
Units / decimals	According to selection for preset.
Note	Can not be reset to zero.

Dimensions enclosure



Quality
ISO 9001
DEKRA certified
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