

## Basic Flow rate Monitor / Totalizer

with configurable alarm / pulse signal 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 instantaneous flow rate, total, accumulated total and alarm messages.
- ✓ Two alarm values can be entered: low and high flow rate alarm.
- ✓ 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 alphanumeric 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 digital outputs that can be configured as a scaleable pulse output or as a flow rate alarm output.

### Inputs

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

### Applications

- ✓ Basic flow rate monitoring with a precise calculation over the full measurement range, where re-transmission of the totalizer and monitoring of the flow rate function is required.
- ✓ 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-Alert is a flow rate indicator and totalizer with continuous flow rate monitoring feature. It offers the facility to set one low flow rate and one high flow rate alarm value. The display shows flow rate, total, accumulated total and alarm messages. On-screen engineering units are easily configured from a comprehensive selection.

## Display

The main process information is displayed with 7 digits (12mm, 0.47”) to show flow rate, total or accumulated total. The 7 alpha-numeric digits (7mm, 0.28”) are used for the flow rate measurement units, the clear setup menu and the alarm messages. For good readings in full sunlight and darkness, the B-Alert 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-Alert 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.

## Pulse / alarm outputs

Two digital outputs are available which can be configured as a scaleable pulse output or as a flow rate alarm output. The pulse length can be set to 5msec or 100msec. The output is a passive NPN signal.

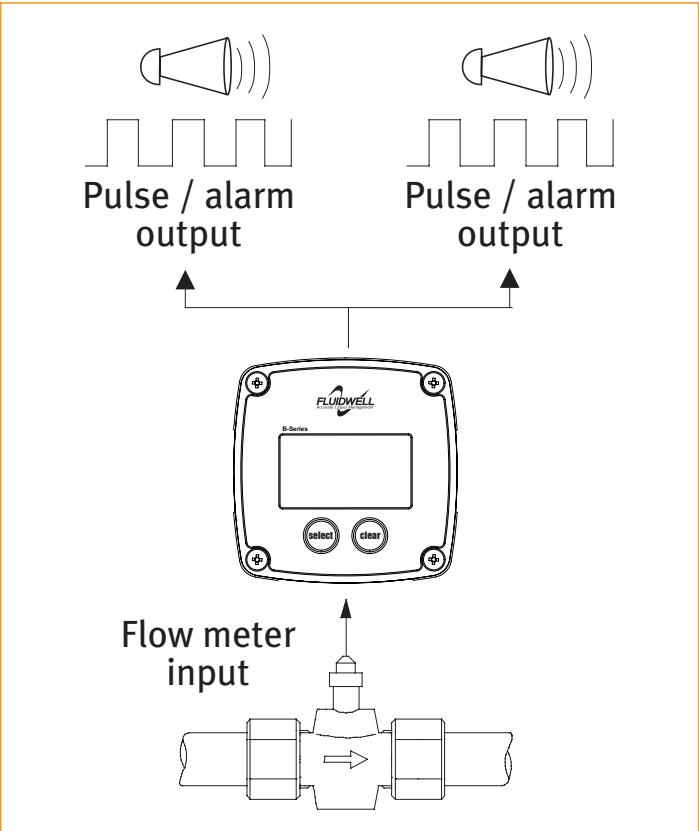
## Power requirements

Two power inputs are available to supply the B-Series and sensor. The B-Alert can be powered with a single 3,6V lithium AA battery. The basic 10 - 30V DC power supply can supply the B-Alert 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-Alert can be field or wall mounted or directly on the flowmeter.

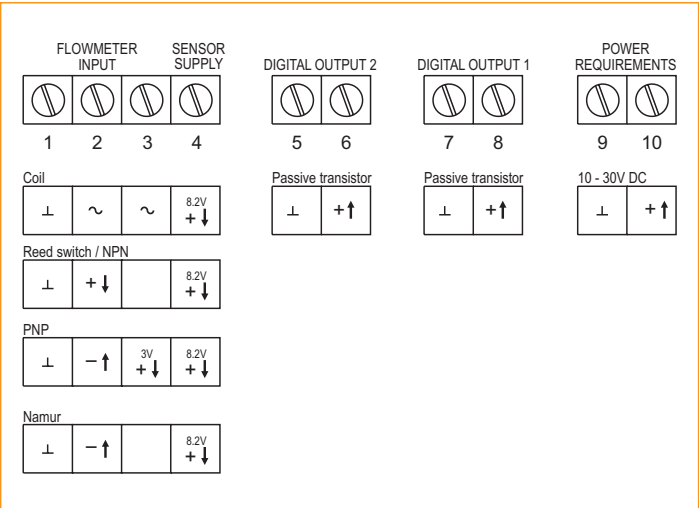
# B-Alert application overview



## B-Alert display example



## B-Alert terminal connections



# Technical specification

## General

Display	
Type	High intensity transfective 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	<ul style="list-style-type: none"><li>Pulse output: Transmitting accumulated total.</li><li>Alarm output: Low or high flow rate alarm.</li></ul>
Frequency	User definable: 100Hz (5msec) or 5Hz (100msec).
Output type	Two passive transistor outputs (NPN) - not isolated. 300mA, max. 30V per output.

## Operational

Operator functions	
Displayed functions	<ul style="list-style-type: none"><li>Flow rate.</li><li>Total.</li><li>Accumulated total.</li><li>Alarm values low and high flow rate.</li><li>Alarm values can be entered</li><li>Reset total by pressing the CLEAR-key twice.</li></ul>

Total	
Digits	7 digits.
Units	L, m³, US gal, igal, Oil bbl, kg, lb or none.
Decimals	0 - 1 - 2 or 3.
Note	Total can be reset to zero.

Accumulated total	
Digits	7 digits.
Units / decimals	According to selection for total.
Note	Can not be reset to zero.

Flow rate	
Digits	7 digits.
Units	mL, L, m³, g, kg, ton, US ton, US gal, igal, Oil bbl, lb, cf or none.
Decimals	0 - 1 - 2 or 3.
Time units	/sec - /min - /hr - /day.

Alarm values	
Digits	7 digits.
Units	According to selection for flow rate.
Decimals	According to selection for flow rate.
Time units	According to selection for flow rate.
Type of alarm	Low and high flow rate alarm.

# Datasheet B-Alert

Basic with a capital B!



Reliable

*Count on us.*

## Dimensions enclosure

