Basic with a capital B!

# H. HERMANN EHLERS GMBH

H **3** 

FLOWMETERS · BATCH CONTROLLERS · CONTROL VALVES · FITTINGS

# **Basic Flow rate Indicator / Totalizer**

nothing more, nothing less



#### **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 and accumulated total.
- 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.

#### **Inputs**

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

## **Applications**

- Basic flow measurement where a local flow rate indication and totalizer function is required without re-transmission functionality..
- 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 <u>E-Series</u> indicators.
- For panel mount applications we offer our <u>D-Series</u> indicators.

#### **General information**

#### Introduction

The B-Basic is a local indicator to display the actual flow rate, total and accumulated total. The total can be reset to zero by pressing the CLEAR button twice. 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 and the clear setup menu messages. For good readings in full sunlight and darkness, the B-Basic 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-Basic 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.

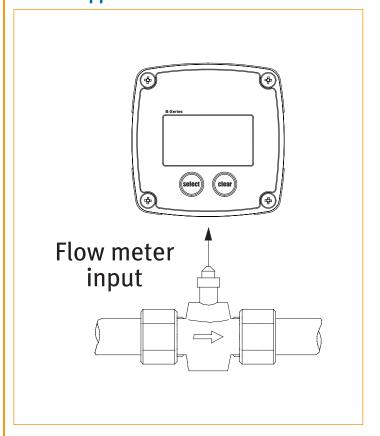
#### Power requirements

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

#### **Enclosures**

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

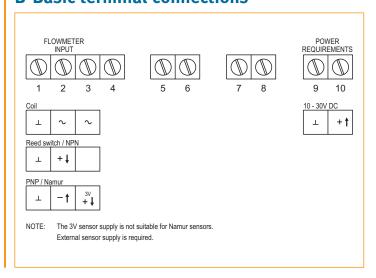
#### **B-Basic application overview**



#### **B-Basic display example**



#### **B-Basic terminal connections**



# **Technical specification**

#### General

Display	
Туре	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  $-20^{\circ}\text{C to } +60^{\circ}\text{C } (-4^{\circ}\text{F to } +140^{\circ}\text{F}).$ 

Power requirements	
Basic supply	10 - 30V DC. Standard consumption: Pmax. 60mW.
	With backlight: Pmax. 435mW.
Note	The basic power supply will also supply the backlight.
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 connections

Type Plug-in terminal strip. Wire max. 1.5mm<sup>2</sup>.

Data protec	tion
Туре	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: 8omVpp), NPN, PNP,
	reed-switch, Namur.
Frequency	Minimum oHz - 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	o.oooo10 - 9,999,999 with variable decimal position.
Low-pass filter	Available for reed-switch.

# Operational

Operator functions	
Displayed	• Flow rate.
functions	• Total.
	<ul> <li>Accumulated total.</li> </ul>
	<ul> <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	o - 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.



#### **Dimensions enclosure**

