

# Flow Rate Monitor / Totaliser



The E018 is one of the top models in our range of explosion proof flow computers. The E-series distinguishes itself by its quality and functionality driven European design and manufacturing. It is more than fulfilling the rules for explosion proof design, it is about safety during the daily operation.



Often, the environment is much tougher than the explosion proof requirements demand. Thus dangerous conditions may be experienced due to a broken enclosure or a poorly made flame path. Ruggedness and reliability is where Fluidwell stands for and it is now available in a comprehensive well designed and purpose driven explosion proof flow monitor / totaliser.

## Features

- Explosion proof according ATEX, IECEx, FM and CSA c-us
- High and low flow rate alarm monitoring
- Displays flow rate, total, alarm values, measuring units and a flow rate indicating speedometer.
- Bright LED backlight, red flashing in case of an alarm
- 15 point linearization of the flow curve – with interpolation
- Ability to process all types of signals: Sine wave (coil), NAMUR NPN/PNP pulse, Reed-switch, active pulse signals.
- 4 configurable digital outputs for alarms, scaled pulse output of the linearized accumulated total and input retransmission
- Loop powered 4-20mA output acc. Linearized flow rate
- Integrated HART 7 communication protocol
- Power requirements: loop powered, battery or 9 – 27V DC
- Sensor supply: 8.2 / 12 / 24V DC
- Auto backup of settings and running totals
- Easy configurable via PC with free downloadable software

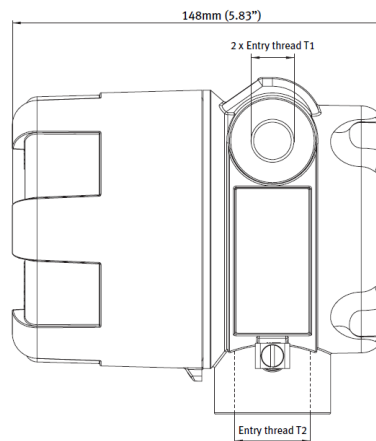
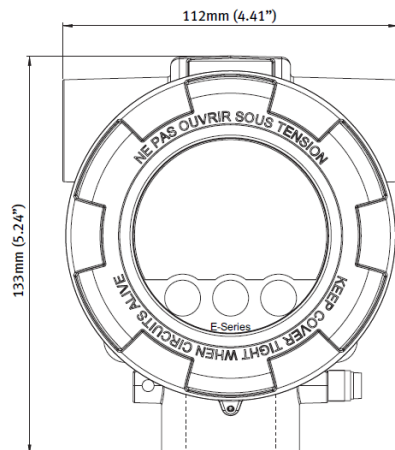
## Advantages

- Save time and gain flexibility with the easy-to-operate through glass keypad: no need to remove the front cover or arrange a work permit
- Intuitive “Know one, know them all!” configuration menu, saving time, cost and aggravation.
- Cost saving with an easy to install, spacious chamber, plug and play connectors and 1” NPT thread for flow meter mounting.
- Durable high grade stainless steel 316L Ex d enclosure for extremely salty atmospheres (offshore).

## Specifications

<b>Display</b>	
Type	High intensity transfective numeric and alphanumeric LCD, UV-resistant, with bi-colour backlight. Red (flashing) backlight during alarm conditions. Intensity can be adjusted via the keypad
Dimensions	65mm x 45mm (2.56" x 1.77")
Digits	Seven 12mm (0.47") and eleven 7mm (0.28") digits. Various symbols and measuring units
Operating temperature	-40°F to +158°F (-40°C to +70°C)
<b>Power Requirements</b>	
Type PB	Long life lithium battery – life time depends on settings and configurations – up to approx. 2 years
Type PD	9 – 27V DC. Consumption max. 4.5 Watt
Type AH	Loop powered, analog output. 11 – 27V DC, Min. 3.5mA. Consumption max. 675mW (25mA @ 27VDC)
<b>Signal Inputs</b>	
Type P	Coil / sine wave (HI: 20mVpp or LO: 90mVpp – sensitivity selectable), NPN/PNP, reed switch, Namur, active pulse signals 8 or 24V DC
Frequency	Minimum 0Hz – maximum 10kHz 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
<b>Signal Outputs</b>	
Frequency	Max. 500HZ. Pulse length user definable between 1msec up to 10 seconds. Retransmission: minimum pulse duration 50us square wave output based on frequency (sine wave or coil) input signal
Accuracy	12 bit. Error 0.05% of full scale at 25°C (77°F), 40ppm/°C temperature drift. Analog output signal can be scaled to any desired range.

## Dimensions



## Product Codes

<b>E018</b>	<b>Flow Monitor/ Totaliser</b>	
Input Analog Output Communi- ation	<b>P</b>	<b>Pulse input, eg. Coil, NPN, PNP</b>
	<b>AH</b>	<b>Galvanically isolated, loop powered 4-20mA output.</b>
	CR	HART Communication, remote configuration is possible
	<b>CX</b>	<b>No Communication, remote configuration is possible</b>
Enclosures	<b>H_A_</b>	<b>Die-cast aluminium Ex d enclosure</b>
	HS_	Stainless steel 316L Ex d enclosure
	<b>H_A</b>	<b>Entry threads: 2 x ¾" NPT / 1 x 1" NPT</b>
	H_B	Entry threads: 3 x ¾" NPT
	H_C	Entry threads: 2 x ½" NPT / 1 x 1" NPT
	H_D	Entry threads: 2 x ½" NPT / 1 x ¾" NPT
	H_G	Entry threads: 2 x M20 / 1 x M25
	H_H	Entry threads: 3 x M25
Add.	<b>IB</b>	<b>Remote control input to reset total or to lock the "clear total" button</b>
Digital output	OR	2 mechanical relay outputs (OT remains available) – requires 24-27V DC
	<b>OT</b>	<b>4 passive transistor outputs</b>
Power	PD	9-27V DC + sensor supply
	<b>PX</b>	<b>Basic power supply 9-27V DC (no real sensor supply)</b>
Battery	PB	Additional lithium battery powered (optional)
Hazardous	<b>XD</b>	<b>Explosion proof according ATEX, IECEx, FM and CSA c-us</b>
	<b>ZB</b>	<b>Backlight is included as standard</b>
	ZF	Coil input 10mVpp
Options	ZG	Coil input 5mVpp

The **bold** marked text contains the standard configuration: E018-P-AH-CX-HAA-IB-OT-PX-XD-ZB

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