



## E SERIES EXPLOSION PROOF TOTALIZER & FLOW RATE INDICATOR

#### **BENEFITS**

- Save time with the easy-to-operate through glass keypad: no need to remove the front cover nor to arrange a work permit
- Easy installation with the spacious chamber and plug and play connectors
- Long life duration in extremely salty atmospheres (offshore) with heavy duty stainless steel Exd enclosure
- Key information at a glance as the display shows flow rate, total, measuring units and a flow rate indicating speedometer

#### **FEATURES**

- Selectable on-screen engineering units; volumetric or mass
- 7 digit flow rate / total and 11 digit accumulated total
- 16 point linearization of the flow curve with interpolation
- · Power options: Loop powered, battery and 8 30V (dc)
- Isolated, loop powered 4 20mA output according to linearized flow rate
- Scaled pulse output according to linearized accumulated total
- Ability to process all types of volumetric or mass flowmeter signals: Reed-switch, NAMUR, NPN/PNP pulse, Sine wave (coil), Active pulse signals. (0)4 - 20mA and 0 - 10V (dc) analog inputs are pending.
- HART communication

# **APPLICATIONS**

The E018 by FLOMEC® offers you an enclosure designed to be used in rough and tough applications, beyond being just explosion proof. Its sturdy design and ease of use are unequaled by any other explosion proof indicator in the market. The E018 is always your first and safest choice in explosion proof applications.

# **PRODUCT CONFIGURATION**

#### STANDARD CONFIGURATION 1

E018 = Flow Rate Monitor / Totalizer - Alarms - HART

#### FLOWMETER INPUT SIGNAL 2

P = Pulse input: Coil, NPN, PNP, Namur, Reed-switch

#### ANALOG OUTPUT SIGNAL 3

AH = Galvanically isolated, Loop powered 4-20mA output

### COMMUNICATION 4

**CR** = HART communication

#### **ENCLOSURE TYPES** 5

- **HAD** = Diecast Aluminum Enclosure, Entry threads: 2" x 1/2" NPT / 1" x 3/4" NPT
- HSD = Stainless Steel Enclosure, Entry threads: 2" x 1/2" NPT / 1" X 3/4" NPT

#### ADDITIONAL INPUTS 6

IB = Remote input to reset total or to lock the "Clear Total" button

#### OUPUTS 7

OT = Passive transistor output - standard configuration

#### POWER REQUIREMENTS 8

**PD-PB** = 9 - 27 V (dc) + sensor supply, Lithium battery power

## HAZARDOUS AREA 9

**XD** = Explosion proof enclosure according ATEX & IECEx (CSA and FM Pending)

#### OTHER OPTIONS 10

**ZB** = Backlight is included as standard

## 1 2 3 4 5 6 7 8 9 10

>>>> E112 P AH CX HAA IB OT PX-PB XD ZB

## **SPECIFICATIONS**

| Display:     |   |  |
|--------------|---|--|
| Туре         | High intensity transreflective numeric and alpha-<br>numeric LCD, UV resistant, with bright backlight.<br>Intensity can be adjusted via keypad. |  |
| Digits       | Seven 0.47" (12 mm) and eleven 0.28" (7 mm) digits. Various symbols and measuring units.  |  |
| Refresh rate | User definable: 8 times/s to 30 s.  |  |
| Speedometer  | To indicate the actual flow rate the bargraph runs from 0 to 100% in 20 blocks, each block is 5%.   |  |

#### **Operating Temperature (Operational):**

-40°F to +158°F (-40°C to +70°C)

#### **Power Requirements:**

9 - 27V (dc). Power consumption maximum 4.2 Watt. Long life Lithium battery - lifetime depends upon settings and configuration - up to approximately 2 years

| tion - up to approximately 2 years |   |  |
|------------------------------------|---|--|
| Hazardous Area -                   | Explosion Proof:  |  |
| ATEX<br>Certification:             | <ul> <li>II 2 G Ex IIC T6 Gb</li> <li>II 2 D Ex IIIC T85°C Db</li> </ul>  |  |
| IECEx<br>Certification             | Ex d IIC T6 Gb<br>Ex tb IIIC T85°C Db   |  |
| FM / CSA c-us<br>Certification     | Explosion-proof for use in Class I, Division 1,<br>Groups A, B, C, D<br>DIP (Dust-Ignition-proof): Class II, Division 1,<br>Groups E, F and G. Class III, hazardous (classified) locations  |  |
| Ambient to:                        | -40°F to +158°F (-40°C to +70°C)  |  |
| Hazardous Area - Directives:       |   |  |
| EMC:                               | Compliant ref. EN61326-1 and FCC 47 CFR part 15   |  |
| Low voltage:                       | Compliant ref. EN61010-1  |  |
| Signal Input (Flowmeter):          |   |  |
|                                    | Coil / sine wave (COIL-HI: 20mVpp or COIL-LO: 80mVpp - sensitivity selectable), NPN / PNP, open collector, reed switch, Namur, active pulse signals 8 - 12 and 24V (dc)                     |  |
| Frequency:                         | Minimum oHz - maximum 7 kHz for total and flow rate. Maximum frequency depends on signal type and internal low-pass filter. E.g. reed switch with low-pass filter. Maximum frequency 120Hz. |  |
| K-Factor                           | 0.000010 - 9,999,999 with variable decimal position   |  |
| Low-pass filter                    | Available for all pulse signals   |  |

## **ACCESSORIES**

| Part No. | Description             |
|----------|-------------------------|
| FW-ABB04 | 1 X 3/4 inch NPT plug   |
| FW-ABB05 | 1 X 1 inch NPT plug     |
| 1522068  | E-Series Wall Mount Kit |
| 1522051  | E-Series Pipe Mount Kit |

# **APPROVALS**



11/17



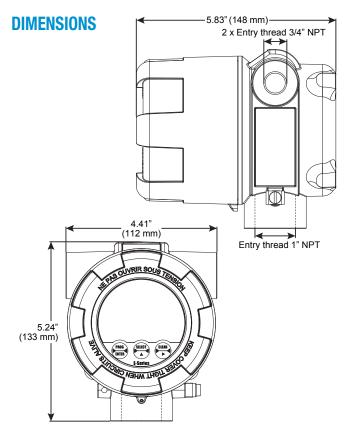






#### **External Reset Total:** Function: • Terminal input to reset total remotely • If this terminal input is closed, the "clear total" function is disabled Internally pulled-up switch contact - NPN Type: Duration: Minimum pulse duration 100ms Signal Output (Digital): Function: Pulse output. Transmitting accumulated total Frequency: Maximum 500Hz. Pulse length user definable between 1 ms up to 10 seconds Type OT: One passive transistor output (NPN) - not isolated. 300mA - 50V @ 77°F (25°C) Signal Output (Analog): Function: Transmitting linearized flow rate Accuracy: 12 bit. Error < 0.1%. Analog output signal can be scaled to any desired range.

| Type AH:                                       | Galavanically isolated, loop powered 4-20mA output                               |  |
|--|--|--|
| Accumulated Total - 11 digits:                 |  |  |
| Units / Decimals:                              | According to selection for total   |  |
| Note:  | Can not be reset to zero   |  |
| Flow rate - 7 digits, 0 - 1 - 2 or 3 decimals: |  |  |
| Units:   | mL, L, m³, Gallons, kg, Ton, lb, bl, cf, RND, ft³, scf, Nm³, Nl, igal - no units |  |
|  |  |  |



Service & Warranty: For technical assistance, warranty replacement or repair contact your FLOMEC® or GPI® distributor: In North or South America: 888-996-3837 / FLOMEC.net Outside North or South America: +61 2 9540 4433 / FLOMEC.net

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IND-1043 E Series