

E SERIES FLAME PROOF TOTALISER & RATE INDICATOR



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 / Totaliser - Alarms - HART

FLOWMETER INPUT SIGNAL 2

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

ANALOGUE OUTPUT SIGNAL 3

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

COMMUNICATION 4

CR = HART communication

ENCLOSURE TYPES 5

HAD = Diecast Aluminium 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

OUTPUTS 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

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 linearisation of the flow curve - with interpolation
- Power options: Loop powered, battery and 8 - 30V (dc)
- Isolated, loop powered 4 - 20mA output according to linearised flow rate
- Scaled pulse output according to linearised 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

1 2 3 4 5 6 7 8 9 10
 >>>> E018 P AH CR HAD IB OT PD-PB XD ZB

SPECIFICATIONS

Display:	
Type	High intensity transreflective numeric and alpha-numeric LCD, UV resistant, with bright backlight. 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°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	
Hazardous Area - Explosion Proof:	
ATEX Certification:	<ul style="list-style-type: none"> II 2 G Ex IIC T6 Gb II 2 D Ex IIIC T85oC Db
IECEX Certification	<ul style="list-style-type: none"> Ex d IIC T6 Gb Ex tb IIIC T85oC Db
FM / CSA c-us Certification	Explosion-proof for use in Class I, Division 1, Groups A, B, C, D DIP (Dust-Ignition-proof): Class II, Division 1, Groups E, F and G. Class III, hazardous (classified) locations
Ambient to:	-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



External Reset Total:	
Function:	<ul style="list-style-type: none"> Terminal input to reset total remotely If this terminal input is closed, the "clear total" function is disabled
Type:	Internally pulled-up switch contact - NPN
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 @77oF (25oC)
Signal Output (Analogue):	
Function:	Transmitting linearised flow rate
Accuracy:	12 bit. Error < 0.1%. Analogue output signal can be scaled to any desired range.
Type AH:	Galvanically isolated, loop powered 4-20mA output
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, NI, ical - no units
Time units:	/s - /min - /hr - /day

DIMENSIONS

