



# SAFE AREA / IS FLOWRATE MONITOR / TOTALIZER

FLUIDEX F-Series, by Fluidwell®, stands out as the primary and most secure option for field mount indicators used in both safe and hazardous areas. This is particularly crucial in challenging weather conditions such as rain, snow, salty atmospheres, and temperatures ranging from -40°C to +80°C (-40°F to 176°F).



## **SPECIFICATIONS**

## Display

- Type: High intensity reflective numeric and alpha-numeric LCD, UV resistant
- **Dimensions:** 3.5 in. x 1.6 in. (90 mm x 40 mm)
- **Digits:** Seven 0.67 in. (17 mm) and eleven 0.31 in. (8 mm) digits. Various symbols and measuring units.
- Refresh rate: User definable: Fast, 1 s, 3 s, 15 s, 30 s, Off
- Option ZB: Transflective LCD with green LED backlight. Good readings in full sunlight and darkness.

## Signal Input (Flowmeter)

- Coil / sine wave (minimum 20mVpp or 80mVpp sensitivity selectable), NPN / PNP, open collector, reed switch, Namur, active pulse signals 8 -12 and 24V (dc)
- Frequency: Minimum oHz maximum 7kHz for total and flow rate internal low-pass filter. E.g. reed switch with lowpass filter: maximum frequency 120Hz
- K-Factor: 0.000010 9,999,999 with variable decimal position
- Low-pass filter: Available for all pulse signals

## Analogue Output Signal

- Function: Transmitting differential / sum flow rate
- Accuracy: 10 bit. Error < 0.05%. Analog output signal can be scaled to any desired range.
- Update time: Ten times per second
- Type AP: Passive 4-20mA output not isolated. Unit will be loop powered.
- Type AH: Galvanically isolated, loop powered 4-20mA output

## **Pulse Output Signal**

- Function: Pulse output according to differential or sum accumulated total and indication negative pulse output.
- **Frequency:** Maximum 64 Hz. Pulse length user definable between 7.8 ms up to 2 seconds
- Type OT: Two passive transistor outputs (NPN) not isolated.
  Maximum 50V (dc) 300mA per output



#### **Power Requirements**

- 8 24 V (ac/dc) ± 10%. Power consumption maximum 10 Watt.
- 16 30V (dc). Power consumption maximum 1 Watt.

#### **Sensor Excitation**

1.2 / 3.2 / 8.2 / 12 / 24V (dc) - maximum 400mA @ 24V (dc)

#### **Communication option**

- Function: Reading display information, reading / writing all configuration settings
- Protocol: HART

## Total - 7 digits, 0 - 1 - 2 or 3 decimals

- Units: L, m3, GAL, USGAL, kg, lb, bbl, no unit
- Note: Total can be reset to zero

#### 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, m3, Gallons, kg, Ton, lb, bl, cf, RND, ft3, scf, Nm3, Nl, igal no units
- Time units: /s /min /hr /day

## Alarm values - 7 digits

- Units / Decimals: According to selection for total
- **Time units:** According to selection for total
- Type of alarm: Low and high flow rate alarm. Includes alarm delay time and configurable alarm outputs.

## Line temperature - 6 digits, 1 decimal

• Units: °C, °F or K

#### Enclosure

- **Dimensions:** 5.12" x 4.72" x 2.95" (130 x 120 x 75 mm) W x H x D
- Type HE: GRP panel mount enclosure IP65 / NEMA 4X. UV-resistant and flame retardant.
- Weight: 1.32 lbs (600g)

## **Terminal Connections**

Removable plug-in terminal strip. Wire maximum 1.5 mm2 and 2.5 mm2

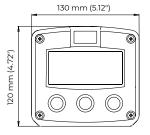
## Temperature Range

-30°C - +80°C (-22°F - +176°F)

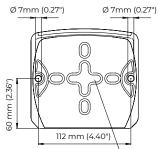
## **Data Protection**

- Type: EEPROM backup of all settings. Backup of running totals every minute. Data retention at least 10 years.
- **Pass-code:** Configuration settings can be pass-code protected.

## **DIMENSONS**







Mounting bolt recess not available for flat bottom enclosures.

## CONFIGURATION AND ORDER CODE

1		Standard Configuration
	F018	Flow Rate Monitor / Totalizer - Linearization & Alarms
	F115	Flow Rate Monitor / Totalizer - Bi-Directional - Quadrature
	F127	Differential / Sum Flow Computer - Net Use - Temp Correction
	F130	Batch Controller - Two Stage
2		Flowmeter Inpuit Signal
	Р	Pulse input: Coil, NPN, PNP, Namur, Reed-switch
3		Analog Output Signal
	AP	Passive 4-20mA output, loop powered unit (F115 & F127)
	АН	Galvanically isolated, loop powered 4-20 mA ouput (F018)
	АХ	No analog output (F130)
4		Communication
	CR	HART Communication (F018)
	СХ	NO communications (F115, F127 & F130)
5		Flow Equations
	EL	Corrected Liquid Volume (F127)
	EX	No flow equations (F115 & F130)
		Nil (F018)
6		Enclosure
	HE	Cable Entery: 2-16 mm & 1-20 mm
7		Additional Inputs
	IR	Remote control input to start, pause or stop (F130)
	IX	No additional inputs (F018, F115 & F127)
		Nil for F018

8		Outputs
	ОТ	Two passive transistor outputs - standard configuration (F018 only has 1 not 2)
9		Power Supply
PD	РВ	8 - 24 V (ac/dc) + sensor supply - with XI: 16 - 30 V (dc) & Lithium battery powered (F018*, F115 & F127)
PD	PC	8 - 24 V (ac/dc) + sensor supply - with XI: 16 - 30 V (dc) & Lithium battery powered - Intrinsically Safe (F018* & F130)
		(*) F018 does not have the 8-24 V (ac/dc)
10		Temperature Input Signal
	TP	PT100 Input (F127)
	TX	No Temperature Input Signal (F115 & F130)
		Nil (F018)
11		Hazardous Area
	ΧI	Intrinsically Safe, according to ATEX & IECEx (F018 & F127)
	ХХ	Safe area only (F018, F115, & F130)
11		Other Options
	ZB	Backlit (F018, F115 & F127)
	ZX	No Options (F130)

