

# F093

# Safe area / Intrinsically safe - Tachometer Monitor

displays engine speed and running hours with alarm output



#### **Features**

- Displays engine speed and running hours simultaneously and additional accumulated running hours, alarm values and alarm messages.
- On-screen engineering units: HOURS and RPM.
- Displays clear alarm messages.
- Red flashing LED backlight in case of an alarm; intensity adjustable.
- Large 17mm (0.67") digits for engine speed or running hours.
- Various alarm values can be entered: low / high engine speed alarm and total running hours alarm.
- Intrinsically safe according ATEX, IECEx, FM and CSA C-US.
- GRP, Aluminum or high grade stainless steel enclosure.
- Auto backup of settings in EEPROM memory.
- Easy configuration with clear alphanumerical display.
- Ambient temperature: -40°C to +80°C (-40°F to 176°F).
- Various <u>accessories</u> are available for this product.

## **Product description**

**€ © © ©** 

The F093 is a local indicator to monitor the tachometer engine speed with running hours simultaneously. The running hours can be reset to zero by pressing the CLEAR button twice. The eleven digit accumulated running hours however can not be reset to zero.

## **Advantages**

- Robust aluminum or stainless steel 316L field enclosure (IP65, IP67 / NEMA Type4X).
  It is so rugged, a truck can even stand on it!
- Intrinsically Safe available ATEX, IECEx, FM and CSA approval for gas and dust applications.
- Familiar easy operation with the Fluidwell "Know one, know them all" configuration structure, saving time, cost and aggravation.
- Very diverse mounting possibilities: walls, pipes, panels or directly onto outdoor sensors.

#### **Applications**

- Tachometer applications where monitoring of the engine speed and running hours is important and both need to be displayed and registered.
- The F-Series is your first and best choice for field mount indicators in safe and hazardous area

applications. Especially in harsh weather conditions like rain, snow, sandy deserts, salty atmospheres and temperatures between -40°C up to +80°C (-40°F up to 176°F).

# **Product specifications**

#### **Signal Inputs**

#### **General Purpose Inputs**

 Pulse inputs from tachometers: Reed-switch, NAMUR, NPN/PNP pulse, Sine wave (coil), active pulse signal.

### Supply

#### **Power Supply**

- Long life Lithium battery.
- 8 24V AC/DC.
- 115 230V AC.
- Basic: 8 30V DC.

#### **Sensor Supply**

• 8.2, 12, 24V DC.

## **Signal Outputs**

#### **Alarm outputs**

- <u>Function:</u> Configurable alarm output to transmit the engine speed alarm or total running hours alarm.
- <u>Type:</u> One passive NPN transistor, active PNP transistor or isolated electro-mechanical relay.

#### **Analog outputs**

None.

#### **Hazardous Area**

#### **Intrinsically Safe**

• ATEX:

Gas: II 1 G Ex ia IIC T4 Ga

Dust: II 1 D Ex ia IIIC T<sub>200</sub> 100 °C Da

IECEx:

Gas: Ex ia IIC T4 Ga

Dust: Ex ia IIIC T<sub>200</sub> 100 °C Da

• CSA & FM:

I.S. Class I/II/III, Div 1, Grp A...G, T4 Class I, Zone 0, AEx ia IIC T4 Ga

Note: Extended aluminum enclosures not

available with CSA/FM approval.

#### **Explosion Proof**

• ATEX/IECEx:

Gas: II 2 G Ex db IIB+H2 T5 Gb Dust: II 2 D Ex tb IIIC T80°C Db

#### Communication

- Modbus communication available on <u>F1-Series</u> products.
- HART communication is available with the <u>F018</u> Flow rate Monitor / Totalizer.



We're happy to answer any questions about our products and services. Just send us an email or give us a call.