

# **F190**

## Safe area / Intrinsically safe - Multi-Purpose Monitor

with alarm outputs and configurable hysteresis



#### **Features**

- Displays actual value, % and measuring unit.
- 4 alarm values can be entered: low-low, low, high and high-high alarm.
- 4 configurable hysteresis modes for alarm set- & resetpoints.
- Various alarm messages can be set to each alarm value.
- Large 17mm (0.67") digits.
- Wide range of engineering units for e.g. level, temperature and pressure and other applications
- Create a custom measuring unit with max. 8 characters.
- Full Modbus communication RS232/485/TTL.
- Loop or battery powered, 8 24V AC/DC or 115 -230V AC power supply.
- Sensor supply 3 / 8.2 / 12 / 24V DC.
- Red flashing LED backlight in case of alarm.
- Intrinsically safe according ATEX and IECEx.
- GRP, Aluminum or high grade stainless steel enclosure.
- Ambient temperature: -40°C to +80°C (-40°F to 176°F).
- Various <u>accessories</u> are available for this product.

### **Product description**

The F190 is a versatile general / multi-purpose indicator with continuous monitoring feature. Beside the focus on level, temperature and pressure applications, it also contains a range of other measuring units and even the possibility to create a custom unit with max. 8 characters.

It has two low level and two high alarm values with 4 configurable hysteresis modes. If desired, an ignore function can be set up to allow for an incorrect measurement for a certain period of time.

#### **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 and IECEx 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**

- For monitoring a wide range of process paramaters like flow (linear or square root), level, pressure and temperature measurements, even with signal re-transmission or serial communication available.
- 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**

• (0)4 - 20mA.

#### **Supply**

#### **Power Supply**

- Long life Lithium battery.
- 4 20mA Loop-powered.
- 8 24V AC/DC.
- 115 230V AC.
- Basic: 8 30V DC.

#### **Sensor Supply**

• 8.2, 12, 24V DC.

#### **Signal Outputs**

#### **Pulse outputs**

• None.

#### **Alarm outputs**

- <u>Function</u>: Configurable fail-safe alarm outputs for low-low, low, high, high-high or all combined alarms.
- <u>Type:</u> Up to three passive NPN transistors or active PNP transistors or up to four isolated electro-mechanical relays.

#### **Analog outputs**

- <u>Function</u>: Re-transmitting the actual value the output can be scaled to any range (e.g. 2.5 m³ to 1400.0 m³).
- <u>Type:</u> One passive isolated, floating or loop powered 4 - 20mA output or one active (0)4 -20mA or 0 - 10V DC output.

#### **Hazardous Area**

#### **Intrinsically Safe**

• ATEX:

Gas: II 1 G Ex ia IIB/IIC T4 Ga Dust: II 1 D Ex ia IIIC T<sub>200</sub> 100 °C Da

• IECEx:

Gas: Ex ia IIC/IIB T4 Ga Dust: Ex ia IIIC T<sub>200</sub> 100 °C Da

#### **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

- <u>Function:</u> All process data and settings can be read and modified through the communication link.
- Protocol: Modbus ASCII / RTU.
- Interface: RS232 / RS485 2-wire or 4-wire / TTL.



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