

F173 Safe area / Intrinsically safe - Level Monitor

with linearization, high / low alarms and analog outputs



Features

- Fifteen point linearization of the tank shape - with interpolation.
- Level monitoring: four alarm values can be set: low-low, low, high and high-high level alarm.
- Alarm values can be changed by the operator or they can be password protected.
- Optional clear alarm output function, e.g. to turn off an acoustic alarm.
- Analog output to transmit the actual level.
- Level and alarm values: six large 17mm (0.67") digits.
- Displays level, height or percentage, measuring unit and alarm messages simultaneously.
- Alarm ignore function allows an incorrect level for a certain period of time.
- Selectable on-screen engineering units; volumetric, mass and height.
- Displays clear alarm messages.
- Red flashing LED backlight in case of a level alarm; intensity adjustable.
- Intrinsically safe according ATEX and IECEx.
- GRP, Aluminum or high grade stainless steel enclosure.
- Backup of settings in EEPROM memory.
- Ambient temperature: -40°C to +80°C (-40°F to 176°F).
- Various [accessories](#) are available for this product.

Product description

The F173 is a versatile level indicator featuring linearization and continuous level monitoring. In addition to the average Span, fifteen linearization points can be entered to compensate for the tank shape. The unit will interpolate between these points to increase accuracy. This linearization affects all displayed information as well as the alarm and analog outputs.

With the level monitoring feature, two low and two high level alarm values can be set. If desired, an ignore function can be set up to allow for an incorrect level for a certain period of time. Up to five outputs are available to transmit alarm conditions and actual level. The display shows the actual level, height or percentage, alarm values, alarm messages and status. On-screen engineering units are easily configured from a comprehensive selection.

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

- Level measurement where linearization of the tank shape and continuous level monitoring is important as well as signal re-transmission of the level or serial communication.
- 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

Level 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

Alarm outputs

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

Analog outputs

- Function: Re-transmitting the linearized level, height or percentage - the output can be scaled to any range (e.g. 2.5 m³ to 1400.0 m³).
- Type: 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 T₂₀₀ 100 °C Da
- IECEx:
Gas: Ex ia IIC/IIB T4 Ga
Dust: Ex ia IIIC T₂₀₀ 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

- Function: All process data and settings can be read and modified through the communication link.
- Protocol: Modbus RTU.

- Interface: RS232 / RS485 2-wire or 4-wire / TTL.



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