PanaFlow Z1G/Z2G

Quick-start guide

Installation instructions

(see other side for electrical wiring and programming instructions)

1. Local mount PanaFlow Z1G/Z2G

Remove the components from the shipping container. The typical PanaFlow ZIG/Z2G system shown in Figure 1 includes the following items:

- 1 Meter body with flanges (material list WCB: LCB: CF8M: CD3MWCuN
- 2 Transmitter electronics
- 3 Magnetic stylus (for transmitter keypad)
- 4 Mounting adapter, transmitter (for local mount only)
- 5 Transducers/inserts

Transmitter electronics (2)



Figure 1: Local mount PanaFlow Z1G/Z2G process gas flow meter assembly

Note: For electrical connections information see "Making the electrical connections: on page 2.

2. Remote mount PanaFlow Z1G/Z2G

The typical remote PanaFlow ZIG/Z2G system shown in Figure 2 includes the following items:

- 1 Meter body with flanges (material list WCB: CF8M: CD3MWCuN)
- 2 XGM868i electronics
- 3 Electronics mounting bracket
- 4 Remote mount adapter
- 5 Haz. area certified remote cable
- 6 Combined pressure and temperature sensors (optional)



3. Remove mount connection between FlowCell and electronics



Figure 3: Remote mount wiring options

3.1 Wiring configuration options with/without preamp



Figure 4: Wiring configurations for remote mount without preamp



Figure 5: Wiring configurations for remote mount with preamp

Note: for making remote mount connection between FlowCell and electronics see Figure 2 to Figure 7.



WARNING! The PanaFlow ZIG/Z2G Process Gas Flowmeter can measure the flow rate of many gases, some of which are potentially hazardous.



WARNING! Follow all local safety codes and regulations for installing electrical equipment and working with hazardous fluids or flow conditions. Consult safety personnel to verify all procedures.

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Electrical wiring and programming instructions

(see other side for installation instructions)

4. Making the electrical connections

To prepare the PanaFlow ZIG/Z2G process gas flowmeter for wiring, refer to Figure 6 and Figure 7, and complete the following steps:



Figure 6: Rear cover with connection labels



Figure 7: Transmitter electronics - wiring diagram (Removed rear cover view)

Wiring the Transducers (Remote mount only, refer Section 3) Refer user manual 910-321 2.4.2

Refer user manual 910-321

Refer user manual 910-321

Refer user manual 910-321

Sec 2.4.3

Sec 2.4.4

Sec. 2.4.5

Wiring the standard 4-20mA analog outputs

Wiring the standard RS485 serial port

Wiring the option cards (for PT sensor only)

Wiring the line power



5. Operation

The PanaFlow ZIG/Z2G process gas flowmeter does not have an ON/OFF switch, it will power up as soon as the connected power source is energized. There are three methods for obtaining readings from the PanaFlow ZIG/Z2G Process Gas Flowmeter (refer user manual):

- Built-in PanaFlow Z1G/Z2G Process Gas Flowmeter LCD display
- PanaView software installed on personal computer
- External analog device to read the PanaFlow Z1G/Z2G Process Gas Flowmeter analog output

5.1 PanaFlow Z1G/Z2G Process Gas FLowmeter LCD display

The PanaFlow Z1G/Z2G Process Gas FLowmeter display screen includes the following information:

- Channel number
- Flow parameter
- Units of measure
- Flow rate value

Channel # Parameter Ch1 MDOT 0.00 LB/SEC Flow Rate Units

5.2 Programming the LCD display

The Flowmeter is pre-programmed, to modify the program use the keypad program. Complete the following steps to program the LCD display: Refer user manual.

- Power up the PanaFlow ZIG/Z2G Process Gas Flowmeter and wait until it has initialized. To enter the keypad program, press the [*] key, followed by the [~] key, and the [*] key again. Each successive key must be entered within 10 seconds of the prior key.
- 2. In the keypad program window, scroll to PROG and press [\screw]. In the PROG menu, scroll to GLOBL and press [\screw].
- 3. Scroll to I/O and press [\checkmark], and scroll to LCD and press [\checkmark]. At
- the # of LCD parameters screen, scroll to the desired number
 (from OFF through I-4 and KEY) and press [√]. The OFF setting switches the measurement display off. The KEY setting enables users to change the measurement display with the arrow keys, without accessing the keypad program. If you select KEY:
 - To view a parameter other than the one currently displayed, press the [▲] and [♥] keys to scroll through the various available parameters.
- 5. Select the desired measurement parameter.

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