

## TEK-BAR 3800E

*Utilities/Non-Explosion Proof Multivariable Transmitter*



# Quick Start Guide

## 1. Before you begin

This guide provides basic guidelines to assist you in quickly getting started.



Installation of the transmitter in an explosive environment must be in accordance with the appropriate local, national, and international standards, codes, and practices. Review the approvals section of the 3800E Utilities/Non-Explosion Proof Multivariable Transmitter reference manual for any restrictions associated with a safe installation.



Do not remove the transmitter covers in explosive environments when the circuit is live.



Make sure the transmitter is installed by qualified personnel and in accordance with applicable codes of practice.

## 2. Unpack

Tek-Bar 3800E Utilities/Non-Explosion Proof Multivariable Transmitter

## 3. Dimensional Drawing

### Horizontal Impulse Piping Type

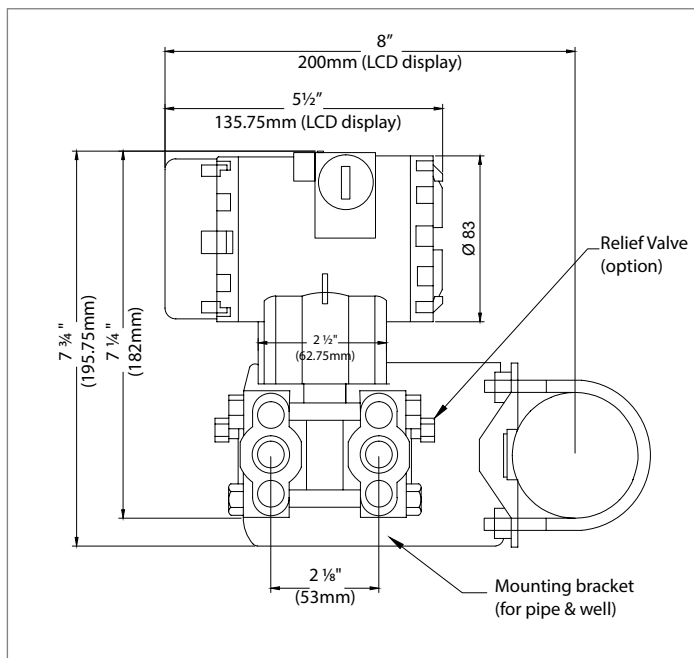


Fig 1: 3800E MVPT Front view

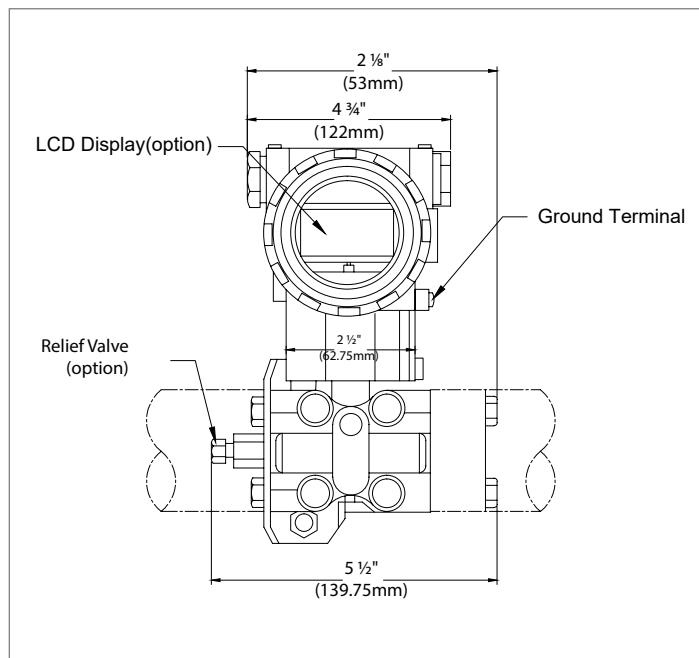


Fig 2: 3800E MVPT Side View

## Horizontal Impulse Wall Mounting Type

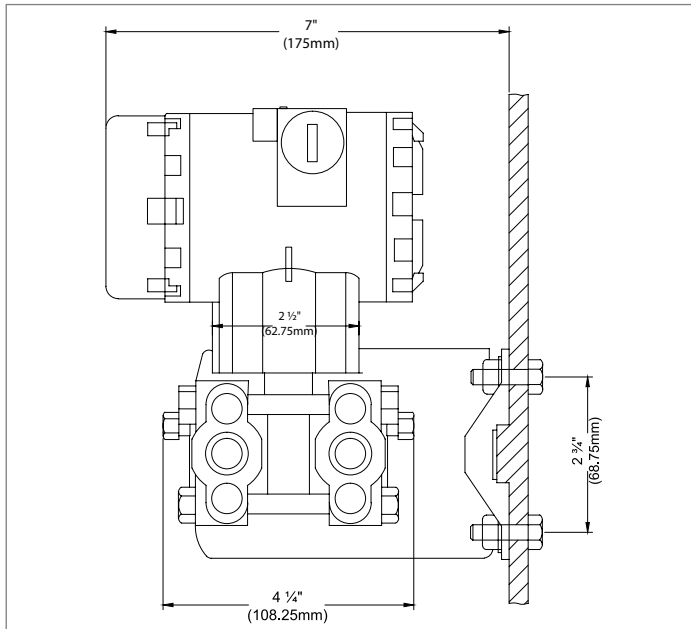


Fig 3: Wall Mounting Type

## Vertical Impulse Mounting Type

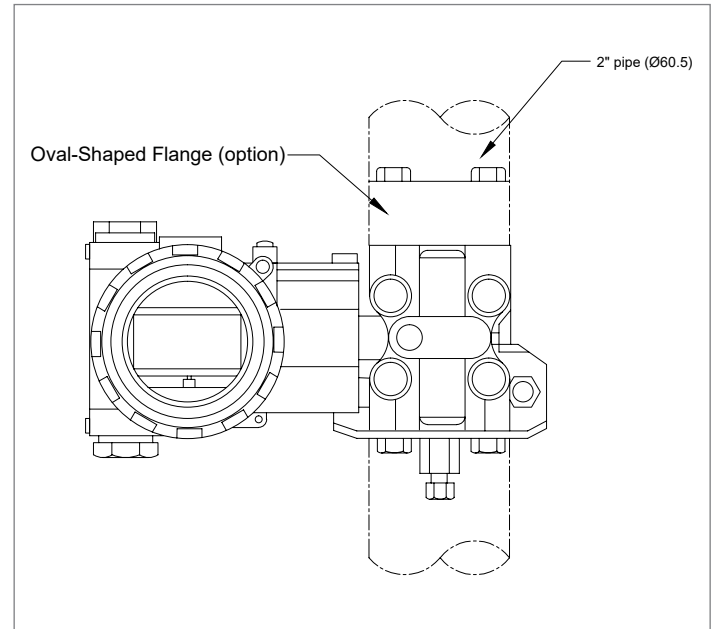


Fig 4: Vertical Impulse Mounting

## 4. Display

<p>--Main menu--</p> <ol style="list-style-type: none"> <li>1. Language</li> <li>2. User Setup</li> <li>3. Flow Setup</li> <li>4. Calibration</li> </ol>	<p>--Main menu--</p> <ol style="list-style-type: none"> <li>5. Total Reset</li> <li>6. Display</li> <li>6. Self Test</li> </ol>
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Fig 5: Display Menu

- In all main interface (main interface 1, main interface 2), press the M key to enter the main menu interface. You can select the corresponding menu item by pressing the S shift key and press M to enter. Each menu item can be described in the following sections, as follows:
  - Display unit: Changes in instantaneous, operating conditions, temperature, and pressure display units.
  - Self-test: Checking the instrument running status.
  - Total reset: Clearing the accumulated traffic.
  - Setup: Setting instrument run parameters.
  - Calibration: Setting the flow parameters and the temperature channel, pressure channel, current output, flow coefficient and differential pressure transmitter zero calibration settings.
  - Password: Modifying the settings, clear and calibrate passwords.

# Quick Start Guide

## 5. Power Supply

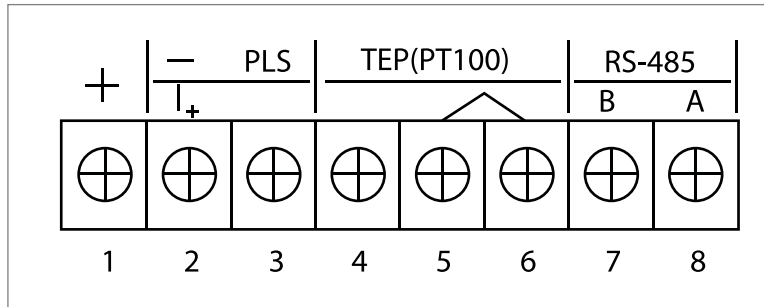


Fig 6: Wiring Connection

1. Power supply:  
1: Power supply 24V +      2: Power supply 24V-
2. Current output:  
1: Power supply 24V+      2: Current output I+ (with HART communication)
3. Pulse:  
2: Pulse negative      3: Pulse positive
4. Temperature:  
4: PT100A      5 and 6 short      PT100B      two-wire system  
4: PT100A      5: PT100B      6: PT100B      three-wire system
5. 485 communication:  
7: RS485 B      8: RS485 A

### Note:

1. Internal power supply battery can be used, and the service life is 2 or 3 years;
2. When using current output or HART communication, you need to connect the external power supply 24V, which can be automatically switched. No setup.

## 6. Installation

- **Liquid Flow**

Place taps on the side and mount the transmitter beside or below the taps. Ensure that the drain or vent valves are oriented upwards.



Fig 7: Liquid Flow Installation

- **Gas Flow**

Place taps on the top of the line and mount the transmitter above the taps.



Fig 8: Gas Flow Installation

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- **Steam Flow**

Use impulse lines to place the transmitter away from the line. Place taps on the side of the line. Mount the transmitter beside or below the taps. Fill impulse lines with water at start-up.



Fig 10: Steam Flow Installation

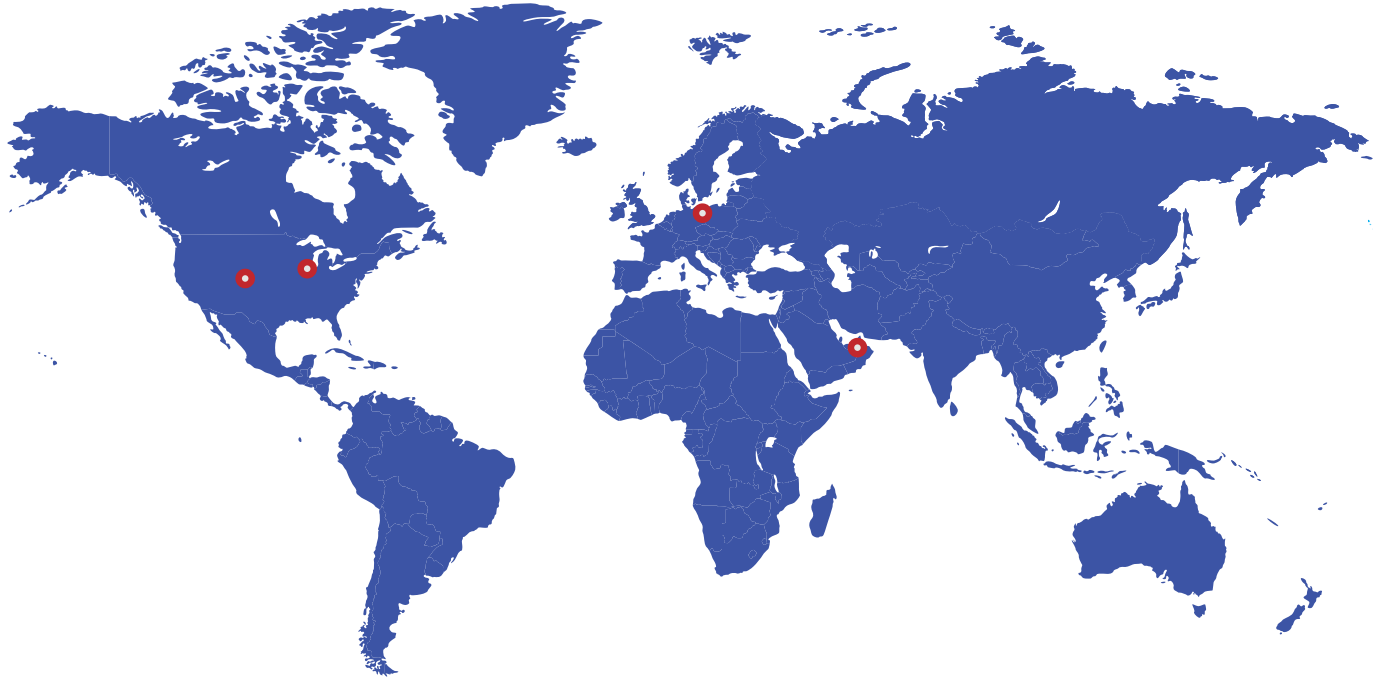
## 7. Appendix

### Product Warranty Description:

1. Product warranty period of 18 months.
2. The warranty period for the repaired, repaired and replaced parts during the warranty period is delayed by one year from the date of shipment. If the extension of a year after the original warranty period has not yet reached 18 months, it is the original warranty period of 18 months. Part of the repaired part of the warranty period remains the same.
3. Out of the product warranty period, repair or replacement parts warranty period extended for one year except the other part of the warranty period.
4. The warranty period for the product accessories purchased from a third party is based on the warranty period determined by the third party. (Such as the terminal and the three valve group warranty period is one year.)



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