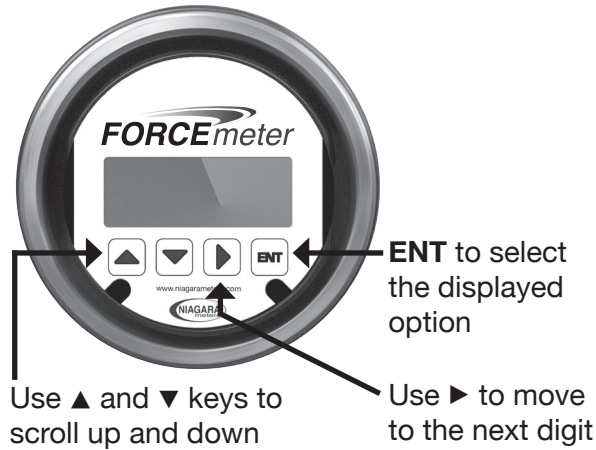


Setup

The ForceMeter™ is pre-calibrated and configured. The meter only needs to be zeroed to adjust for installation orientation.

SEE ZEROING THE FORCEMETER.

Display Description



Accessing the Menu

1. Press **ENT** and **▲** simultaneously
2. Enter password and press **ENT**
3. Use the **▲** and **▼** keys to increment or decrement the selected digit
4. Use the **►** key to select the next digit

Note: Default password is 8960

Zeroing the ForceMeter™

To zero the ForceMeter™, access the menu and follow the commands below.

1. Press **ENT** and **▲** simultaneously.
2. Enter password and press **ENT**

3. Menu will display:

MAIN MENU
EXIT

4. Use **▼** to scroll to Zero Meter
5. Press **ENT**
6. Menu will display:

FLOW = ZERO?
NO

7. Use **▲** to select **YES**
8. Press **ENT**
9. Menu will display:

SET ZERO?
NO

10. Use **▲** to select **YES**
11. Press **ENT**
12. Menu will display:

SET ZERO
PLEASE WAIT

13. Menu will display; complete and then

MAIN MENU
ZERO METER

14. Use the **▲** to scroll up for **EXIT**, then press **ENT**.
15. Display will return to operation mode*

***NOTE:** Display may show Display Rate and Total, Rate only or Total only.

SEE INSTALLATION & OPERATIONS MANUAL.

Technical Data

FUNCTIONAL SPECIFICATIONS	
Fluid Types	Liquids (Reynolds numbers greater than 2000), gases and steam
Pressure	Mounting Type / Connections: according to the appropriate ANSI or DIN specifications
Process Temperature	-320° to 500° F, (-195° to 260° C)
Transmitter Temperature	-4° to 158° F, (-20° to 70° C)
PERFORMANCE SPECIFICATIONS	
Accuracy	± 1.0% of rate
Repeatability	± 0.15%
Flow Direction	Unidirectional or bidirectional
Approvals	CE, FM
PHYSICAL SPECIFICATIONS	
Housing / Flanges	316L Stainless steel standard, others available
Mounting Positions	Horizontal, vertical or on an angle
Typical Straight Pipe Requirements	10 Times the pipe diameter of straight uninterrupted pipe upstream 5 Times the pipe diameter of straight uninterrupted pipe downstream
Process Connections	Inline: MNPT, Flanged, Wafer, Flare tube Insertion Probes: Fixed, Retractable
Power	18 to 36 VDC

SEE INSTALLATION & OPERATIONS MANUAL.

Quick Start Guide ForceMeter™



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All data subject to revision.

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Warnings

This guide is intended to cover the initial start-up of the ForceMeter™ only. It is the end-user's responsibility to ensure that the ForceMeter™ itself is installed properly and in compliance with the intended usage. Operating the ForceMeter™ outside of the intended parameters can result in damage to the meter. The ForceMeter™ is pre-calibrated for each application.

SEE INSTALLATION & OPERATIONS MANUAL.

Description

The ForceMeter™ is a liquid, steam, or gas flow meter. The force of the fluid is sensed on the target in the flow stream using a hermetically sealed, strain gage bridge circuit. The transmitter converts the force to a two wire, 4-20mA output which is proportional to flow rate.

Maintenance and Repair

The ForceMeter™ does not require maintenance on a regular basis.

SEE INSTALLATION & OPERATIONS MANUAL.

Repairs during the warranty period are performed by the manufacturer.

SEE INSTALLATION & OPERATIONS MANUAL.

Installation Information

Care should be exercised when removing the ForceMeter™ from the package and installing in the line. Do not damage sealing surface such as flange gasket surfaces and pipe threads. Avoid lifting the flow meter by the target disc or target lever rod. Avoid damaging the target disc.

The ForceMeter™ should be installed on the upstream side of the flow controls or shut off valves to ensure complete immersion of the target in the fluid at all rates of flow.

Pipe, wafer, or probe types for normal installations should be preceded by a minimum of ten diameters and followed by a minimum of five diameters of straight uninterrupted flow line for typical applications.

Additional Options

- Resetting Total
- Simulating 4-20mA
- Programming

SEE INSTALLATION & OPERATIONS MANUAL FOR COMPLETE LIST AND INSTRUCTIONS FOR PROGRAMMING AND MENU OPTIONS.

Warranty

Manufacturer's limited equipment warranty applies.

SEE INSTALLATION & OPERATIONS MANUAL.

Electrical

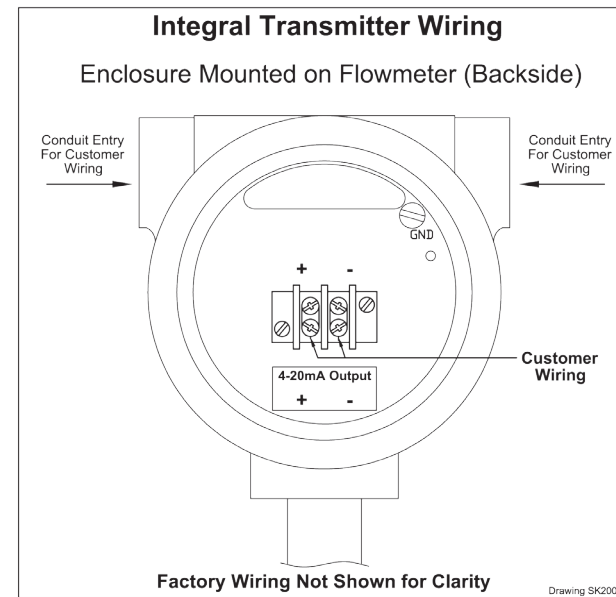
Integral Transmitter Mounting

For meters with integral transmitter mounting, remove the rear enclosure cover to access the 4-20mA loop connections. Ground wire should be attached to the ground screw. Additional wiring instructions are included for installing the power supply and a recorder, etc.

SEE INSTALLATION & OPERATIONS MANUAL.

SEE FIGURE 1.

Figure 1. Integral Transmitter Wiring



Remote Transmitter Mounting

For remote mounted transmitters, remove the covers on the meter enclosure and transmitter enclosure to access the terminal strips. Use eight conductor cable (Beldin 8418 or equivalent) to connect the meter terminals to the transmitter terminals. The 4-20mA loop connections are accessible in the transmitter enclosure.

SEE FIGURE 2.

Figure 2. Remote Transmitter Wiring

