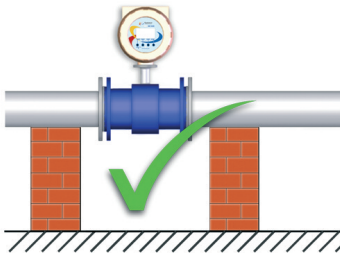
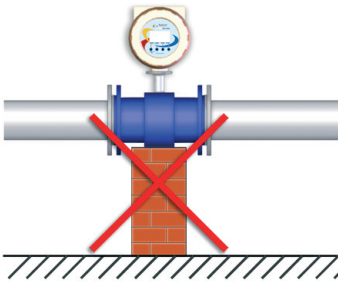
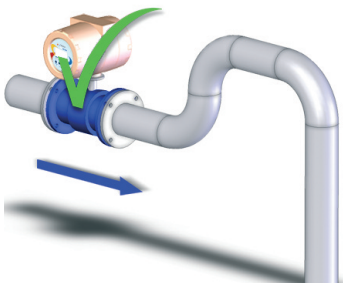
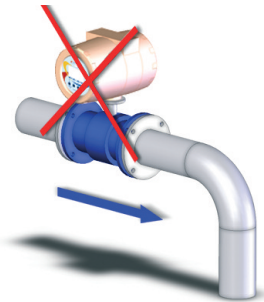
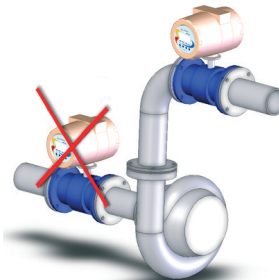
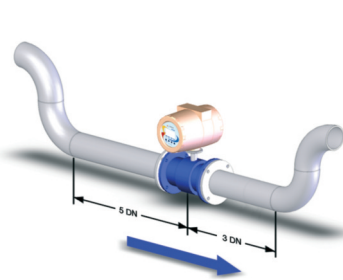
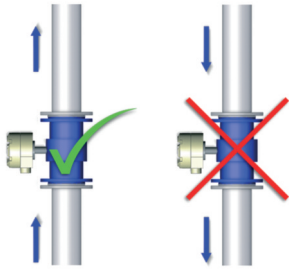


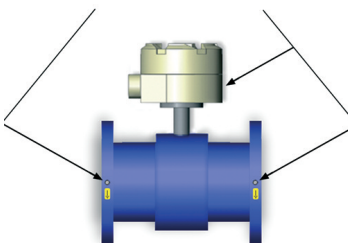
Electromagnetic Flow Meter

Quick Setup Guide

(For models EL2200, EL2400, EL500, EL4000)



Ground Sensor



Step 1 Sensor Mechanical Installation

- 1) The sensor must be installed at least 5 to 10 diameters away from any hydraulic disturbance upstream of the meter, such as pipe elbows, tees, pumps, valves, pressure regulators etc.
- 2) The sensor should be installed in a location that ensures the meter is always full of liquid, even when flow is stopped.
- 3) Ideally, the sensor should be installed in a vertical section of pipe, with the liquid flowing upwards, or as shown in the installation diagrams.
- 4) Check that the flow direction is consistent with the flow direction label on the sensor.

Step 2 Electrical Installation

- 1) Make sure that the sensor and transmitter are properly grounded to the pipeline and the grounding point on the sensor.

IMPORTANT: THE GROUNDING REQUIREMENTS ARE NECESSARY TO ENSURE CORRECT OPERATION OF THE UNIT

- 2) Connect power to the appropriate terminal block on the main PCB.
- 3) Connect the outputs to the device as shown in the diagrams on the next page.
- 4) **DO NOT** power up the sensor until you are certain the wiring is correct.

Step 3 Start-up

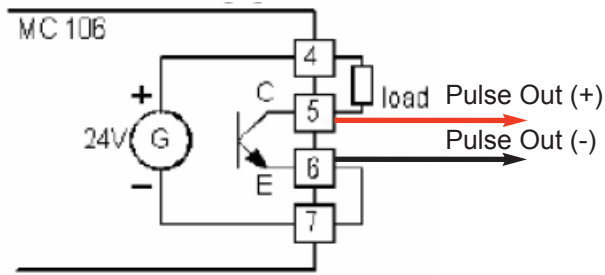
- 1) For best results, power up the device and leave for 10 to 15 minutes to warmup prior to zero calibration.
- 2) Verify that the pipeline is full of liquid and flow is blocked in order to proceed to automatic zero calibration.
- 3) Perform zero calibration (see manual).
- 4) Configure & scale the pulse & digital outputs.
- 5) For the MC608 transmitter, the unit can be configured using the PC based programming tool; see www.ftimeters.com/downloads/MC608software.zip.



Step 4: Transmitter Wiring

MC 106 Wiring

Pulse Output



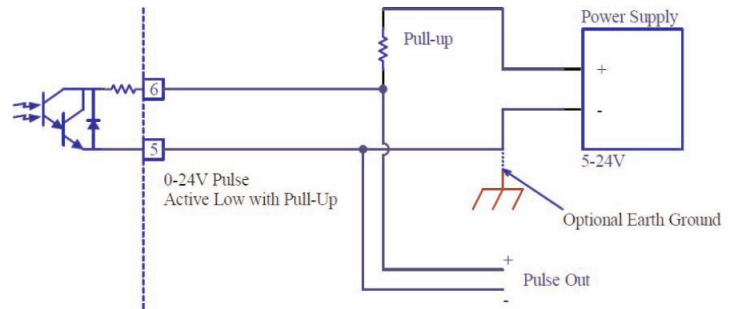
4-20mA Output

The analog output is a direct connection between Terminals 2(+) and 3(-)

Please refer to the MC106 manual for complete wiring instructions

MC 608 A/B Wiring

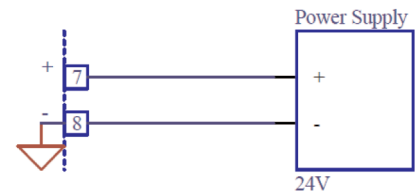
Pulse Output



4-20mA Output



Please refer to the MC608 manual for complete wiring information.



Step 5: Transmitter Configuration

MC 608 Configuration

The configuration of the 608 can be performed in three different ways:

1. Through the 4 push buttons located on the front mask of the converter, accessed by unscrewing the front panel glass.
2. Via PC through RS 485 modbus output and using the configuration software supplied by FTI.
3. Via PC through the IrDA port located on the front of the converter on top of the display and the configuration software.

The converter has three different levels of password protection.

- Level 1: 608111
- Level 2: 709222
- Level 3: 231042

The MC608 follows a very simple menu structure. The unit will be delivered with most of the parameters factory configured, the user typically only needs to configure the outputs.

MC 106 Configuration

The MC 106 A has no option for an integral keyboard. The unit was factory configured. If the unit needs to be re-configured or modified in the field a hand held TRM100 terminal/display can be used to modify the converter settings.

The MC106B has a key board and display, program modifications can be performed through the front keypad.

(E) = Enter
(C) = Clear

Level 1 Password: 106000
Level 2 Password: 210000

To change or enter a location simply enter the respective function number. For example, to zero the flow meter enter function number "47"; to change the full range flow rate enter "01". A full listing of function numbers can be found in the manual.

FTI Calibration Services

For Optimum performance all flow meters should be re-calibrated on a regular basis. Flow Technology has a NVLAB accredited worldclass calibration facility that is capable of calibrating all types of flow meters (Mag meters, Turbine, Coriolis, PD, Vortex etc)

