



Technical Bulletin Field Calibration of Seametric Meters

Seametrics meters leave the factory calibrated and with the K-factor marked on the meter or fitting. However, where the installation is less than ideal (or the original K-factor for the meter has been lost), you may wish to field calibrate your meter to take into account the exact conditions of flow (temperature, pressure, piping configuration, viscosity of liquid) under which it will be used.

Field calibration is accomplished by running a known volume of liquid past the meter, reading the total on your indicator at the end of the procedure, and calculating the number of pulses recorded per volumetric unit of liquid.

Step-by-step instructions for this simple procedure follow:

1. Install the meter and indicator.
2. Locate a bucket, tank, or barrel whose precise volume (in gallons) is known to use as your target container.
3. Reset the total on your indicator to zero, following the instructions in your manual.
4. Reset your indicator K-factor to one (1), following the instructions in your manual.
5. Run the fluid past the meter until the target container is full, without overflow.
6. Read the total on the display of your indicator. This number represents the total number of pulses that were recorded as the known volume of liquid passed the meter.
7. Calculate your K-factor by dividing the total number of pulses by the volume of liquid that flowed past the meter. Usually the K-factor is measured in gallons, but any volumetric unit can be used (for instance, pulses per liter, etc).
8. Reset your indicator with the new, field-calibrated K-factor, following the instructions in your manual.

EXAMPLE: You filled a 5 gallon bucket, and your indicator reads 500. Your field-calibrated K-factor is 500 pulses divided by 5 gallons, or 100 pulses per gallon.

OPTIONAL: If you would like an even more precise K-factor, repeat the above steps at various flow rates typical for your installation and average your K-factor readings.