



**Note:** Before starting the calibration procedure below, ensure that the pump is primed and void of any trapped air.

**Using the ml scale:** (scale is based on volume pumped, over any given time)

1. Fill the calibration cylinder to the top mark with the liquid to be dispensed. This can be accomplished by manually filling the cylinder, or, if the feed tank level is higher than the cylinder, by opening the isolation valve below the cylinder and back filling the cylinder.
2. Using a stop watch, measure the volume dispensed in 60 seconds.
3. Multiply the measured volume by 60 to find your ml per hour volume.
4. Adjust the pump volume control, higher or lower to meet with your desired output.
5. Repeat above steps 4 through 8 until your desired output is met.

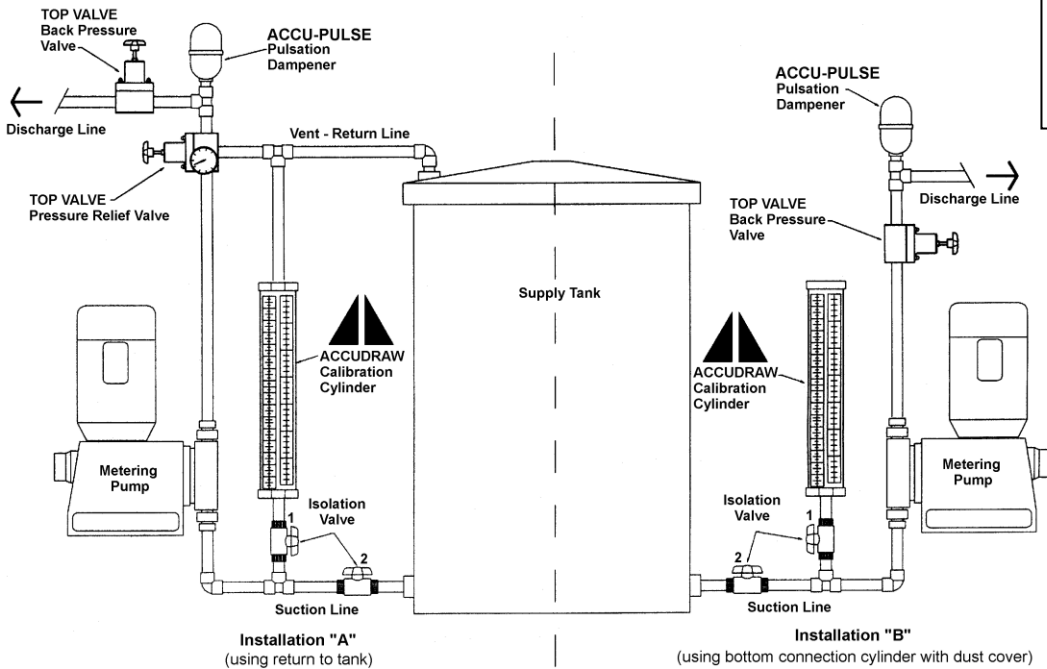
**Caution:** Never leave unattended when back filling the cylinder.

2. With the calibration cylinder full of the liquid to be dispensed, start the metering pump and operate at 100% output until all air is removed from both suction lines and pump head.
3. Shut pump "OFF".
4. With calibration cylinder full, close isolation Valve (#2) from supply tank, and open isolation valve (#1) below cylinder.
5. Start the pump.

If you wish to shorten the time of dispensing for calibration by one half (1/2) or one quarter (1/4), you must multiply the volume by the same number used to divide the time by to determine ml per minute or hour.

e.g. 100 ml in 60 seconds equals  
50 ml X 2 in 30 seconds or  
25 ml X 4 in 15 seconds

## Typical Installations ("A" and "B")



**Conversion Factors**  
 1ml = 1 cc  
 1000 ml = 1 liter  
 ml/sec x 60 = ml/min  
 1 US gal/min x 0.063 = liters/sec  
 1 US gal = 3.786 liters

**Caution:**  
 Do not use as a  
 Pressure Vessel



# Metering Pump Accessories Save \$\$\$\$

## Prevent unsafe and inefficient systems by design.

### ACCUDRAW Calibration Cylinders



PVC Glass Poly

- PVC, glass, polypropylene
- translucent, chemical resistant
- coloured graduations and lettering
- threaded or socket connections
- standard sizes 100 ml to 20,000 ml

Custom built in other sizes and materials.

### TOP VALVE Back Pressure/Pressure Relief



- long life diaphragm
- range of 0 – 150 PSIG
- air release, optional gauge port
- PVC, CPVC, PVDF, PTFE, polypropylene, stainless, Alloy 20 and Hastelloy C
- 7 sizes 1/4" – 2" NPT
- colour coded handles indicate size

Designed to enhance the accuracy and safety of your metering pumps.

### ACCU-PULSE

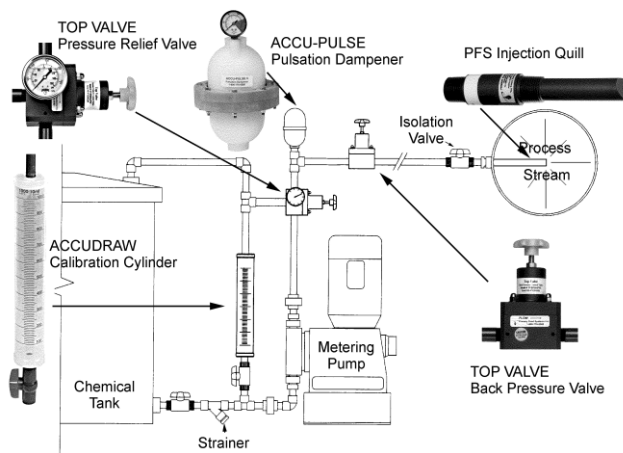
Pulsation Dampeners



Designed to remove pulsating flows from positive displacement pumps.

- increase system efficiency and pump life
- decrease maintenance and costs
- protect pipes, meters, valves and instrumentation from pulsation and vibration
- ensure meter accuracy, longevity and repeatability
- prevent foaming and splashing
- extensive range of materials and sizes
- lightweight, compact design

### Typical Metering Pump System



AutoCad drawings available from our web site.

Visit [www.primaryfluid.com](http://www.primaryfluid.com)

### PFS Injection Quills



Designed to inject chemical into the center stream of process.

- provides for a more homogenous mix in the pipeline
  - built-in checks to prevent back siphoning
  - 2 sizes 6" and 8" length
  - 1/2" or 3/4" NPT, BPST, or Flg'd Conn.
  - PVC, CPVC, PVDF, polypropylene, Stainless, Hastelloy C & Titanium
  - pressure to 3000 PSIG
  - temperature to 260°C (500°F)
- Custom built in other sizes and materials.

### Accu-Vent



Designed to automatically vent gases and vapours.

- vents gases and vapors released from Sodium Hypochlorite, Sulfuric Acid & Hydrogen Peroxide
- CPVC (Corzan) and Viton corrosion resistant wetted materials of construction
- specially designed float material automatically vents built up gases on system start up and under working pressure
- standard 1/2" or 3/4" NPT threaded connections or optional socket weld
- available in other materials

### PFS Corporation Stops



Designed to inject chemical into the center stream of process.

- isolation valve allows for ease of maintenance
  - available in 6 materials of construction
  - wetted components have comparable or greater chemical resistance than quill construction material
  - standard and custom lengths available
  - connection in NPT, metric or flanged
- Custom built in other sizes & materials.

Call Toll Free 1-800-776-6580  
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