

ProMinent Fluid Controls Application Bulletin

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Calibrating a Pump with a Self-degassing Liquid End

- Prime pump, set PRV and BPV. Calibration should be done pumping chemical (not water) at normal operating backpressure.
- Stop pump, fill calibration column.
- Put a collection container to collect the chemical that discharges from the degassing valve.
- Start pump, let pump run for a set time (normally 1 minute).
- Measure the volume of chemical that came from the degassing line.
- Read the volume of chemical pumped from the calibration column.
- Subtract the volume from the degassing line from the volume pumped from the calibration column. The difference is the volume per time pumped.
- Calculate the volume/ hour by multiplying the volume by 60 minutes divided by the time pumped (in minutes). The units for volume are the same as the volume measurement on the calibration column.

Example:

1. The pump pumped for 1 minute.
2. The volume read from the calibration column was 100 mL.
3. The volume that came from the degassing line was 25 mL.
4. CALCULATION
 $100 \text{ mL} - 25 \text{ mL} = 75 \text{ mL}$
 $75 \text{ mL} \times 60 \text{ min./ 1 hr.} \div 1 \text{ min.} = 4500 \text{ mL/ hr or 4.5 L/hr}$