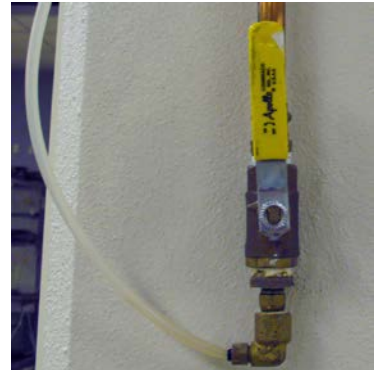


# Pipes and Fittings

ver 6

## Start-up:

- First off, check that the experiment is plugged in; the orange cord should be plugged in near the computers.
- Next, check that the air valve (on wall around from orange cord) is open (parallel to the pipe). Leave it like this when you finish, please.
- Climb up the ladder and peek into the big tank to make sure that it is at least half-full of water (if not, ask Mike or John to help fill it).
- Open the Labview VI. (see below; click [here](#) to access.)
- Right click to request control of VI.
- Select a flow rate. (ex. 12 gal/min) Keep your set point within the range of 5 to 15 gallons per minute.
- Turn on the pump.
- You should see readings for the flow, the temperature, the pressures at the pump and all fittings.
- Select how many data points to obtain and at what interval.
- Click push to record (it will light up)
- Change the flow rate according to your experiment.
- You can make brief excursions outside (5 to 15 gal/min), but don't stay outside the 5 to 15 range for more than two minutes!



## Shut Down:

- Turn it off the pump.
- That's it, you're done!

**Good Luck!**

# Pipe and Fittings

Off = red; on = green

Boxes in gray show current readings for each device

Change flow rate here

Fluid Temperature: 18.6 C

Gate Valve Delta P: -0.10 psi

Pump Switch:

Pump Delta P: 0.0 psi

Ball Valve Delta P: -0.09 psi

Flowrate Setpoint: 10.0 gal/min

Manual Control Override: Auto

Control Valve: 100

Kc: 2

EL Delta P: -0.02 psi

Liquid Flowrate: -0.0 gal/min

Set Manual Valve Position: 100

Ti: 0.05 (min)

TEE Delta P: 0.02 psi

Td: 0 (min)

Pipe Delta P: -0.02 psi

U Delta P: -0.02 psi

Specify Time between Data Points (sec): 1

Specify number of data points: 1

Push to Record

Data Point Count: 0

Cancel Data Collection

Cancel

Find a link to the data in a spreadsheet at the bottom of the page