Proper Mounting of your Variable Area Flow Meter

Flow OUT

Flow In

Flow OUT

150

 $140 \\ 130$

 $120 \\ 110$

100 90

> 80 70

60 50

150

90 80

70 60

50 40

30 20

10

For general applications where the system is venting to atmosphere the flow meter should be mounted as shown on left. The scale should increase from bottom to top. If using a control valve it should be placed at the inlet side of the flow tube. Having the valve placed on the inlet prevents any minor fluctuations in inlet pressure from affecting the readings.

> The vacuum source (or pump) is connected at the top. Flow moves from bottom to top.

For Vacuum applications, if using a valve, you want the control valve to be on top. You can do this by flipping the tube so the scale increases from bottom to the top. This way flow still goes in the same direction, but the valve acts to isolate the affect the vacuum pump has on the readings.



For applications where there will be varying differential pressures due to varying outlet pressures, the valve should also be mounted on the top. The scale should still increase from bottom to top and flow should still follow the same path as shown. A correlated chart will be needed for the fixed inlet pressure (usually 50 PSI). This is most commonly used when dispensing gas from a cylinder at a fixed PSI where the outlet pressure may change. A mass flow meter should also be considered.