The flow equation $Q = C'' F_{tf} \sqrt{h_w (P_s + P_a)}$, when solved for various values of differential pressures h_w, gives the rate of flow and rate of counting, e.g. -- universal adapter dial = 650; $C'' = 2,260$ (from curve); counting rate = 100 cu.ft. per count; static pressure $P_s = 160$ p.s.i.; atmospheric pressure $P_a = 13.0$ p.s.i.; flowing temperature $T_f = 20°F$.; flowing temperature factor $F_{tf} = 1.0408$; differential pressure $h_w = 50''$w.g. Rate of flow in cu.ft. per hour from the formula = 218,769 or 60.769 cu.ft. per second.

On the basis of 100 cu.ft. per count, the time required for 100 counts would be 164.55 seconds.

Various values of h_w could be supplied by actual manometer in the above formula and the error found by comparison with the theoretical.

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Ref: A-751