F19.
The pressure-tank reservoir for a paint sprayer contains air at $50 \mathrm{psi}\left(3.45 \times 10^{5} \mathrm{~Pa}\right)$, and $T=300 \mathrm{~K}^{\circ}$. Air is to be supplied to the spray gun at a rate of $10 \mathrm{grams} / \mathrm{s}$. What is the absolute minimum diameter of the air hose that's required to supply this air?

