



A light blue, rounded rectangular control volume is shown. Inside the volume, the pressure and density are labeled as P_b, ρ_b . Below this, the mass is given by the equation $m_b = \rho_b V_b$. At the bottom center of the volume, a horizontal arrow points to the right, labeled V_a , representing the velocity of the fluid exiting the control volume.

$$P_b, \rho_b$$

$$m_b = \rho_b V_b$$

V_a