Static Fluid: Example

\[ P_A = P_{\text{atm}} + \rho g h \]

\[ P_B = P_{\text{atm}} + \rho g h \]

\[ P_C = P_{\text{atm}} + \rho g h \]

\[ P_{\text{oil}} = \frac{P_A - P_{\text{atm}} - \rho g l}{\rho g} \]

\[ l = 135 \text{ mm} \]

\[ d = 12.3 \text{ mm} \]

\[ \rho_{\text{oil}} = 916.5 \text{ kg/m}^3 \]