SR-30 Inlet Flow Detail

Cross-sectional area

\[ A_1 = 38.5 \text{ cm}^2 \]

\[ \Delta P_1 = P_{\text{stagnation}} - P_{\text{static}} = 16.9 \text{ torr} \text{ (measured at 77,000 rpm)} \]

where \( P_{\text{stagnation}} = P_{\text{atm}} \)

PSF = profile shape factor = \( \frac{\dot{m}_{\text{actual}}}{\dot{m}_{\text{based on pitot}}} \)