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## NOMENCLATURE

| | |
|---|---|
| $D_c$ | cavity width, m |
| $D_o$ | orifice width, m |
| $f$ | actuation frequency of diaphragm, m |
| $h_c$ | height of cavity, m |
| $h_o$ | height of orifice, m |
| L | Stroke length, dimensionless |
| p | pressure, pa |
| Re | Reynolds number, dimensionless |
| $Re_L$ | Reynolds number established on dimensionless Stroke length, dimensionless |
| S | Stokes number, dimensionless |
| $S_r$ | Strouhal number, dimensionless |
| T | time period, 1/s |
| t | time, s |
| u | radial velocity field, m/s |
| $U_o$ | average velocity of synthetic jet, m/s |
| $u_t$ | instantaneous velocity of synthetic jet, m/s |
| $u_{max}$ | peak velocity at orifice exit, m/s |
| B1 | axial dimensions of quiescent air, mm |
| B2 | lateral dimensions of quiescent air, mm |

**Greek symbols**

| | |
|---|---|
| $\rho$ | density of fluid, kg/m$^3$ |
| $\mu_T$ | kinematic turbulent viscosty, m$^2$/s |
| $\mu$ | dynamic viscosity, kg/ms |
| $\nu$ | kinematic viscosity, m$^2$/s |
| $\Delta$ | diaphragm displacement, mm |

**Subscript**

| | |
|---|---|
| o | average |
| cl | centreline |
| t | instantaneous |
| max | maximum |
| i | inlet |
| w | wall |