$\overline{\overline{2}}00$
$\overline{2}2300$
C_y
θ
$\overline{2}00$
$\overline{2}2300$

a_1, a_3, a_5, a_7 C_y
A
c
D
$f = \sqrt{k/m}/2\pi$
F_y
F_0
k
m
m_a
P_d
$P_{in} = \rho U^3 D/2$
P_{mean}
P_t
t
U
U_i
$y, \dot{y}, \ddot{y}$
$A = DL$
λ
$\lambda_{1,2}$
ρ
$\omega_n = 2\pi f$
ω_s
$= cD/mU$
$C_y = F_y/0.5\rho U^2 DL$
$m^* = m/\rho D^2 L$
Re
$U^* = U/fD$
$Y = y/D$
$\dot{Y} = m^* \dot{y}/a_1 U$
$\ddot{Y} = m^{*2} D/a_1^2 U^2$
$\Gamma_1 = 4\pi^2 m^{*2}/U^{*2} a_1^2$
$\Gamma_2 = c^* m^*/a_1$
$\zeta = c/2m\omega_n$
$\theta = \tan^{-1}(\dot{y}/U)$
$= 4\pi^2 m^{*2}/U^{*2}$
$= c^* m^*$