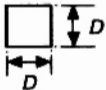
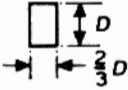
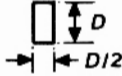
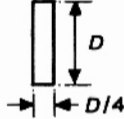
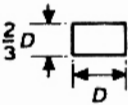
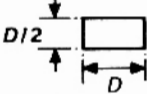
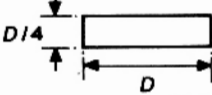
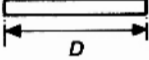
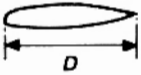


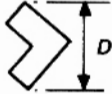


Table 4-1 Slope of vertical force coefficient for various sections in a steady flow

Section	$\partial C_y / \partial \alpha^a$		Reynolds number
	Smooth flow	Turbulent flow <sup>b</sup>	
	3.0	3.5	$10^5$
	0.	-0.7	$10^5$
	-0.5	0.2	$10^5$
	-0.15	0.	$10^5$
	1.3	1.2	66 000
	2.8	-2.0	33 000
	-10.	—	2 000–20 000
	-6.3	-6.3	$>10^3$
	-6.3	-6.3	$>10^3$
	-0.1	0.	66 000
	-0.5	2.9	51 000
	0.66	—	75 000

Source: Richardson et al. (1965), Parkinson and Brooks (1961), Slater (1969), Nakamura and Mizota (1977), Nakamura and Tomonari (1977). See Figs. 4-4, 4-9, 4-11, and 4-22 for additional data.

<sup>a</sup>  $\alpha$  is in radians; flow is left to right.  $\partial C_y / \partial \alpha = -\partial C_L / \partial \alpha - C_D$ .  $C_y$  based on the dimension  $D$ .  $\partial C_y / \partial \alpha < 0$  for stability.

<sup>b</sup> Approximately 10% turbulence.