List of symbols

A	area
a	area (relatively small), velocity of sound
B	width of channel
b	width, thickness
C	coefficient of discharge
C_c	coefficient of contraction
C_D	drag coefficient
C_f	frictional drag coefficient
C_L	lift coefficient
C_M	moment coefficient
C_v	coefficient of velocity
c	integration constant, coefficient of Pitot tube, flow velocity coefficient
c_p	specific heat at constant pressure
c_v	specific heat at constant volume
D	diameter, drag
D_f	friction drag
D_p	pressure drag, form drag
d	diameter
E	specific energy
e	internal energy
F	force
F_r	Froude number
f	coefficient of friction
g	gravitational acceleration
H	head
h	head, clearance, loss of head, depth, enthalpy
I	geometrical moment of inertia
i	slope
J	moment of inertia
K	bulk modulus
k	interference factor
k_d	cavitation number
L	length, power, lift

l length, mixing length

M mass, Mach number

m mass flow rate, mass (relatively small), strength of doublet, hydraulic mean depth

n polytropic exponent

P total pressure

p pressure

p_0 stagnation pressure, total pressure, atmospheric pressure

p_s static pressure

p_t total pressure

p_∞ pressure unaffected by body, static pressure

Q volumetric flow rate

q discharge quantity per unit time, quantity of heat per unit mass

R gas constant

Re Reynolds number

r radius (at any position)

r_0 radius

s specific gravity, entropy, wetted perimeter

T tension, absolute temperature, torque, thrust, period

t time

U velocity unaffected by body

u velocity (x-direction), peripheral velocity

V volume

v specific volume, mean velocity, velocity (y-direction), absolute velocity

v_* friction velocity

W weight

w velocity (z-direction), relative velocity

$w(z)$ complex potential

α acceleration, angle, coefficient of discharge

β compressibility

Γ circulation, strength of vortex

γ specific weight

δ boundary layer thickness

δ^* displacement thickness

ζ vorticity

η efficiency

θ angle, momentum thickness

κ ratio of specific heat

λ friction coefficient of pipe μ

μ coefficient of viscosity, dynamic viscosity

v kinematic viscosity, angle

ρ velocity potential

τ shear stress

ϕ angle, velocity potential

ψ stream function

ω angular velocity