



Fig. 2 Monochromatic progressive surface gravity waves

NOTATION

c = phase velocity (= velocity of propagation)	m = parameter of elliptic functions and integrals
c_g = group velocity	m_1 = complementary elliptic parameter (= $1 - m$)
E = mean energy density	MEL = mean energy level
E = complete elliptic integral of the second kind (= $E(m)$)	MWL = mean water level ($z_{MWL} = 0$)
E_f = mean energy flux = P (power)	p = pressure
F_m = momentum part of radiation stress	p^+ = excess pressure (= $p + \rho g z$)
F_p = pressure part of radiation stress	T = wave period
F_w = radiation stress ($\equiv F_m + F_p$)	u = horizontal particle velocity
g = gravity acceleration	U = Stokes parameter (= Ursell parameter $\equiv HL^2/h^3$)
h = mean water depth	w = vertical particle velocity
Δh = wave set-down	α = horizontal particle amplitude
H = wave height	β = vertical particle amplitude
k = wave number (= $2\pi/L$)	η = surface displacement above MWL ($\eta_{mean} = 0$)
K = complete elliptic integral of the first kind (= $K(m)$)	ρ = density of water
L = wave length	

Values for deep water are distinguished by the suffix \circ

Prepared by

Ove Skovgaard
Ib A. Svendsen
Ivar G. Jonsson
Ole Brink-Kjær

INSTITUTE OF HYDRODYNAMICS AND HYDRAULIC ENGINEERING (ISVA)
TECHNICAL UNIVERSITY OF DENMARK
BUILDING 115 · DK-2800 LYNGBY · DENMARK