g_j components of the gravitational acceleration
H_{ij} the given function
v_j velocity of a point in a medium
k_0 the initial permeability coefficient
n_0 the porosity

Greek symbols

ζ the volume change of the fluid per unit volume of the porous media
α the Biot coefficient
ε the volumetric strain
ρ_f the density of the fluid
β the coefficient of thermal expansion considering fluid and particles.
$\Delta\tilde{\sigma}_{ij}$ the stress increment
ε_{ij} the total strain
ε_v the strain