

Reynolds number = Re

[@wikipedia](#)

Dimensionless quantity characterising the ratio of inertial forces to viscous forces and corresponding **fluid flow regime**:

$$(1) \quad \text{Re} = \frac{u d}{\nu} = \frac{\rho u d}{\mu}$$

where

u	average cross-sectional flow velocity
d	characteristic linear dimension of the fluid conduit
ρ	fluid density
μ	dynamic viscosity
ν	kinematic viscosity

The physical meaning of **Reynolds number** is the ratio of Inertial forces to Viscous forces:

$$(2) \quad \text{Re} = \frac{\text{Inertial forces}}{\text{Viscous forces}} = \frac{u d}{\nu}$$

See also

[Physics](#) / [Fluid Dynamics](#) / [Fluid flow regimes](#)

[[Reynolds number in Pipe Flow](#)]