

Plane Poiseuille flow

[@wikipedia](#)

The driving equation for steady-state single-phase fluid between infinite parallel planes:

(1)
$$u = \frac{k}{\mu} \nabla p$$

where

u	flow velocity
∇p	pressure gradient along the flow
μ	fluid viscosity
$k = w^2/12$	inter-plane permeability
w	distance between parallel planes

See also

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[[Pipe Poiseuille flow](#)]