

Pore volume

[@wikipedia](#)

Part of the [bulk rock volume](#) V_r containing the [hydrodynamically connected fluids](#) (also called [free fluids](#)) within each [pore](#) element:

$$(1) \quad V_\phi = V_r - V_m$$

where

V_m	solid rock matrix volume
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Although the [fluid](#) inside the pore is movable but some [pores](#) maybe isolated from each other and do not contribute to rock [permeability](#).

This splits the [pore volume](#) V_ϕ into two components: [connected pore volume](#) V_{con} and [closed pore volume](#) V_{cls} :

$$V_\phi = V_{\text{con}} + V_{\text{cls}}$$

See also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Petrophysics \(PP\)](#) / [Volumetric Rock Model](#)

[[Basic reservoir properties](#)] [[Pore volume](#)] [[Connected pore volume](#)] [[Closed pore volume](#)] [[Porosity](#)] [[Connected porosity](#)] [[Closed porosity](#)]