

Volumetric Flowrate

@wikipedia

Volume of fluid passing through a certain area A per unit time:

$$(1) \quad q_A = \frac{dV_A}{dt}$$

SI unit	Metric unit	Oilfield units
m^3/s	$\text{cmd} = \text{m}^3/\text{d}$	bpd

In [Petroleum Industry](#) this term depends on context and may mean [pipeline flowrate](#) or [wellbore flowrate](#) which can be measured at [separator](#) (and called [Surface flowrate](#)) or [downhole](#) (and called [Sandface flowrate](#)).

Volumetric flowrate q_A is related to mass flowrate \dot{m}_A and fluid density ρ as:

$$(2) \quad \dot{m}_A = \rho \cdot q_A$$

See Also

[Natural Science](#) / [Physics](#) / [Mechanics](#) / [Continuum mechanics](#) / [Fluid Mechanics](#)

[[Mass Flowrate](#)]

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Well Testing \(WT\)](#) / [Flowrate Testing](#)

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