

Thermal expansion coefficient =

@wikipedia

A measure of relative media [density](#) ρ change due to a unit [temperature](#) T variation:

(1)
$$\alpha_V = \frac{1}{\rho} \left(\frac{\partial \rho}{\partial T} \right)_p$$

Symbol	Dimension	SI units	Oil metric units	Oil field units
α_V	-1	K ⁻¹	°C ⁻¹	°F ⁻¹

For the [Ideal Gas](#): $\alpha_V = \frac{1}{T}$.

See also

[[Single-phase fluid compressibility](#)] [[Multi-phase fluid compressibility](#)] [[Pore compressibility](#)] [[Total compressibility](#)]

[[Young modulus – thermal expansion @model](#)]