

Isentropic bulk modulus = K_S

Bulk modulus under [isentropic](#) (constant [entropy](#) $S = \text{const}$) compression/decompression [thermodynamic process](#):

$$(1) \quad K_S = \rho \cdot \left(\frac{\partial p}{\partial \rho} \right)_S$$

Isentropic bulk modulus is [material property](#) and is inverse to [Isentropic Compressibility](#) β_S :

$$(2) \quad K_S = \frac{1}{\beta_S}$$

See also

[Physics](#) / [Mechanics](#) / [Continuum mechanics](#) / [Continuum body](#) / [Bulk modulus](#)

[[Isentropic Compressibility](#) (β_S)]