Relationships between isotropic elastic material constants

	E	ν	G or μ	λ	K
E, ν	E	ν	$\frac{E}{2(1+\nu)}$	$\frac{\nu E}{(1+\nu)(1-2\nu)}$	$\frac{E}{3(1-2\nu)}$
G, λ	$\frac{G(3\lambda+2G)}{\lambda+G}$	$\frac{\lambda}{2(\lambda+G)}$	G	λ	$\frac{3\lambda+2G}{3}$
K, λ	$\frac{9K(K-\lambda)}{3K-\lambda}$	$\frac{\lambda}{3K-\lambda}$	$\frac{3}{2}(K-\lambda)$	λ	K
E, G	E	$\frac{E-2G}{2G}$	G	$\frac{G(E-2G)}{3G-E}$	$\frac{GE}{3(3G-E)}$
E, K	E	$\frac{3K-E}{6K}$	$\frac{3EK}{9K-E}$	$\frac{3K(3K-E)}{9K-E}$	K
K, ν	$3K(1-2\nu)$	ν	$\frac{3K(1-2\nu)}{2(1+\nu)}$	$\frac{3\nu K}{(1+\nu)}$	K
G, ν	$2G(1+\nu)$	ν	G	$\frac{2\nu G}{1-2\nu}$	$\frac{2G(1+\nu)}{3(1-2\nu)}$
λ, ν	$\frac{\lambda(1+\nu)(1-2\nu)}{\nu}$	ν	$\frac{\lambda(1-2\nu)}{2\nu}$	λ	$\frac{\lambda(1+\nu)}{3\nu}$
K, G	$\frac{9KG}{3K+G}$	$\frac{3K-2G}{2(3K+G)}$	G	$\frac{3K-2G}{3}$	K

$$D_{ijkl} = \frac{(1+\nu)}{2E}\left[-\frac{2\nu}{1+\nu}\delta_{ij}\delta_{kl} + \delta_{ik}\delta_{jl} + \delta_{il}\delta_{jk}\right]$$

$$C_{ijkl} = \frac{E}{2(1+\nu)}\left[\frac{2\nu}{1-2\nu}\delta_{ij}\delta_{kl} + \delta_{ik}\delta_{jl} + \delta_{il}\delta_{jk}\right]$$