

ELMT01

(2d/3d Linear Truss Element)

For each element property set (ndm = dimension of problem)

MATE, ElmtID USER, 1 Igeom E, A REZOption, REZone(1), ..., REZone(2*ndm) ρ , Imass α , β blank line at end of each element specification

Definitions:

ElmtID	Element property ID
Igeom	1: linear geometry 2: nonlinear geometry (presently not implemented)
E	Young's elastic modulus
A	Cross section area
REZOption	Option for rigid end zone offsets 1 : rigid end zone offsets in global reference system 2 : rigid end zone offsets in local reference system
REZone(1:2*ndm)	Rigid end zone offsets at element nodes i and j in global or local reference system REZone(1),..., REZone(ndm): X, Y, (Z) value of offset at node i REZone(ndm+1), ..., REZone(2*ndm): X, Y, (Z) value of offset at node j Note: for local reference system specification only two x-values are read, i.e. ndm=1
ρ	Mass density per unit volume
Imass	Switch for lumped or consistent mass matrix 0 = lumped 1 = consistent
α , β	Rayleigh damping factors; the element damping matrix is $C = \alpha M + \beta K_0$