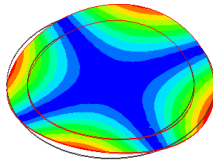
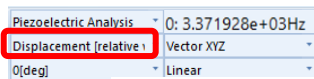


Question 14

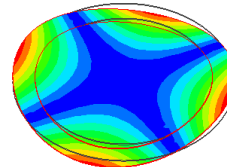
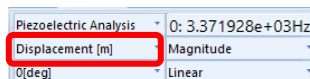
Q: How to obtain the displacement in the resonant analysis?

A: The resulting displacements in the resonant analysis are equivalent to the eigenvectors of an eigenvalue problem. They represent relative values and can not be considered as absolute values for displacement, stress, and strain. (Both in the stress and piezoelectric analyses)

However, if the piezoelectric analysis is performed with the electric potential boundary condition applied, the input energy through the electric potential can be calculated. By precisely correcting for the input energy, accurate displacement values at the resonant frequency can be obtained.



Solver: Piezoelectric Analysis
Field: Displacement (relative value)
Element: Vector XYZ
Scale: Linear



Solver: Piezoelectric Analysis
Field: Displacement [m]
Element: Magnitude
Phase: 0[deg]
Scale: Linear