

Virtual Tuning of LHP Outdoor Shake Table

Hydraulic Plant Simulation



Oil Parameters:

Supply pressure psi
Return pressure psi
Bulk modulus psi

Friction Parameters:

Sliding force kip
Yield displacement in
Hysteresis

Servo valve Parameters:

Natural frequency Hz
Damping %
Overlap %
Rated pressure psi
Rated flow gpm

Fixture & Specimen Parameters:

Static force kip
Static spring kN/mm
Rigid mass ton
Modal mass ton
Modal frequency Hz
Modal damping %

Actuator Parameters:

Piston area in²
Usable stroke in
Cushion length in
Damping %
Piston leakage gpm/psi

Miscellaneous Results:

Oil column freq Hz
Max velocity mm/s
Max force kN
Max flow gpm
Max volume gal

Accumulator Parameters:

Volume gal
Precharge press psi
Gas constant
Pump flow gpm

Units Conversion Factors





