

ES-400-870

System Performance	Metric	American
Rated Sine Force	400 kN	88000 lbf
Rated Random Force	300 kN	66000 lbf
Rated Shock Force	800/1200* kN	176000/269000* lbf
Usable Frequency	DC-1700 Hz	DC-1700 Hz
Maximum Velocity	2/2.5* m/s	78.7/98.4* in/s
Maximum Acceleration	1000 m/s ²	100 g
Maximum Static Payload	6000 kg	13227 lbs
Resonance Frequency	1600±5% Hz	1600±5% Hz
Maximum Displacement p-p	51 mm	2 in

Shaker: ET-400-870

Mass of Moving Elements	330 kg	727 lbs
Armature Diameter	870 mm	34.2 in
Weight	About 23000 kg	About 50706 lbs
Body Suspension Natural Frequency	2.5 Hz	2.5 Hz
Stray Flux Density	<10 Gauss	<10 Gauss
Dimension L×W×H	2900×2066×1986 mm	114.2×81.3×78.2 in

Power Amplifier: SDA-460

Power	460 kVA	460 kVA
Power Supply Requirement	600 kVA	600 kVA
Dimension L×W×H	6000×1010×2070 mm	236.2×39.8×81.5in
Weight Uncrated	About 6100 kg	About 13448 lbs

Water Cooling: CU-3

Internal Circle Water Flow (Distilled Water)	120 L/min	26.4 gal/min
Internal Circle Water Pressure (Distilled Water)	1 Mpa	145 psi
External Circle Water Flow (City Water)	320 L/min	70.4 gal/min
External Circle Water Pressure (City Water)	0.25-0.4 Mpa	36-58 psi
Water Pump Power (Internal/External)kW	8/6.5 kW	8/6.5 kW
Distilled Water Requirement	Hardness 30ppm, PH7~8, Conductivity 1Us/cm	
Unit Weight (kg)	About 300 kg	About About 661 lbs
Dimension L×W×H	607×1010×2070 mm	23.9×39.8×75.7 in

Options

- Magnesium or Aluminum Armature
- Customized Fixtures (T, L, Cube)
- Combo or Standalone Slip Table
- Pneumatic Isolators or Free Foundation Isolation Base
- Motorized Shaker Body Rotation System
- Air Caster or Glide Rail
- Head Expanders and Vertical Support Platforms
- Cooling tower
- Thermal barrier
- Remote control

Outline Drawing



ET-400-870

Power Amplifier SDA-460

Water Cooling CU-3

NOTE: In keeping with our commitment to continuous product improvement, the information herein is subject to change.

Water-cooled Series

Water-cooled Vibration test system features with the large force, large bearing capacity and high cooling efficiency, to complete the tri-axial sinusoidal vibration test, broadband random vibration test and classical (semi-sinusoidal, trapezoidal, and postpeak sawtooth) pulse and shock response spectrum test. The multi-environment combined test can be completed with the equipped climate chamber. At present, this series has a variety of models to choose. The exciting force range is from 50 kN to 500 kN and maximum load is from 800 kg to 10000 kg.

Performance characteristics

- Random to sinusoidal excitation force ratio: 1:1
- Two-times-of-sine shock force (Three times optional)
- Displacement peak-to-peak: 51mm, 76mm or 100mm
- Lightweight armature and large working table
- Better vibration isolation effect of air spring at trunnion position
- Large bearing capacity of air spring in central room, and good low-frequency performance
- Equipped with an automatic centering system, to control the armature is always in the balance position during movement
- Double magnetic circuit design, with low flux leakage and uniform magnetic field