

ES-80LS3-445

System Performance	Metric	American
Rated Sine Force	80 kN	17600 lbf
Rated Random Force	80 kN	17600 lbf
Rated Shock Force	160/240* kN	35200/52800* lbf
Usable Frequency	DC-2500 Hz	DC-2500 Hz
Maximum Velocity	2 m/s	78.7 in/s
Maximum Acceleration	1000 m/s ²	100 g
Maximum Static Payload	800 kg	1760 lbs
Resonance Frequency	2400±5% Hz	2400±5% Hz
Maximum Displacement p-p	76 mm	3 in

Shaker: ET-80LS3-445

Mass of Moving Elements	60 kg	132 lbs
Armature Diameter	445 mm	17.5 in
Weight	4500 kg	9921 lbs
Body Suspension Natural Frequency	<2.5 Hz	<2.5 Hz
Stray Flux Density	<10 Gauss	<10 Gauss
Dimension L×W×H	1730×1104×1308 mm	68.1×43.5×51.5 in

Power Amplifier: SDA-80

Power	80 kVA	80 kVA
Power Supply Requirement	140 kVA	140 kVA
Dimension L×W×H	1800×1010×2070 mm	70.9×39.8×81.5 in
Weight Uncrated	1800 kg	3968 lbs

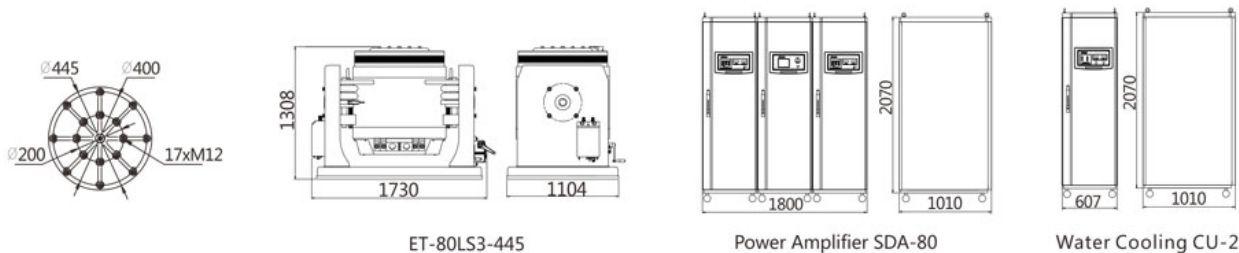
Water Cooling: CU-2

Internal Circle Water Flow (Distilled Water)	80 L/min	17.6 gal/min
Internal Circle Water Pressure (Distilled Water)	1 Mpa	145 psi
External Circle Water Flow (City Water)	160 L/min	35.2 gal/min
External Circle Water Pressure (City Water)	0.25-0.4 Mpa	36-58 psi
Water Pump Power (Internal/External)kW	8/4 kW	8/4 kW
Distilled Water Requirement	Hardness 30ppm, PH7~8, Conductivity 1Us/cm	
Unit Weight (kg)	300 kg	About 661 lbs
Dimension L×W×H	607×1010×2070 mm	23.9×39.8×81.5 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-80LS3-445

Power Amplifier SDA-80

Water Cooling CU-2

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

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