

IMV VIBRATION TEST SYSTEMS

J series

IMV-Smart™ ECO-Shaker

Air-cooled Vibration Test Systems J250/EM5AM



Long-duration shock tests require high velocity and large displacement. J-series is a high-frequency system that offers usability and durability while accommodating high velocity and displacement testing.

[Expanded maximum test range]

Maximum velocity of Sine force: 94 in/s, Maximum velocity of Shock force 137 in/s, Maximum displacement: 4.0 in-p
[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard.
[All models can be directly coupled to a climatic chamber.]



1. High velocity and large displacement

High velocity of 94 in/s and large displacement of 4.0 in-p.



PS guide system

2. Improvement of testing environment

With the use of Intelligence Shaker Management (ISM), EM range can reduce power consumption and CO2 emissions automatically.

eco-shaker

3. User first principle

Compatible with K2 vibration controller. Intuitive interface leads the operator with user-friendly guidance.





System Specification		
Frequency Range (Hz)	0-2,200	
Rated Force	Sine (lbf)	7,900
	Random (lbf rms) ¹	7,900
	Shock (lbf)	15,800
	High Velocity Shock (lbf) ⁴	15,300
Maximum Acc.	Sine (g)	79
	Random (g rms)	55
	Shock (g peak)	159
	High Velocity Shock (g peak) ⁴	154
Maximum Vel.	Sine (in/s)	94
	Shock (in/s peak)	94
	High Velocity Shock (in/s peak) ⁴	137
Maximum Disp.	Sine (inp-p)	4.0
	High Velocity Shock (inp-p) ⁴	4.0
Maximum Travel (inp-p)	4.7	
Maximum Load (lbs)	1,320	
Power Requirements (kVA) ²	53	
Breaker Capacity (A) ³	100	

Vibration Generator (J250)	
Armature Mass (lbs)	99.2
Armature Diameter (φ in)	17.3
Armature Resonance (Hz)	1,700
Allowance Eccentric Moment (lbf·in)	13,730
Mass (lbs)	7,720

Power Amplifier (EM5AM-J50)	
Maximum Output (kVA)	50
Amplifier Bay	2
Mass (lbs)	2,050

Cooling Blower (VAPE 710/P2R)	
Mass (lbs)	617

Environmental Data		
Input Voltage Supply (3 φ, V)	220/480	
Compressed Air Supply (psi)	102	
Working Ambient Temperature	Shaker (F)	32-104
	Amplifier (F)	32-104

Vibration Generator (J250)

a: W 58 in
b: H 51 in
c: D 44 in
d: 34 φ in

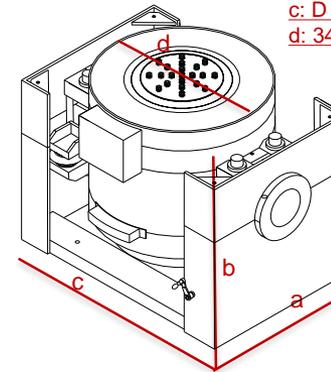
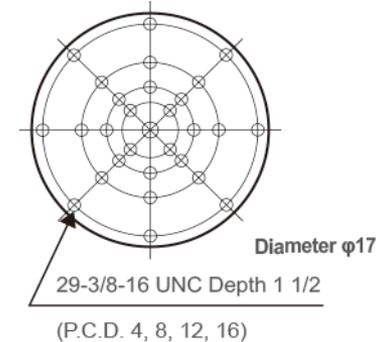
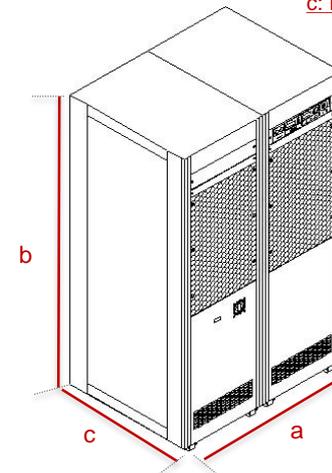


Table Insert Pattern (unit: inch)



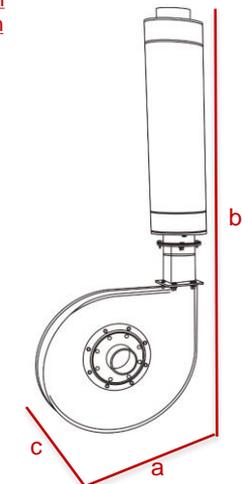
Amplifier (EM5AM-J40)

a: W 46 in
b: H 77 in
c: D 34 in



Blower (VAPE 710/P2R)

a: W 46 in
b: H 84 in
c: D 32 in



¹ Random force ratings are specified in accordance with ISO5344 conditions. Please contact IMV or your local distributor with specific test requirements.

² Power supply: 3-phase 220/480 V, 60 Hz. A transformer is required for other supply voltages.

³ Breaker capacity for 480 V.

⁴ For high-velocity option

*For random vibration tests, please set the test definition of the peak value of acceleration waveform to operate at less than the maximum acceleration of shock.

*Frequency range values vary according to the sensor and vibration controller.

*Armature mass and acceleration may change when a chamber is added.