

IMV VIBRATION TEST SYSTEMS

i series

Air cooled Vibration Test Systems

i250 / SA5AM

i250 / EM5AM

Vibration tests have diversified and specifications have become increasingly strict. i-series offer a user-friendly lineup with enhanced performance and durability.

[Expanded maximum test range]

Max. velocity of Sine force: 2.4 m/s, Max. velocity of Shock force 4.6 m/s, Max. displacement: 100mmp-p

[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard.

[Low noise] Optimised design of the air intake based on fluid dynamics has reduced the air-intake noise.

[All models can be directly coupled to a climatic chamber.]



① High durability with PS guide

PS guide (parallel slope guide) is an upper support system conforming to continued vibration testing at high velocity.



■ PS guide system

② Improvement of Testing Environment

With the operation 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.



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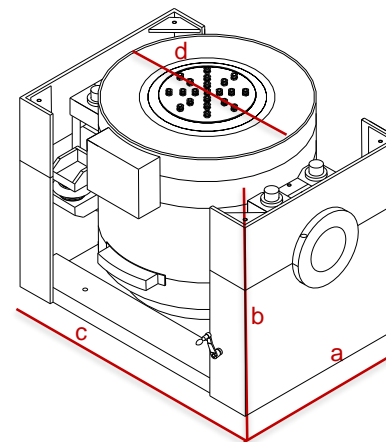


System Specifications		
System Model	i250/SA5AM	i250/EM5AM
Frequency Range (Hz)	0-2500	
Rated Force	Sine (kN) *1	40
	Random (kN rms)	40
	Shock (kN)	80
Maximum Acc.	Sine (m/s ²)	1142
	Random (m/s ² rms)	800
	Shock (m/s ²)	2284
Maximum Vel.	Sine (m/s)	2.2
	Shock (m/s peak)	2.2
Maximum Disp.	Sine (mmp-p)	51
	Maximum Travel (mmp-p)	68

Vibration Generator (i250)	
Armature Mass (kg)	35
Armature Diameter (φ mm)	440
Armature Resonance (Hz)	1900
Allowance Eccentric Moment (N·m)	1550
Maximum Payload (kg)	600
Mass (kg)	3000

Cooling Blower		
Model	VAPE 710/P2R	
Mass (kg)	250	
Environmental Data		
Power Requirement (kVA) *2	57	
Input Voltage Supply (3φ, V)	380/400/415/440	
Compressed Air Supply (Mpa)	0.6	
Working Ambient	Temperature (°C)	0 - 40
	Humidity (%RH)	0 - 85

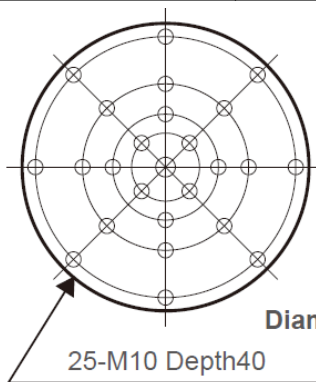
Power Amplifier		
System Model	SA5AM-i50	EM5AM-i50
Maximum Output [kVA]	50	50
Mass [kg]	880	930



Shaker

Model: i250

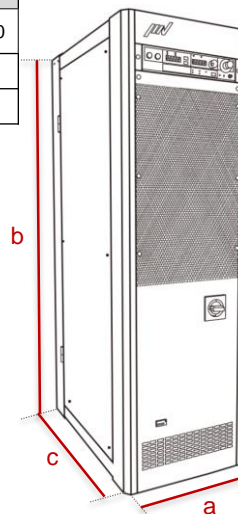
- a: W 1463 mm
- b: H 1187 mm
- c: D 1100 mm
- d: 860 φmm



Diameter φ440
unit: mm

25-M10 Depth40
(P.C.D.100,160,250,400)

i250



Amplifier

Model: SA5AM-i50

- a: W 580 mm
- b: H 1950 mm
- c: D 850 mm

Model: EM5AM-i50

- a: W 1160 mm
- b: H 1950 mm
- c: D 850 mm



Blower

Model: VAPE 710/P2R

- a: W 1160 mm
- b: H 2405 mm
- c: D 787 mm

*1) Random force ratings are specified in accordance with ISO5344 conditions.
 *2) Power supply: 3-phase 380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.
 *3) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force.
 Please contact IMV or your local distributor with specific test requirements.
 * The specification shows the maximum system performance.
 For long-duration tests, de-rating by up to 70 % must be applied.
 Continuous use at maximum levels may cause failure.
 * In the case of Random vibration test, please set the test definition of the peak value of acceleration waveform to be operated less than the maximum acceleration of Shock.
 * Frequency range values vary according to sensor and vibration controller.