

# J-series

## Large Displacement Range



J240/SA4M  
(With a slip table)

### J-series accommodates high velocity and large displacement testing

Long duration shock tests require high velocity and large displacement.

J-series is a high-functionality system that offers usability and durability furnished with functions that accommodate high velocity and large displacement testing.

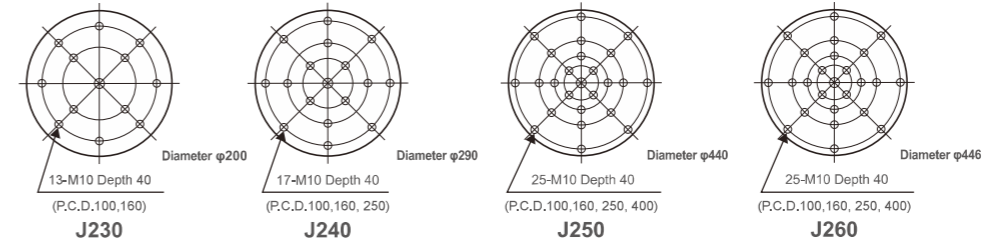
[Expanded maximum test range] • Maximum velocity of Sine force : 2.4 m/s • Maximum velocity of Shock force : 4.6 m/s • Maximum displacement : 100 mmp-p

[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]

#### Table Insert Pattern (Unit:mm)



#### Specifications

System Model	J230/SA3M	J230S/SA7M	J240/SA4M	J240S/SA9M	J250/SA5M	J250/SA6M	J260/SA7M	J260S/SA30M		
System Specifications	Frequency Range (Hz)	0-3000	0-3000	0-2400	0-2400	0-2200	0-2200	0-2600 <sup>3)</sup>	0-2000	
	Rated Force	Sine (kN)	16	16	24	24	35	40	54	54
		Random (kN rms) <sup>1)</sup>	16	16	24	24	35	40	54	54
		Shock (kN)	40	40	55	70	70	80	108	196
	Maximum Acc.	Sine (m/s <sup>2</sup> )	941	888	923	857	777	888	857	857
		Random (m/s <sup>2</sup> rms)	658	622	646	600	544	622	600	600
		Shock (m/s <sup>2</sup> peak)	2352	2222	2115	2500	1555	1777	1714	2500
	Maximum Vel.	Sine (m/s)	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
		Shock (m/s peak)	2.4	3.5	2.4	3.6	2.4	2.4	2.4	4.6
	Maximum Disp.	Sine (mmp-p)	100	100	100	100	100	100	100	100
Maximum Travel (mmp-p)		120	120	120	120	120	120	116	116	
Maximum Load (kg)	300	300	400	400	600	600	1000	1000		
Power Requirements (kVA) <sup>2)</sup>	28	38	38	52	53	57	86	127		
Vibration Generator	Model	J230	J230S	J240	J240S	J250	J250	J260	J260S	
	Armature Mass (kg)	17	18	26	28	45	45	63	63	
	Armature Diameter (φmm)	200	200	290	290	440	440	446	446	
	Allowable Eccentric Moment (N·m)	700	700	850	850	1550	1550	1550	1550	
	Dimensions (mm) W×H×D	1124×1079×850	1124×1079×850	1234×1145×890	1234×1145×890	1463×1301×1100	1463×1301×1100	1527×1319×1100	1657×1319×1100	
	Shaker Body Diameter(φmm)	630	630	720	720	860	860	920	920	
	Mass (kg)	1800	1800	2400	2400	3500	3500	4100	5000	
Power Amplifier	Model	SA3M-J30	SA7M-J30S	SA4M-J40	SA9M-J40S	SA5M-J50	SA6M-J50	SA7M-J60	SA30M-J60S	
	Maximum Output (kVA)	23	30	34	40	50	57	70	76	
	Dimensions (mm) W×H×D	580×1950×850	580×1950×850	580×1950×850	1160×1950×850	580×1950×850	580×1950×850	1160×1950×850	2900×1950×850	
Mass (kg)	330	500	440	1200	880	910	1400	3200		
Controller	Vibration Controller	See Vibration Controller K2								
Cooling	Cooling Method	Air cooling								
	Blower	Dimensions (mm) W×H×D	1044×2285×704	1044×2285×704	929×2175×534	929×2175×534	1160×2405×787	1160×2405×787	1160×2405×787	1160×2405×787
Mass (kg)	150	150	150	150	250	250	250	250		

#### Eco Specifications

System Model	EM2305	EM2405	EM2505	EM2506	EM2605		
System Specifications	Frequency Range (Hz)	0-3000	0-2400	0-2200	0-2200	0-2600 <sup>3)</sup>	
	Rated Force	Sine (kN)	16	24	35	40	54
		Random (kN rms) <sup>1)</sup>	16	24	35	40	54
		Shock (kN)	40 (30) <sup>4)</sup>	55 (48) <sup>4)</sup>	70 (68) <sup>4)</sup>	80 (77) <sup>4)</sup>	108 (96) <sup>4)</sup>
	Maximum Acc.	Sine (m/s <sup>2</sup> )	941	923	777	888	857
		Random (m/s <sup>2</sup> rms)	658	646	544	622	600
		Shock (m/s <sup>2</sup> peak)	2352	2115	1555	1777	1714
	Maximum Vel.	Sine (m/s)	2.4	2.4	2.4	2.4	2.4
		Shock (m/s peak)	2.4 (3.5) <sup>4)</sup>	2.4 (3.5) <sup>4)</sup>	2.4 (3.5) <sup>4)</sup>	2.4 (3.5) <sup>4)</sup>	2.4 (3.5) <sup>4)</sup>
	Maximum Disp.	Sine (mmp-p)	100	100	100	100	100
Maximum Travel (mmp-p)		120	120	120	120	116	
Maximum Load (kg)	300	400	600	600	1000		
Power Requirements (kVA) <sup>2)</sup>	28	38	53	57	86		
Vibration Generator	Model	J230	J240	J250	J250	J260	
	Armature Mass (kg)	17	26	45	45	63	
	Armature Diameter (φmm)	200	290	440	440	446	
	Allowable Eccentric Moment (N·m)	700	850	1550	1550	1550	
	Dimensions (mm) W×H×D	1124×1079×850	1234×1145×890	1463×1301×1100	1463×1301×1100	1527×1319×1100	
	Shaker Body Diameter(φmm)	630	720	860	860	920	
	Mass (kg)	1800	2400	3500	3500	4100	
Power Amplifier	Model	SA3M-J30EM	SA4M-J40EM	SA5M-J50EM	SA6M-J50EM	SA7M-J60EM	
	Maximum Output (kVA)	23	34	50	57	70	
	Dimensions (mm) W×H×D	580×1950×850	580×1950×850	1160×1950×850	1160×1950×850	1160×1950×850	
Mass (kg)	380	490	930	960	1400		
Controller	Vibration Controller	See Vibration Controller K2					
Cooling	Cooling Method	Air cooling					
	Blower	Dimensions (mm) W×H×D	1044×2285×704	929×2175×534	1160×2405×787	1160×2405×787	1160×2405×787
Mass (kg)	150	150	250	250	250		

\*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 200/220/240/380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.

\*3) Above 2000 Hz, the force rolls-off at a rate of -12 dB/oct.

\*4) 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.

