K-series

High Excitation Force Water Cooled Range

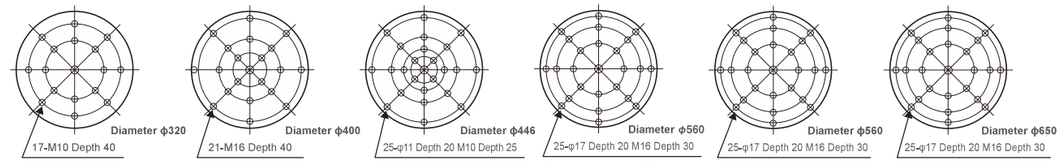
K125
(With a slip table)

High excitation force and silent water cooled system for improving test environment

K-series, high excitation force water cooled vibration simulating test systems fully developed by IMV.
Advanced performance from the K-series will significantly improve the test environment.

[Silent system design] The water cooling system produces neither the intake nor exhaust sounds that an air cooling system emits.
[Record of significant accomplishments] IMV has been developing the most advanced water cooled system.

Table Insert Pattern (Unit:mm)



Specifications

	System Model		K030/SA4MM	K062/SA8M	K080/SA14HM	K100/SA18HM	K125/SA22HM	K100/SA22HM	K125LS/SA27HM	K160/SA26HM	K200/SA32HM
System Specifications	Frequency Range (Hz)		0–3000	0–2500	0–2500	0–2500	0–2500	0–2000	0–2000	0–2000	0–2000
	Rated Force	Sine (kN)	30.8	61.7	80	100	125	100	125	160	200
		Random (kN rms)*1	21.5	61.7	80	100	125	100	125	160	200
		Shock (kN)	61.6	123.4	160	200	250	200	250	320	400
	Maximum Acc.	Sine (m/s^2)	1000	1000	1000	1000	1000	1000	1000	800	1000
		Random (m/s^2 rms)	557	700	700	700	700	700	700	560	700
		Shock (m/s^2 peak)	2000	2000	2000	2000	2000	2000	2000	1600	2000
	Maximum Vel.	Sine (m/s)*3	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Shock (m/s peak)	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.4
	Maximum Disp.	Sine (mmp-p)	51	51	51	51	51	100	100	76.2	76.2
		Maximum Travel (mmp-p)	58	60	59	62	62	132	132	86	86
	Maximum Load (kg)		500	1000	1000	2000	2000	2000	2000	2000	2000
	Power Requirements (kVA)*2		49	87	100	150	170	170	190	270	300
Vibration Generator	Model		K030	K060	K080	K125	K125	K125LS	K125LS	K200	K200
	Armature Mass (kg)		27	40	60	80	80	100	100	200	200
	Armature Diameter (φmm)		320	400	446	560	560	560	560	650	650
	Allowable Eccentric Moment (N·m)		980	980	1550	2450	2450	2450	2450	4900	4900
	Dimensions (mm) W×H×D		1100×1090×824	1380×1085×1000	1380×1085×1000	1776×1373×1300	1776×1373×1300	1990×1546×1370	1990×1546×1370	2465×1908×1740	2465×1908×1740
	Shaker Body Diameter (φmm)		760	900	1000	1100	1100	1100	1100	1260	1260
	Mass (kg)		3000	3700	5000	7000	7000	8000	8000	16000	16000
Power Amplifier	Model		SA4MM-K30	SA8MM-K60	SA14HM-K80	SA18HM-K125	SA22HM-K125	SA22HM-K125LS	SA27HM-K125LS	SA26HM-K200	SA32HM-K200
	Maximum Output (kVA)		33	60	100	98	124	124	155	256	320
	Dimensions (mm) W×H×D		580×1950×850	1160×1950×850	1740×1950×850	2320×1950×850	2320×1950×850	2320×1950×850	2900×1950×850	3480×1950×850	3480×1950×850
	Mass (kg)		950	1350	1500	2500	2600	2600	3300	4850	4800
Controller	Vibration Controller		See Vibration Controller K2								
Cooling	Cooling Method		Shaker:Water cooling / Power Amplifier:Air Cooling								
	Primary Cooling Water Supply (ℓ/min)		195	260	390	390	390	390	650*4	650*4	
	Heat Exchanger	Dimensions (mm) W×H×D	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	1050×1900×800	1050×1900×800
		Mass (kg)	400	400	400	400	400	400	400	600	600

Eco Specifications

	System Model		EMK0301	EMK0622	EMK0801	EMK1251	EMK1252	EMK1255	EMK1256	EMK2001	EMK2002
System Specifications	Frequency Range (Hz)		0–3000	0–2500	0–2500	0–2500	0–2500	0–2000	0–2000	0–2000	0–2000
	Rated Force	Sine (kN)	30.8	61.7	80	100	125	100	125	160	200
		Random (kN rms)*1	21.5	61.7	80	100	125	100	125	160	200
		Shock (kN)	61.6	123.4	160	200	250	200	250	320	400
	Maximum Acc.	Sine (m/s^2)	1000	1000	1000	1000	1000	1000	1000	800	1000
		Random (m/s^2 rms)	557	700	700	700	700	700	700	560	700
		Shock (m/s^2 peak)	2000	2000	2000	2000	2000	2000	2000	1600	2000
	Maximum Vel.	Sine (m/s)*3	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Shock (m/s peak)	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.4
	Maximum Disp.	Sine (mmp-p)	51	51	51	51	51	100	100	76.2	76.2
		Maximum Travel (mmp-p)	58	60	59	62	62	132	132	86	86
	Maximum Load (kg)		500	1000	1000	2000	2000	2000	2000	2000	2000
	Power Requirements (kVA)*2		49	87	100	150	170	170	190	270	300
Vibration Generator	Model		K030	K060	K080	K125	K125	K125LS	K125LS	K200	K200
	Armature Mass (kg)		27	40	60	70	70	100	100	200	200
	Armature Diameter (φmm)		320	400	446	560	560	560	560	650	650
	Allowable Eccentric Moment (N·m)		980	980	1550	2450	2450	2450	2450	4900	4900
	Dimensions (mm) W×H×D		1100×1090×824	1380×1085×1000	1380×1085×1000	1776×1373×1300	1776×1373×1300	1990×1546×1370	1990×1546×1370	2465×1908×1740	2465×1908×1740
	Shaker Body Diameter (φmm)		760	900	1000	1100	1100	1100	1100	1260	1260
	Mass (kg)		3000	3700	5000	7000	7000	8000	8000	16000	16000
Power Amplifier	Model		EM4MM-K30	EM8MM-K60	EM14HM-K80	EM18HM-K125	EM22HM-K125	EM22HM-K125LS	EM27HM-K125LS	EM26HM-K200	EM32HM-K200
	Maximum Output (kVA)		33	60	100	98	124	124	155	256	320
	Dimensions (mm) W×H×D		1160×1950×850	1160×1950×850	1740×1950×850	2320×1950×850	2320×1950×850	2320×1950×850	2900×1950×850	3480×1950×850	3480×1950×850
	Mass (kg)		1300	1400	1550	2550	2650	2650	3350	4950	5100
Controller	Vibration Controller		See Vibration Controller K2								
Cooling	Cooling Method		Shaker:Water cooling / Power Amplifier:Air Cooling								
	Primary Cooling Water Supply (ℓ/min)		195	260	390	390	390	390	390	650*4	650*4
	Heat Exchanger	Dimensions (mm) W×H×D	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	580×1700×850	1050×1900×800	1050×1900×800
		Mass (kg)	400	400	400	400	400	400	400	600	600

*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) If the tests (Sweep or Spot) include high velocity, the maximum velocity value should be reduced to 1.4 m/s.
*4) Bypass circuit is needed. Please contact IMV or your local distributor for further information.
* 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.

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