



K-series

High-Excitation Force Water Cooled Range

IMV-Smart™

ECO-Shaker



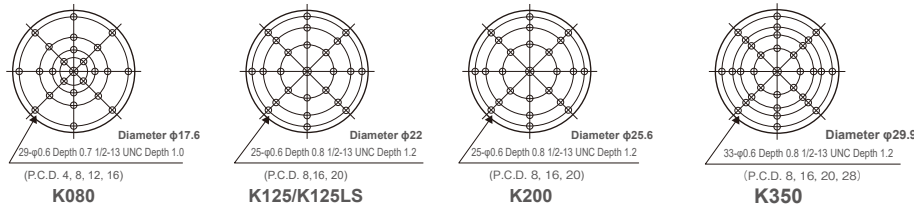
K350
(With a slip table)

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

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

- Maximum excitation force 78,700 lbf
- Maximum acceleration 102 g
- Maximum velocity 79 in/s
- Maximum displacement 4.0 in-p-p
- Maximum loading mass 6,615 lbs

Table Insert Pattern (Unit: inch)



Specifications

System Model		K080/EM10HAM*6	K125A/EM18HAM*6	K125LS/EM20HAM*6	K200/EM24HAM*6	K350/EM36HAM*6	
System Specifications	Frequency Range (Hz)	0-2,500	0-2,500	0-2,000	0-2,000	0-2,000	
	Rated Force	Sine (lbf)	18,000	28,100	28,100	45,000	78,700
		Random (lbf rms)*1	18,000	28,100	28,100	45,000	70,800
		Shock (lbf)	36,000	56,200	56,200	90,000	157,300
	Maximum Acc.	Sine (g)	102	102	102	102	102
		Random (g rms)	71	71	71	71	71
		Shock (g peak)	204	204	204	204	204
	Maximum Vel.	Sine (in/s)*3	79	79	79	79	79
		Shock (in/s peak)	79	79	79	94	138
	Maximum Disp.	Sine (in-p)	2.0	2.0	4.0	3.0	3.4
		Maximum Travel (in-p)	2.3	2.4	5.2	3.4	3.7
	Maximum Load (lbs)		2,200	4,400	4,400	4,400	6,615
Power Requirements (kVA)*2		100	170	190	300	325	
Brekaer Capacity (A)*4		150	250	300	500	630 (total)	
Model		K080	K125A	K125LS	K200	K350	
Vibration Generator	Armature Mass (lbs)	132	177	221	441	772	
	Armature Diameter (ϕ in)	17.6	22	22	25.6	29.9	
	Allowable Eccentric Moment (lbf·in)	13,700	21,700	21,700	43,400	43,400	
	Dimensions (in) W x H x D	63 x 48 x 41	70 x 54 x 51	78 x 61 x 54	97 x 75 x 69	118.9 x 90.8 x 81.9	
	Shaker Body Diameter (ϕ in)	39	43	43	50	64.2	
Mass (lbs)	11,025	15,435	17,640	35,280	81,575		
Power Amplifier	Model	EM10HAM-K80	EM18HAM-K125A	EM20HAM-K125LS	EM24HAM-K200	EM36HAM-K350	
	Maximum Output (kVA)	100	124	155	320	400	
	Amplifier Bay (s)	2	3	3	5	7	
	Dimensions (in) W x H x D	46 x 77 x 34	69 x 77 x 34	69 x 77 x 34	114 x 77 x 34	161 x 77 x 34	
Mass (lbs)	3,310	5,730	7,275	11,020	12,015		
Controller	Vibration Controller	See Vibration Controller K2					
Cooling	Cooling Method	Shaker: Water cooling/Power Amplifier: Air Cooling					
	Required Cooling Water Flow Rate (gal/min)	$\Delta t = 5^{\circ}\text{C}$: 103	$\Delta t = 5^{\circ}\text{C}$: 103*5	$\Delta t = 5^{\circ}\text{C}$: 103*5	$\Delta t = 5^{\circ}\text{C}$: 172*5	$\Delta t = 5^{\circ}\text{C}$: 182*5	
	Heat Exchanger	$\Delta t = 10^{\circ}\text{C}$: 25	$\Delta t = 10^{\circ}\text{C}$: 39*5	$\Delta t = 10^{\circ}\text{C}$: 39*5	$\Delta t = 10^{\circ}\text{C}$: 60*5	$\Delta t = 10^{\circ}\text{C}$: 66*5	
	Dimensions (in) W x H x D	23 x 67 x 34	23 x 67 x 34	23 x 67 x 34	41 x 75 x 32	47 x 77 x 55	
Mass (lbs)	885	885	885	1,325	1,325		

*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) If the tests (Sweep or Spot) include high velocity, the maximum velocity value should be reduced to 5.5 in/s.
 *4) Breaker capacity for 480 V
 *5) Bypass circuit is needed. Please contact IMV or your local distributor for further information.
 *6) An export license is required for exporting a shaker system of over 11,240 lbf sine force.
 * 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 sensor and vibration controller.
 * Armature mass and acceleration may change when a chamber is added.
 * Mass and dimensions may change for CE-marked systems.



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*The specifications and design are subject to change without notice.