

FP Series Vibration Testing System

Permanent Magnet



- Ultimate energy saving vibration generator without field coil and power supply
- Industry's first adoption of permanent magnet for more than 10 kN sine force system

"Ultimate Energy Saving" for a conventional medium-sized vibration testing system can be realized by eliminating the field coil and power supply. In addition, the cooling blower is downsized approximately 70% and its rotating speed is controlled according to the temperature of the vibration generator to drastically reduce the required input power and sound level.

※The vibration controller is mounted in the console rack. (Optional)

[Energy-saving Effect]

Reduction of electric charge:

Approx. \$13820.00/year at 25% of rated output
(Approx. JPY1,520,000.00/year at 25% of rated output)

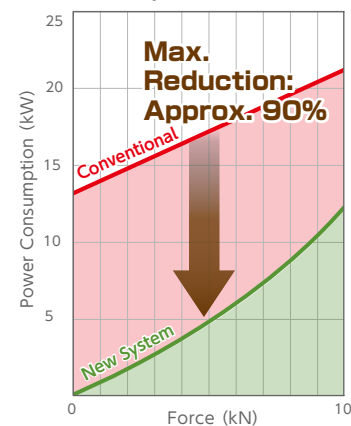
Approx. \$14550.00/year at 10% of rated output
(Approx. JPY1,600,000.00/year at 10% of rated output)

Reduction of CO₂:

Approx. 42,200 kg/year at 25% of rated output
Approx. 79,716 kg/year at 10% of rated output

※Compared to our 916 series system for 70% of operating time
※The discharge of CO₂ emission assumes it to be 0.555 kg-CO₂/kWh.
(according to law enforcement order about the promotion of global warming countermeasures, Article 3)

Reduction effect of power consumption for new drive system



FP Series Specifications

Model	FP-01K/30	FP-02K/25	FP-02K/30A	FP-10K/51	FP-10K/76	FP-20K/51
Rated Force	Sine kN _{0p}	1.2	2.0	2.0	10	20
	Random kN _{rms}	0.48	1.4	1.4	10	20
	Shock kN _{0p}	1.5	3.0	3.0	25	20
Frequency range	Hz to 2500	to 3000	to 2500	to 3000	to 2500	to 2500
Max. acceleration	m/s ² 500	800	444	1000	606	833
Max. velocity	m/s 1.6	1.5	1.5	2.0	2.0	2.0
Max. displacement	mm _{0p} 30	25	30	51	76.2	51
Max. payload	kg 150	40	100	350	300	350
Input power	kVA 1.4	6.2	6.2	11.5	16	27
Armature Mass	kg 2.4	2.5	4.5	10	16	24
Allowable offset load	Nm 3	5	4	500	500	500
Cooling method	Air-cooled	Air-cooled	Air-cooled	Air-cooled	Air-cooled	Air-cooled
Model	Vibration Generator P01-AB/AS	Σ9515-AB/SD	Σ9515-AB/AS	P10-AW/LA	P10-AW/SLS	P20-A
Power Amplifier	375-D/P012	369A-0101-Σ15	369A-0101-Σ15	369A-0202-P10	369A-0202-P10SLS	369A-0606-P20
Console Rack	-	CRD-1500-Σ15	CRD-1500-Σ15	CRD-1500-P10	CRD-1500-P10	CRD-2000-P20
Model	Armature Size mm φ120	φ120	φ120	φ230	φ230	φ330
Size	Vib. Generator mm 384W×391.5H×360D	442W×360H×340D	442W×360H×340D	702W×763H×572D	702W×948H×625D	982W×1000H×750D
	Power Amplifier mm 480W×189H×450D	554W×1462H×1010D	554W×1462H×1010D	554W×1462H×1010D	554W×1462H×1010D	554W×2000H×1010D
	Blower mm 365.5W×700H×434D	474.5W×1040H×495D	474.5W×1040H×495D	411W×810H×525D	411W×810H×525D	707W×1681H×946D
Mass approx.	Vib. Generator kg 75	160	165	690	760	1650
	Power Amplifier kg 35	290	290	300	300	600
	Blower kg 16	31	31	60	60	245

※ Input power specification is for 1φ AC100 V 50/60 Hz. or 3φ AC200 V 50/60 Hz.
※ Lower limit frequency should be determined by a performance of an available vibration control system.