

Features

In response to diversified test conditions, wider system performances are available in the newest IMV i-series vibration test systems.

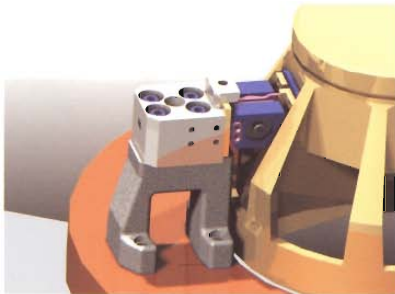
New design concept

- **New vibrators from small systems to large systems**
- **Wider usable frequency range and higher performance**
 - Max. Acceleration 1250 m/s²
 - Max. Velocity 2.2 m/s
 - Max. Displacement 51 mmp-p
- **Higher durability due to new armature guidance system (PS Guide)**
- **Larger loading, up to 1000 Kg**
- **Vibrator's anti-vibration system with linear guidance (as a standard spec., except for the Model i210 vibrator)**
- **Common layout of mounting bolts on the armature tables (Either "mm" unit or "inch" unit bolt layout is selectable)**
- **All type vibrators are "Direct Coupling" available.**



New armature guidance system

- **PS (Parallel Slope) GUIDE**
 - Smooth armature motion by new IMV PS armature guidance system with high stiffness.
 - (Under patent application)
- **Higher durability**
 - Approximate 10 times more durability than the previous IMV type
- **High and accurate waveform reproducibility**
 - Less than 10% waveform distortion
- **Maintenance free**

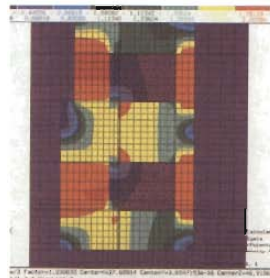


Safety interlocks

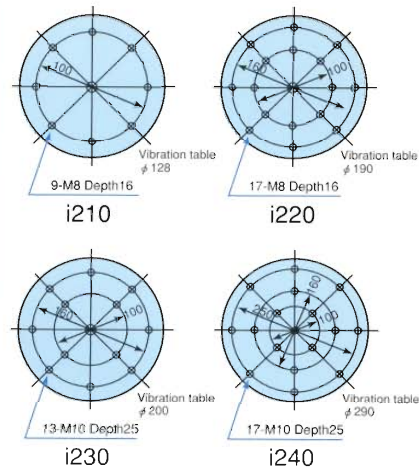
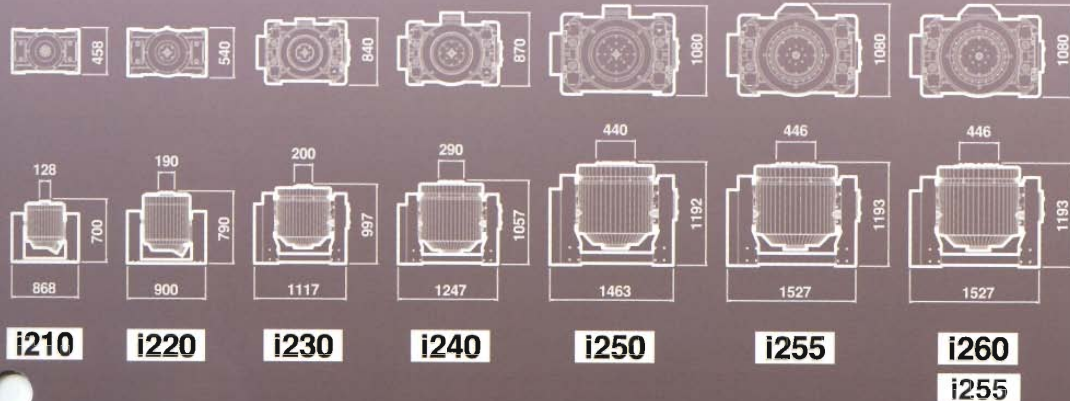
In order to protect test specimens and/or vibration test systems, the IMV "i-series" are equipped with appropriate safety interlocks. (Over Displacement, Power supply monitor, Output voltage / current and the others)

Efficient cooling design

Efficient design of cooling air flow in "i-series" vibrators reduce volume of air flow and level of acoustic noise.



Specification



Specification

| System Model | | i 210/06 | i 210/SA03 | i 220/SA1 | i 220/SA2 | i 230/SA3 | i 230/SA4 | i 240/SA5 | i 240/SA6 | |
|--------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----|
| System Performance | Frequency range Hz | 5~4000 | 5~4000 | 5~3000 | 5~3000 | 5~3000 | 5~3000 | 5~2500 | 5~2500 | |
| | Rated force | SINE kN | 1.17 | 3 | 4 | 8 | 12 | 16 | 20 | 24 |
| | | RANDOM kN rms | 0.819 | 2.1 | 2.8 | 5.6 | 8.4 | 11.2 | 20 | 24 |
| | Max. Acceleration m/s ² | 390 | 1000 | 625 | 1250 | 937 | 1250 | 1000 | 1200 | |
| | Max. Velocity m/s | 0.85 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | |
| | Max. Displacement mmp-p | 30 | 30 | 51 | 51 | 51 | 51 | 51 | 51 | |
| | Max. Loading weight kg | 120 | 120 | 200 | 200 | 300 | 300 | 400 | 400 | |
| System power consumption | 3.7 | 6.8 | 12.6 | 16.4 | 24 | 28 | 36 | 40 | | |
| Vibrator | Model | i 210 | i 210 | i 220 | i 220 | i 230 | i 230 | i 240 | i 240 | |
| | Mass of Armature kg | 3 | 3 | 6.4 | 6.4 | 12.8 | 12.8 | 20 | 20 | |
| | Diameter of vibration table φmm | 128 | 128 | 190 | 190 | 200 | 200 | 290 | 290 | |
| | Max. Allowable overturning moment N·m | 160 | 160 | 294 | 294 | 700 | 700 | 850 | 850 | |
| | Dimensions WxHxD mm | 868x700x458 | 868x700x458 | 900x790x540 | 900x790x540 | 1117x997x840 | 1117x997x840 | 1247x1057x870 | 1247x1057x870 | |
| | Weight kg | 350 | 350 | 900 | 900 | 1600 | 1600 | 2400 | 2400 | |
| Power Amplifier | Model | VA06-i10 | SA03-i10 | SA1-i 20 | SA2-i 20 | SA3-i 30 | SA4-i30 | SA5-i40 | SA6-i40 | |
| | Max. Output kVA | 0.6 | 3 | 5 | 10 | 15 | 20 | 25 | 30 | |
| | Dimensions WxHxD mm | 580x1750x850 | 580x1750x850 | 580x1750x850 | 580x1750x850 | 580x1750x850 | 580x1750x850 | 580x1750x850 | 580x1750x850 | |
| Weight kg | 200 | 240 | 240 | 280 | 290 | 300 | 400 | 410 | | |
| Vibration controller | Selected from Model RC-1120 or the others | | | | | | | | | |
| Cooling | Type of cooling | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | |
| | Dimensions WxHxD mm | 386x882x370 | 386x882x340 | 492x1116x713 | 492x1116x713 | 606x1315x928 | 606x1315x928 | 707x1531x946 | 707x1531x946 | |
| | Weight kg | 22 | 22 | 70 | 70 | 190 | 190 | 220 | 220 | |

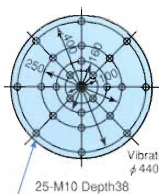
※1) Power supply voltage 3 phase 200V AC 50/60Hz ±10% Voltage Down Transformer (Step-down transformer) is required for other voltage.



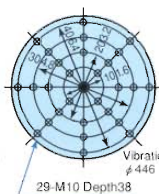
Photo : Model i260/SA14



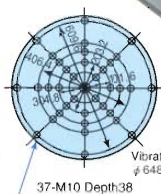
Photo : Model i260/SA14



i250



i260
i255



i260L

Specification

| System Model | | i 250/SA8 | i 250/SA9 | i 250/SA10 | i 255/SA13 | i 260/SA14 | i 260L/SA13 | i 260L/SA14 | |
|--------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----|
| System Performance | Frequency range Hz | 5~2 500 | 5~2 500 | 5~2 500 | 5~2 300 | 5~2 300 | 5~2 300 | 5~2 000 | |
| | Rated force | SINE kN | 32 | 36 | 40 | 49 | 54 | 49 | 54 |
| | | RANDOM kN rms | 32 | 36 | 40 | 45 | 54 | 45 | 54 |
| | Max. Acceleration m/s ² | 914 | 1 028 | 1 142 | 907 | 1 000 | 671 | 739 | |
| | Max. Velocity m/s | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | |
| | Max. Displacement mmp-p | 51 | 51 | 51 | 51 | 51 | 51 | 51 | |
| | Max. Loading weight kg | 600 | 600 | 600 | 1000 | 1000 | 1000 | 1000 | |
| System power consumption | | 57 | 61 | 65 | 86 | 90 | 86 | 90 | |
| Vibrator | Model | i 250 | i250 | i 250 | i 255 | i 260 | i 260L | i 260L | |
| | Mass of Armature kg | 35 | 35 | 35 | 54 | 54 | 73 | 73 | |
| | Diameter of vibration table φmm | 440 | 440 | 440 | 446 | 446 | 648 | 648 | |
| | Max. Allowable overturning moment N·m | 1550 | 1550 | 1550 | 1550 | 1550 | 1550 | 1550 | |
| | Dimensions WxHxD mm | 1463x1192x1080 | 1463x1192x1080 | 1463x1192x1080 | 1527x1193x1080 | 1527x1193x1080 | 1527x1193x1080 | 1527x1193x1080 | |
| | Weight kg | 3000 | 3000 | 3000 | 3500 | 3500 | 3500 | 3500 | |
| Power Amplifier | Model | SA8-i 50 | SA9-i 50 | SA10-i 50 | SA13-i 55 | SA14-i 60 | SA13-i 60L | SA14-i 60 | |
| | Max. Output kVA | 40 | 45 | 50 | 65 | 70 | 65 | 70 | |
| | Dimensions WxHxD mm | 580x1950x850 | 580x1950x850 | 580x1950x850 | 580x1950x850 | 580x1950x850 | 580x1950x850 | 580x1950x850 | |
| | Weight kg | 850 | 870 | 880 | 1000 | 1000 | 1000 | 1000 | |
| Vibration controller | Selected from Model RC-1120 or the others | | | | | | | | |
| Cooling | Type of cooling | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | Forced air cooled | |
| | Dimensions WxHxD mm | 1218x2006x1033 | 1218x2006x1033 | 1218x2006x1033 | 1280x2140x1130 | 1280x2140x1130 | 1280x2140x1130 | 1280x2140x1130 | |
| | Weight kg | 390 | 390 | 390 | 430 | 430 | 430 | 430 | |

※ 1) Power supply voltage 3 phase 200V AC 50/60Hz ±10% Voltage Down Transformer (Step-down transformer) is required for other voltage.

※ 2) An export license issued by the Japanese Government is required to export the "i-series" vibration test systems or vibrators that are designed to generate 50kN over SINE excitation force.