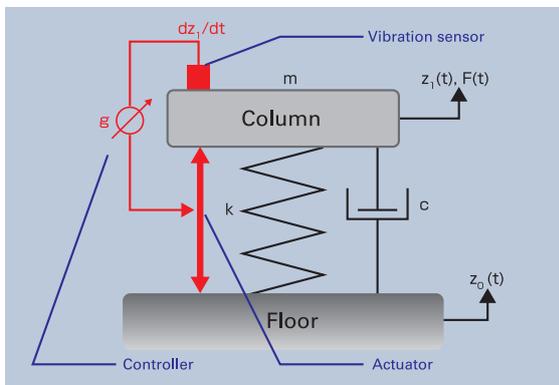


α L4X-911R2J

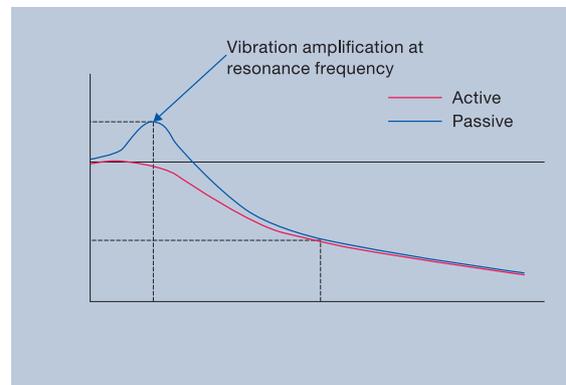
Active Vibration Isolation System for Electron Microscopes

● Principle of active vibration isolation system

Vibration is detected by the sensor mounted on the system, triggering the actuator to output a force in the opposite direction to cancel the vibration. This enables to attenuate vibration amplification due to resonance, which is unavoidable with standard passive isolation system.



Active Isolation System schematic



Vibration transmissibility
Horizontal axis: frequency Vertical axis: Amplitude

● Outline of system

α L4X-911R2J active isolation system is composed with pneumatic mounts added with precision vibration sensors, featured with feedback and feedforward control offering high vibration isolation performance.



α L4X-911R2J
This system is a product of TOKKYOKIKI Corporation.

● Features

- 3 axis high precision vibration sensor
- 6 degree of freedom feedback control
- Feedforward control
- Automatic tuning function
- No need for operation by customer after installation completed



α L4X-911R2J installation example

● Specification

Maximum Payload (With Instrument and Attachment)	1,000 kg
Required Primary Air Pressure	0.6 to 0.8 MPa
Passive Isolation	Diaphragm Type Air Mount
Active Isolation	6DOF Feedback + Floor Feedforward Control
Power Supply	AC 100 - 240 V 2 A (Max.) *Please prepare 2 sockets with ground for Active System and optional compressor

● Components

Active Isolation System	1 unit	D1,102 mm × W902 mm × H155 mm (D1,305 mm × W902 mm × H155 mm with rear support bracket attached) Mass 320 kg
Power Cable	1 set	Length 3 m (125 V) *Consult us for use at higher voltage

● Optional Items

Anchor Brackets	1 unit	Anchor plugs and bolts (M12 × 4) are not included
Air Compressor	1 unit	Please arrange locally

● Applicable Instruments

JSM-IT710HR, JSM-IT510, JSM-IT210, JSM-IT810*, JIB-4700F, JIB-PS500i*, JXA-iHP200F, JXA-iSP100

*Rear support bracket will be attached

Note

- *Execution of vibration measurement and judgment is necessary before installing this system.
- *The overall height of the instrument rises 155 mm
- *Please consult on the floor strength of the location
- *Please check the transportation route before installing the system
- *Specifications and appearance are subject to change without notice

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