

Service & Solution Environmental Engineering Technology



Active

Passive

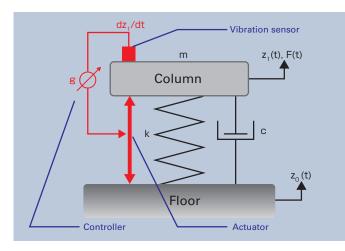
EST-L6HF-A017

Active Vibration Isolation System for JEM-ARM300F2

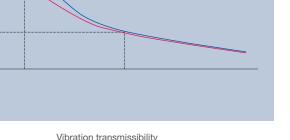
JEM-ARM300F2

Principle of active vibration isolation system

Vibration is detected by the sensor mounted on the instrument, 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 systems.



Active Isolation System schematic



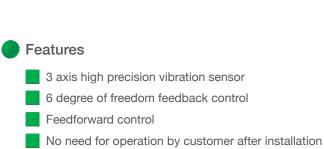
Vibration amplification at resonance frequency

Vibration transmissibility Horizontal axis: Frequency Vertical axis: Amplitude

Outline of system

completed

EST-L6HF-A017 active isolation system is composed with pneumatic mounts added with precision vibration sensors, linear type electromagnetic actuators and digital controller which actualize up to -30 dB suppression at frequency range of 1 to 20 Hz. The active system consists of feedback and feedforward control offering noise-free observation at the instrument's highest performance.



EST-L6HF-A017 active mount



EST-L6HF-A017 controller *This product is manufactured by KURASHIKI KAKO Co. Ltd.

EST-L6HF-A017

Specification

Maximum Payload (With Instrument and Attachment)	2,760 kg (Equal load on each mount, at 0.55 MPa air pressure)	
Required Primary Air Pressure	0.6 to 0.8 MPa	
Passive Isolation	Dome Gimbal Piston Type Hybrid Mount	
Active Isolation	6DOF Feedback + Floor Feedforward Control	
Power Supply	AC 85-250 V, 4 A (Max.) Please prepare 2 sockets for Active System and optional compressor	

Components

Active Isolation Mounts	4 units	D302 mm × W207 mm × H190 mm (Floating) Mass 29 kg per Mount
Controller and Power Supply	1 set	D220 mm × W180 mm × H162 mm Mass 3 kg
Power Cable	1 set	Length 2 m (125 V)
Wiring and Tubing	1 set	Included

Option

Air Compressor	1 unit	For overseas, please arrange locally
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JEM-ARM300F2

Note

*Execution of vibration measurement and judgment is necessary before installing this system. *Specifications and appearance are subject to change without notice.

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