

DAEIL

Vibration Isolation Systems

DVIM series

Pneumatic Vibration Isolation Mounts



■ T type



■ M type



■ B type

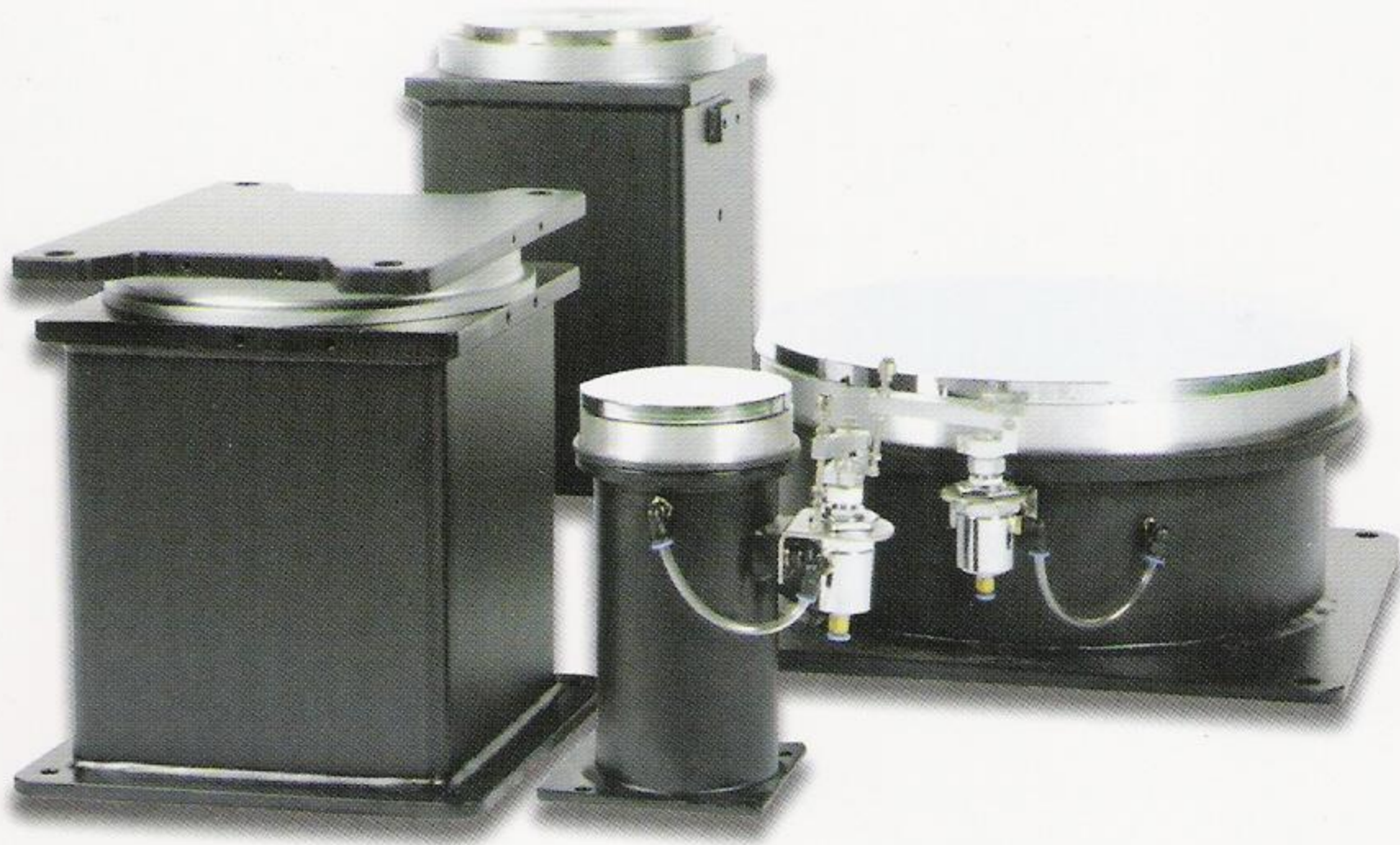


■ S type

DVIM series Pneumatic Vibration Isolation Mounts

DVIM series Vibration Isolation Mount is highly damped version of our pneumatic isolators and ideal for OEM equipment with motorized X-Y stage or robots which require high performance vibration isolation and aggressive settling time for stage-induced motion of the isolated payload. 4 kinds of mounts, T/M/B/S type can be selected on vibration isolation performance or feature/variety of equipment to be isolated.

DVIM series T type



Features

- Faster payload settling times than conventional ones.
- Less vibration induced by air currents and acoustic noise as well as "on board" generated forces.
- "Stiffer" feel to isolated surfaces while maintaining high vibration isolation efficiency. (1.5 Hz)
- Faster throughput and higher yields for semiconductor, FPD manufacturing/inspection machines.
- Greater damping up to five times than conventional ones.

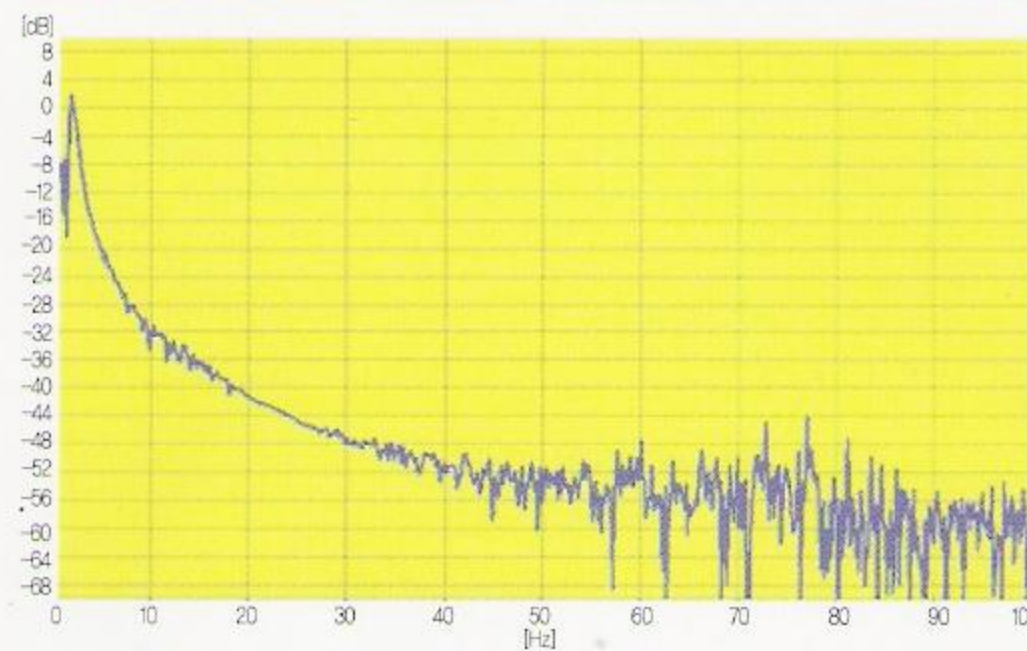
Applications

- X-Y Positioning System.
- Processing/inspection equipment for FPD.
- Manufacturing/Inspection Equipment for Semiconductor.
- Coordinate Measuring Machines.
- Precision Measuring Machines.

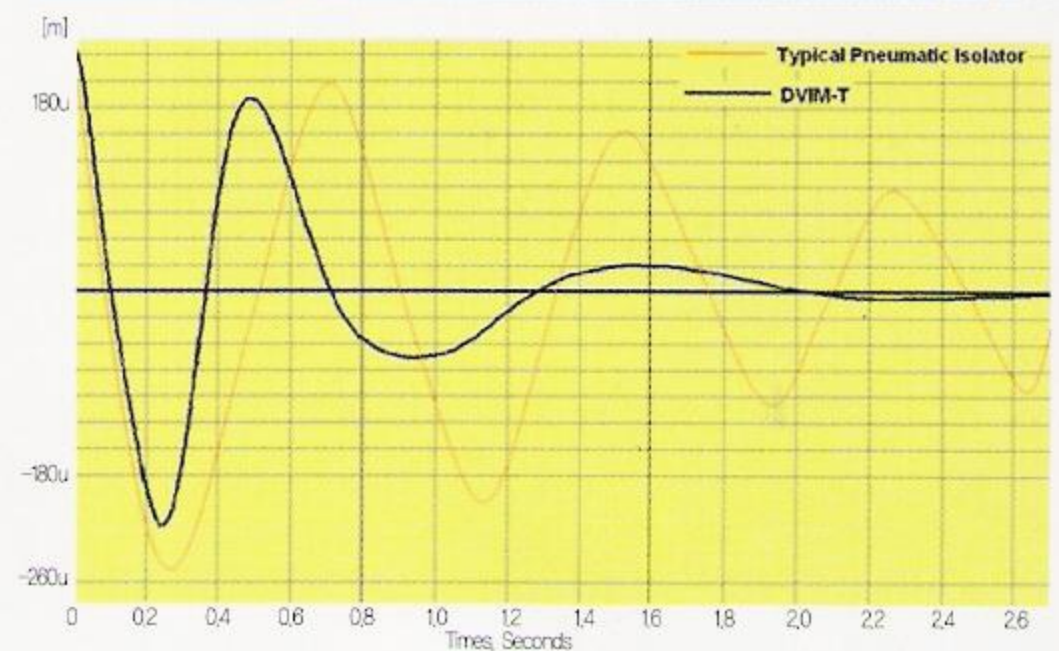
General Specifications

- Vibration Isolation: Pneumatic Isolation Type.
- Natural Frequency: 1.5~2.0 Hz
- Roll-off Rate [10 Hz]: -32~-35 dB
- Damping: Viscous Fluid Damping. (1 chamber)
- Levelling: Auto Levelling by 3 level controllers.
- Levelling Accuracy: ± 0.05 mm/ ± 0.1 mm.
- Air Supply: 4~6 kg/cm² Compressed Air.

Transmissibility



Settling Time

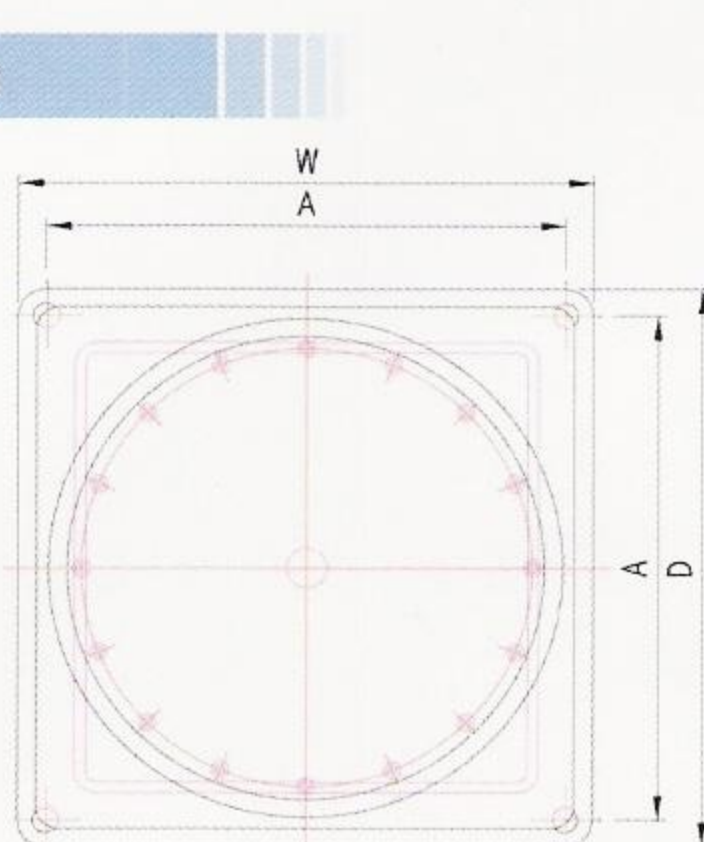


Ordering Chart

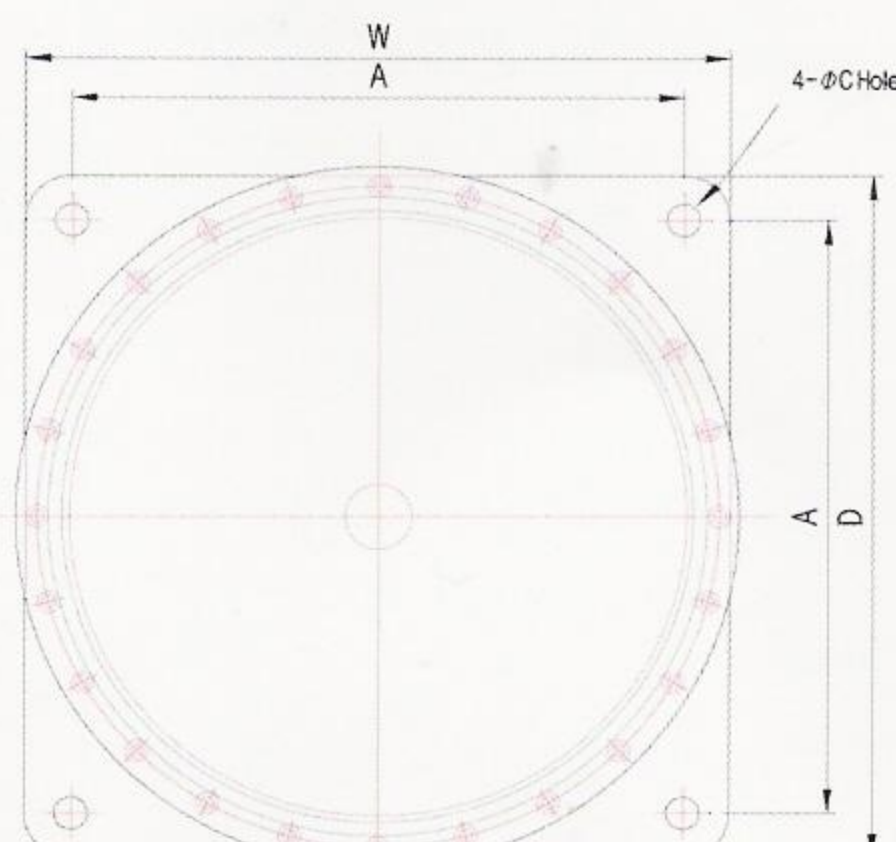
Model No.	DVIM-T-500	DVIM-T-1000	DVIM-T-1500	DVIM-T-2500	DVIM-T-3500	DVIM-T-4500	DVIM-T-6000
Dimension (WxDxH:mm)	210x210x220	260x260x220	310x310x220	340x340x220	380x380x220	430x430x220	490x490x220
Location of Bolt hole (AxAmm)	180	230	280	280	330	380	440
Diameter of Bolt hole (Cmm)	$\Phi 12$	$\Phi 14$	$\Phi 14$	$\Phi 14$	$\Phi 14$	$\Phi 14$	$\Phi 14$
Load Capacity (kg/ea)	500	1000	1500	2500	3500	4500	6000
Production Weight (kg/ea)	37	42	72	85	100	125	180

- ※ The custom dimensions are available upon request beside standard size.
- ※ Above specification would be changed without notice for improvements.
- ※ Load capacity is based on air-pressure of 4 bar.

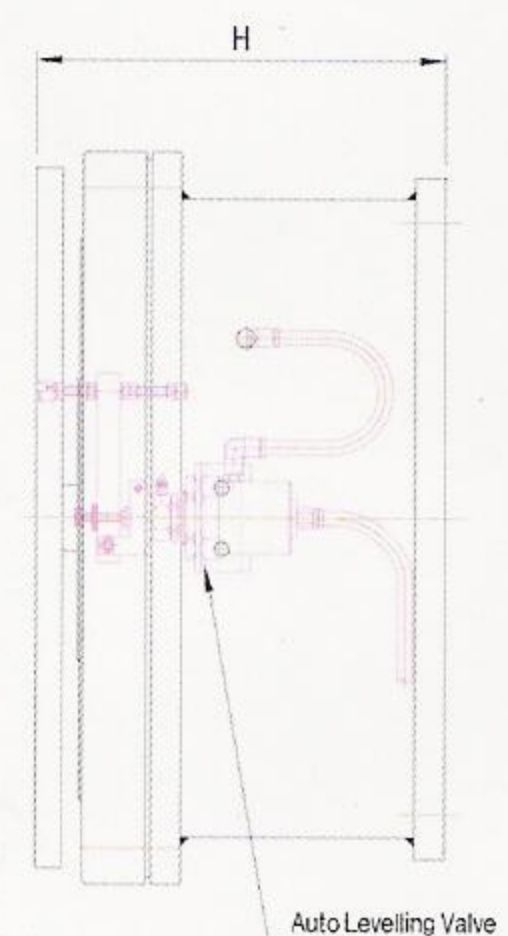
Configuration



• DVIM-T-500~1500



• DVIM-T-2500~6000



Auto Levelling Valve

DVIM series M type



■ Features

- The optional standard heights 170mm/195mm easy to use, less space for installation.
- Unit shape easily attached/installed to equipment.
- Provides both vibration isolation performance and stiffness.
- Additional safety valves restrains the payload from being over travel.
- Enough stiffness to keep the payload quiet for a high speed X-Y stage.
- Faster throughput and higher yields for equipment.

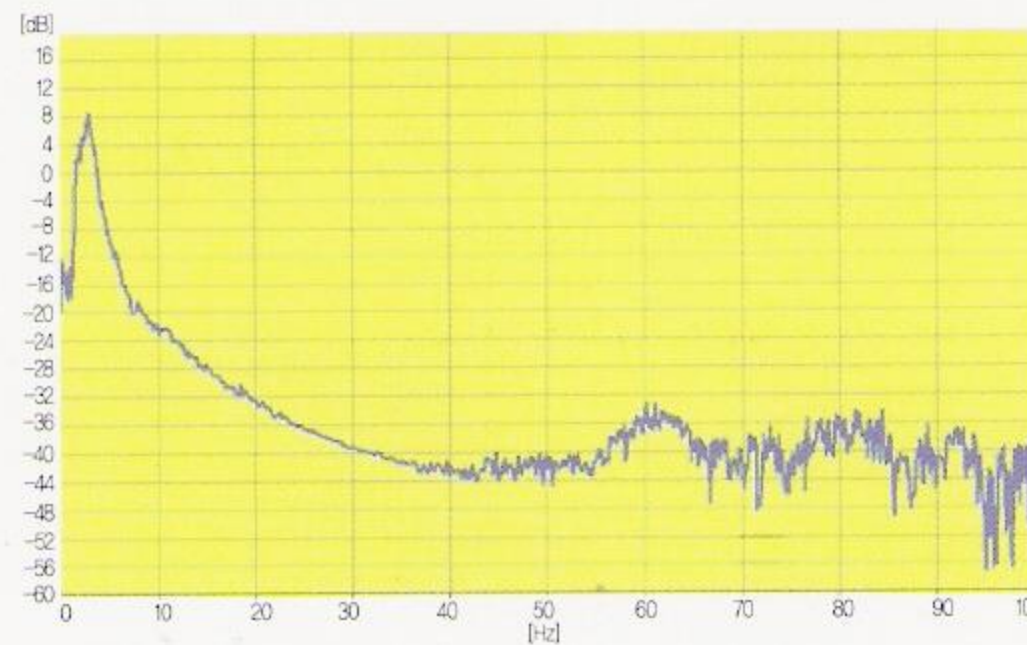
■ Applications

- X-Y Positioning System.
- Manufacturing/Inspection Equipment for FPD/Semicon.
- Laser Processing Machine.
- Coordinate Measuring Machine.
- AFM/STM, SEM/TEM.
- Precision Measuring Equipment.

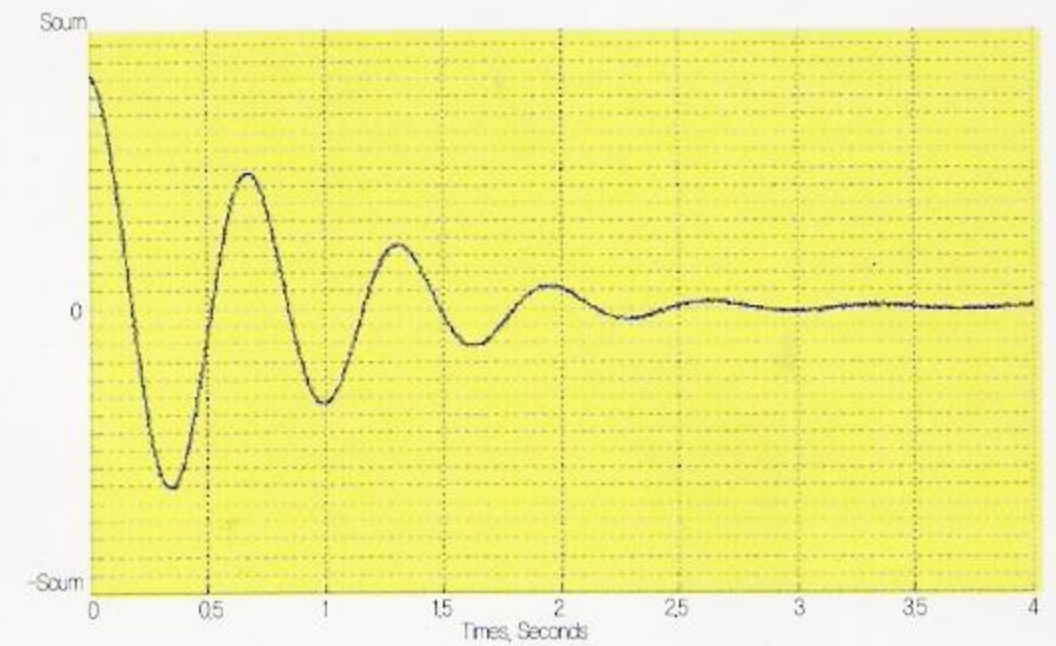
■ General Specifications

- Vibration Isolation: Pneumatic Isolation Type.
- Natural Frequency: 2.3~2.8 Hz
- Roll-off Rate [10 Hz]: over -20~-24 dB
- Damping: Air Damping by orifice. (2 chambers)
- Levelling: Auto Levelling by 3 level controllers.
- Levelling Accuracy: ± 0.05 mm/ ± 0.1 mm.
- Air Supply: 4~6 kg/cm² Compressed Air.

■ Transmissibility



■ Settling Time



■ Ordering Chart

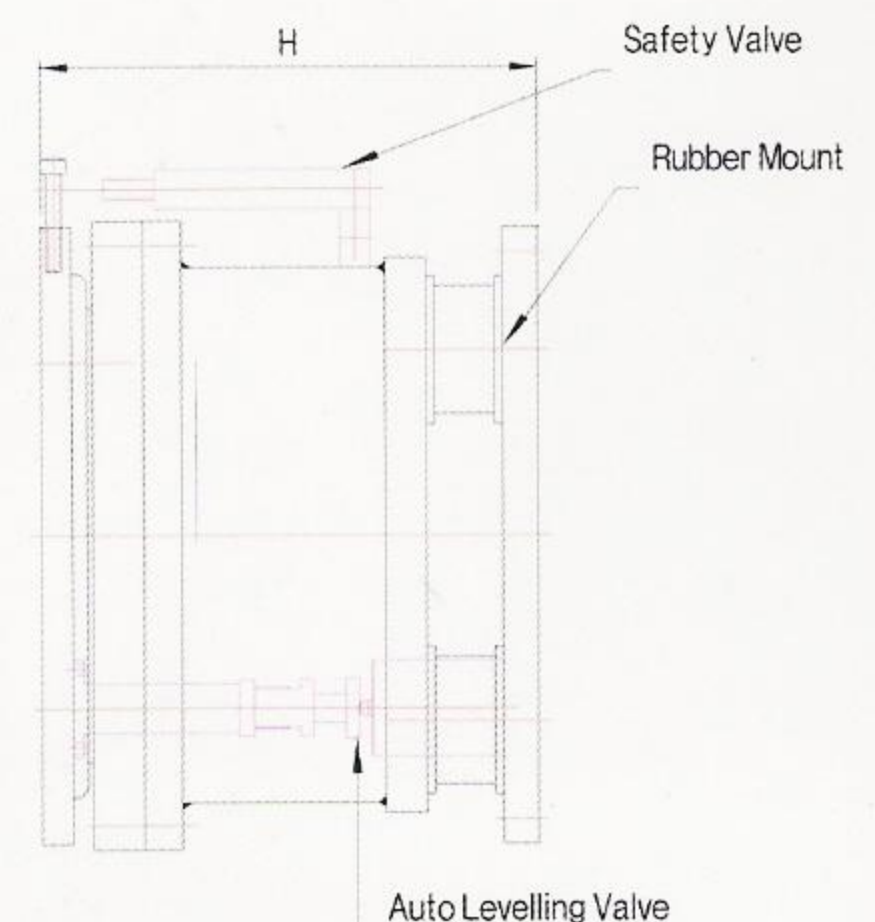
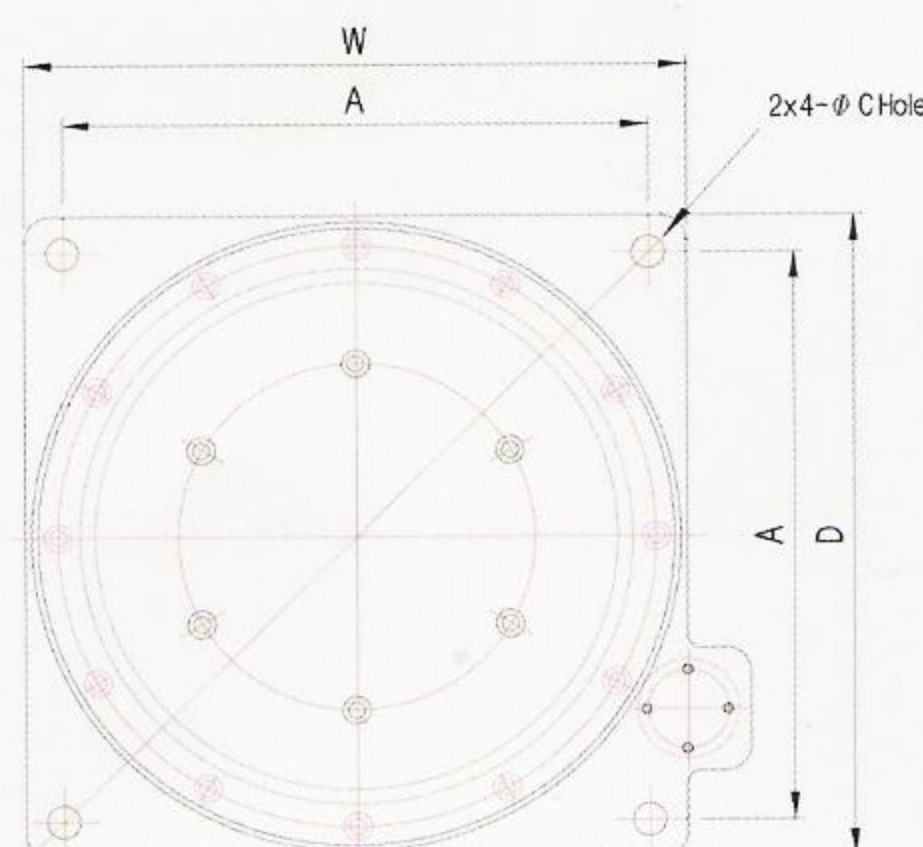
Model No.	DVIM-M-150	DVIM-M-300	DVIM-M-600	DVIM-M-900	DVIM-M-1200	DVIM-M-1500	DVIM-M-2000	DVIM-M-2500	DVIM-M-3000	DVIM-M-4000
Dimension (WxDxHmm)	180x180x170	200x200x170	240x240x170	260x260x195	290x290x195	320x320x195	370x370x195	390x390x195	440x440x195	490x490x195
Location of Bolt hole (AxAmm)	160	180	210	230	260	290	340	360	410	460
Diameter of Bolt hole (Cmm)	Φ10	Φ10	Φ10	Φ14	Φ14	Φ14	Φ14	Φ14	Φ14	Φ14
Load Capacity (kg/ea)	150	300	600	900	1200	1500	2000	2500	3000	4000
Production Weight (kg/ea)	11	14	22	38	46	53	57	68	85	110

※The custom dimensions are available upon request beside standard size.

※Above specification would be changed without notice for improvements.

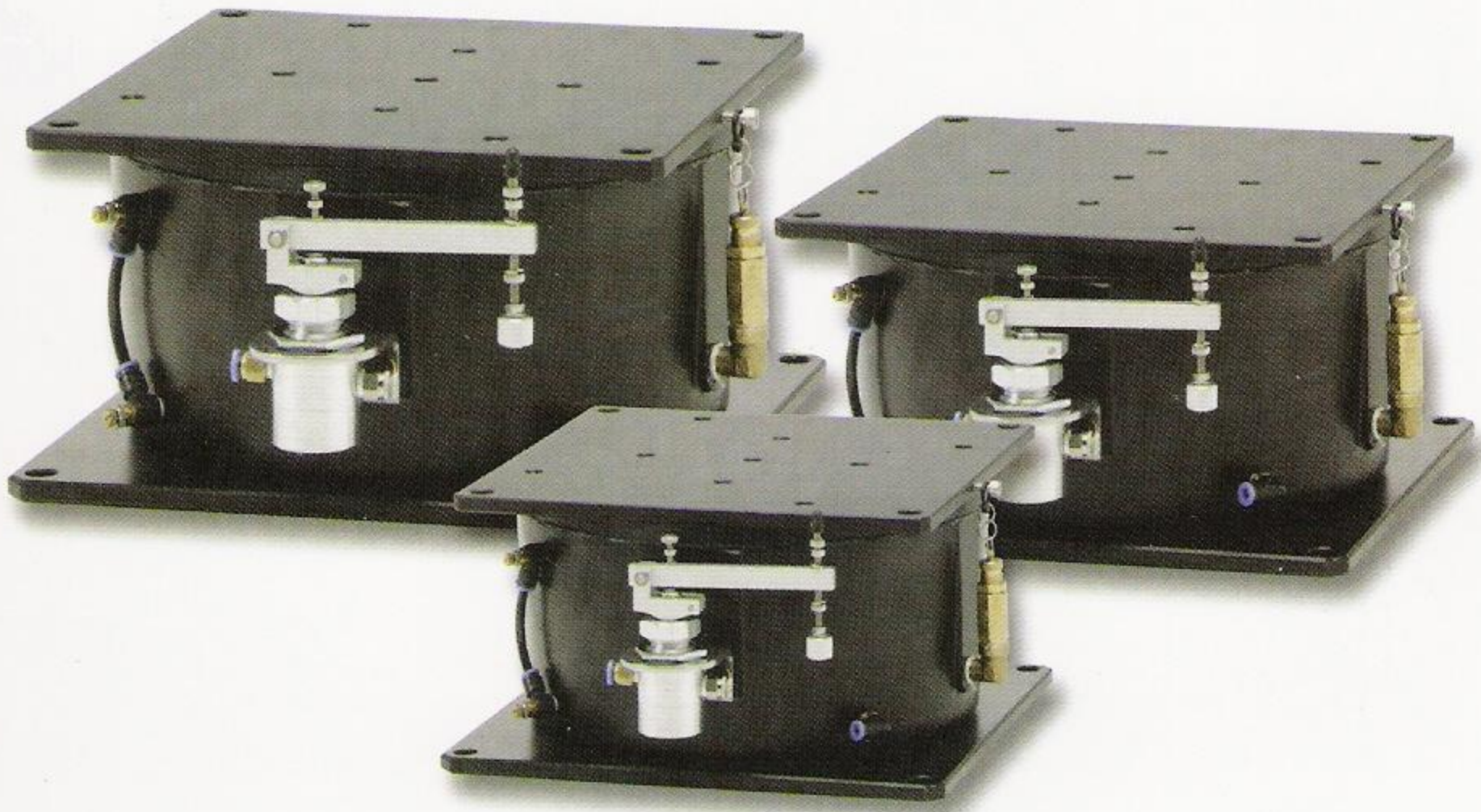
※Load capacity is based on air-pressure of 3 bar.

■ Configuration



Aluminium

DVIM series B type



■ Features

- Light cast aluminum body.
- Relatively lower price but high performance.
- Available in a wide range of size and load capacity.
- Additional safety valves restrains the payload from being over travel.
- Faster throughput and higher yields.
- Enough stiffness to keep the payload quiet for high speed X-Y stage.
- Mounting holes for top and bottom plate.

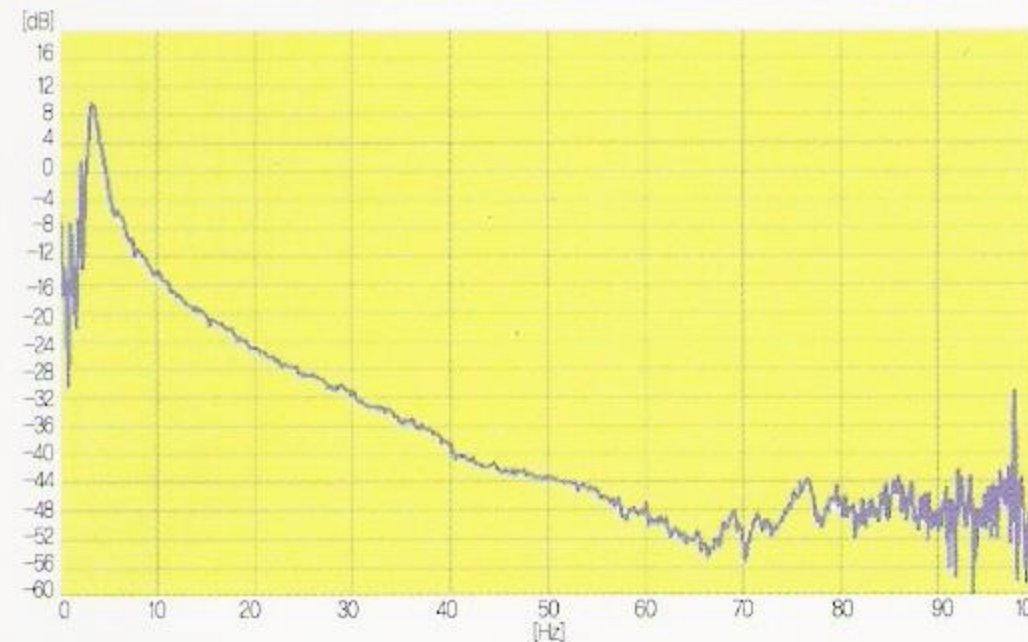
■ Applications

- Measuring and Testing Machines for FPD/Semicon.
- Optical and Electronic Equipment.
- Laser Processing Machines.
- Coordinate Measuring Machines.
- SEM/TEM/E-BEAM etc.

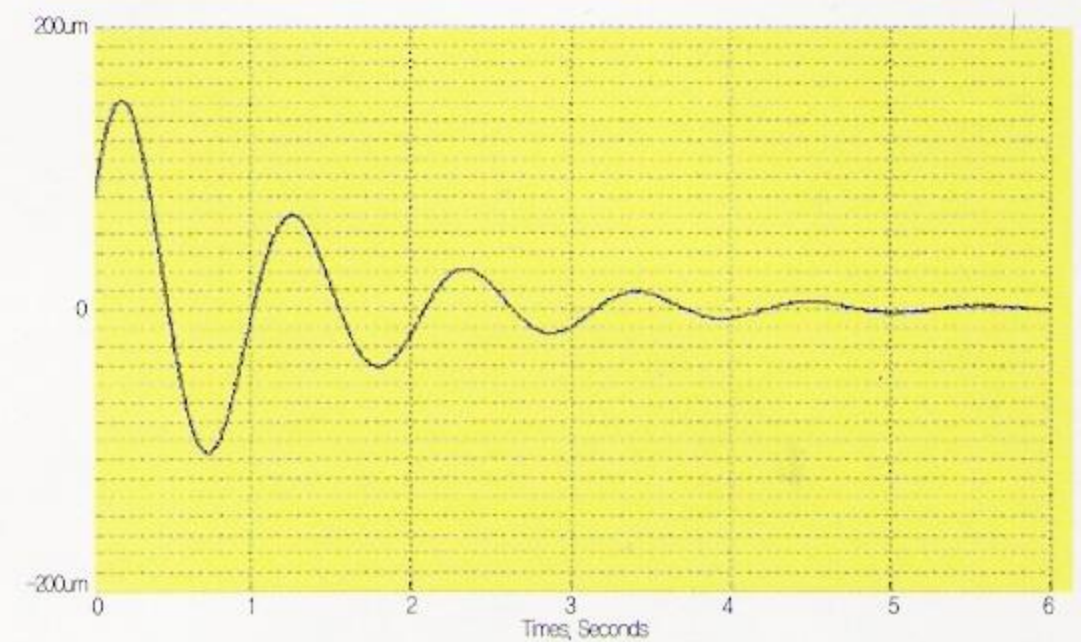
■ General Specifications

- Vibration Isolation: Pneumatic Isolation Type.
- Natural Frequency: 2.5~3.0 Hz
- Roll-off Rate [10 Hz]: -15 dB
- Damping: Air Damping by orifice. (2 chambers)
- Levelling: Auto Levelling by 3 level controllers.
- Levelling Accuracy: ± 0.05 mm/ ± 0.1 mm.
- Air Supply: 4~6 kg/cm² Compressed Air.

■ Transmissibility



■ Settling Time

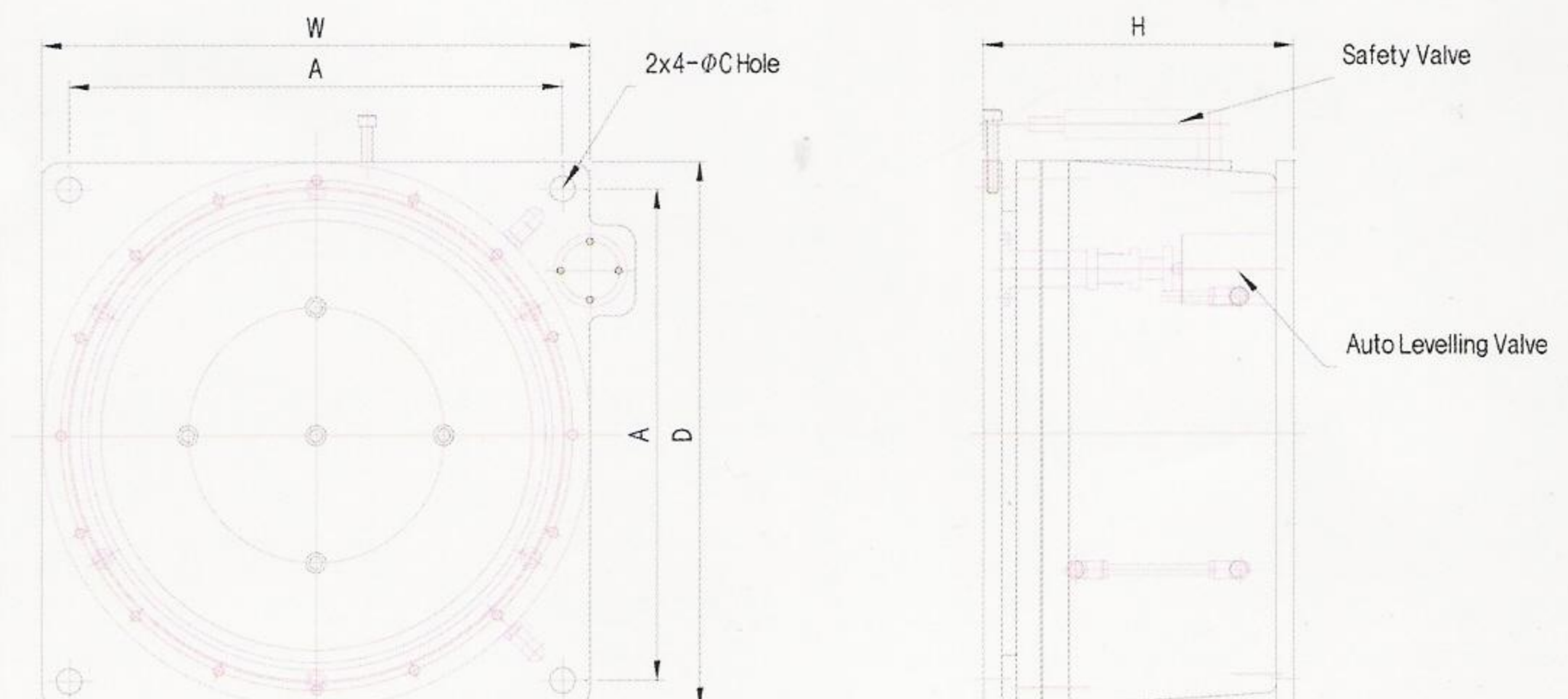


■ Ordering Chart

Model No.	DVIM-B-500	DVIM-B-1000	DVIM-B-1500	DVIM-B-2500	DVIM-B-3500	DVIM-B-4500
Dimension (WxDxHmm)	200x200x170	260x260x170	300x300x170	380x380x170	440x440x170	490x490x170
Location of Bolt hole (AxAmm)	170	230	270	350	410	460
Diameter of Bolt hole (Cmm)	$\Phi 12$	$\Phi 14$	$\Phi 14$	$\Phi 14$	$\Phi 14$	$\Phi 14$
Load Capacity (kg/ea)	500	1000	1500	2500	3500	4500
Production Weight (kg/ea)	15	25	35	50	70	90

- ※ The custom dimensions are available upon request beside standard size.
- ※ Above specification would be changed without notice for improvements.
- ※ Load capacity is based on air-pressure of 3 bar.

■ Configuration



DVIM series S type



General Specifications

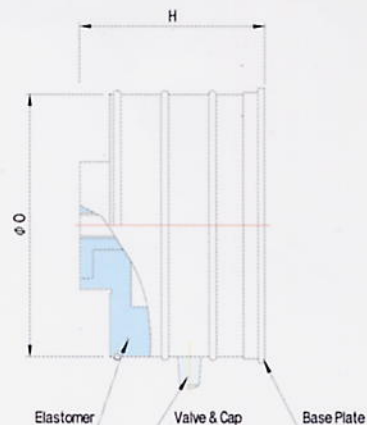
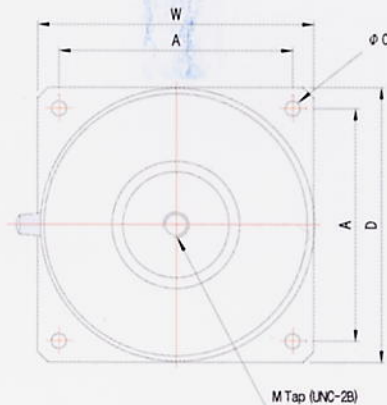
- Natural Frequency: 3~5Hz.
- Transmissibility at Resonance: 8:1
- Structural Materials: Steel and Aluminum, Neoprene Diaphragm.

Ordering Chart

Model No.	DVIM-S-50	DVIM-S-150	DVIM-S-300	DVIM-S-600	DVIM-S-1200	DVIM-S-2400
Dimension (WxDxHmm)	76x76x64	106.5x106.5x62	130x130x90	175x175x90	254x254x90	343x343x90
External Diameter (O)	73	105	127	171	245	338
Location of Bolt hole (AxAmm)	60,5	89	108	152,5	216	305
Diameter of Bolt hole (Cmm)	7	7	7	7	14	14
Bolt Tap (M)	0,375-16	0,500-13	0,500-13	0,500-13	0,625-11	0,625-11
Load Capacity (kg/ea)	50	150	300	600	1200	2400
Production Weight (kg/ea)	0,5	0,7	1,5	2,5	6	12

- ※ The custom dimensions are available upon request beside standard size.
- ※ Above specification would be changed without notice for improvements.

Configuration



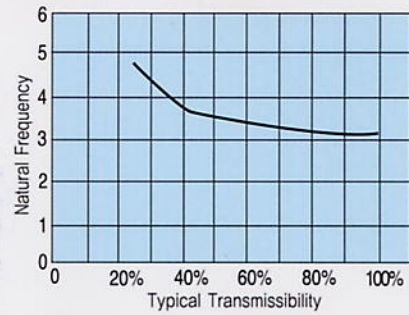
Features

- One to one horizontal to vertical stiffness ratio.
- Simple-easy maintenance.
- Low-cost shock and vibration isolation
- Wide ranges of a load capacity.

Applications

- Vacuum pump, Air compressor, Blower.
- Medical Equipment.
- Coordinate Measuring M/C.
- Optical Systems.
- Other precision Equipment.

Typical Transmissibility



■ Other Daeil System's Products.



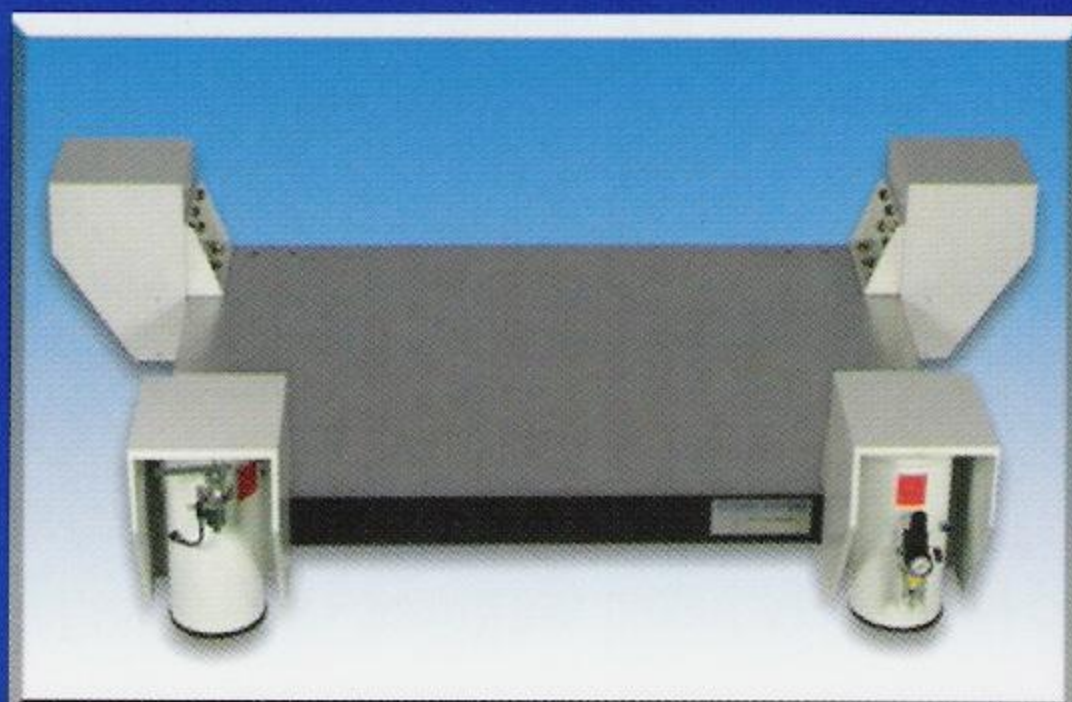
■ DVI0 series



■ DVID series



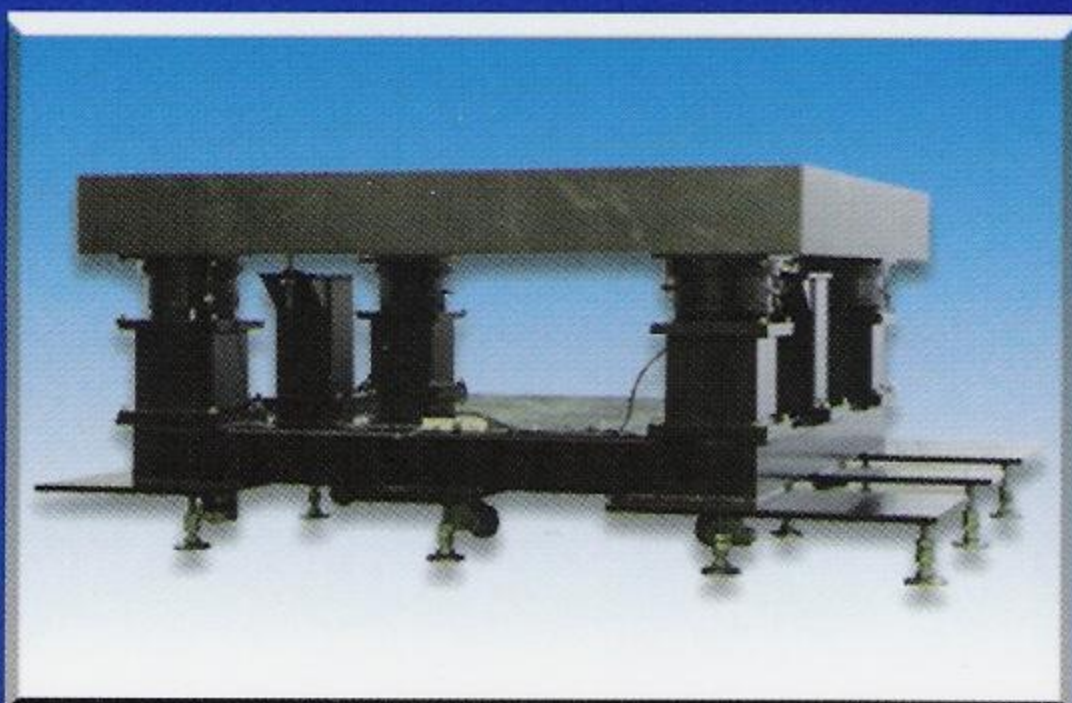
■ DVI0 series



■ DVIP series



■ Clean Booths



■ Custom Product