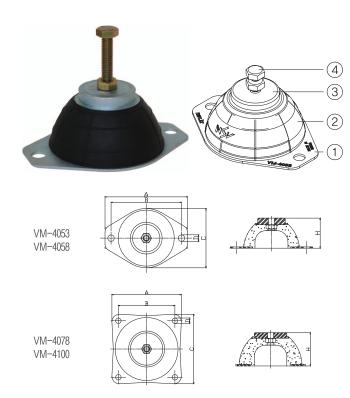
# VM-4000 Rubber Mount (Deflection : 6~16mm)



#### ■ Features

VM-4000 mounts is specifically designed to give large deflection at low loads. Although the mount design allows high deflection, the mountings are compact in weigh and easy to install. Provides passive vibration isolation on electronic instruments, measuring equipment and test cells.

# Specification

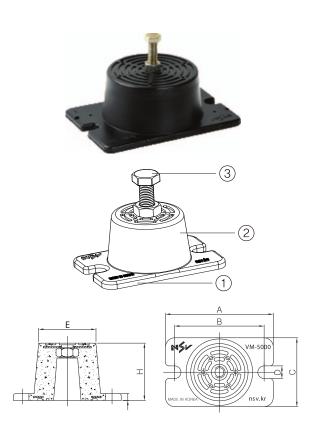
No.	Name of Components	Material	Standard			
1	Lower Plate	SS400	KS D 3503			
2	Body	CR	KS M 6617			
3	Upper Plate	SS400	KS D 3503			
4	Level Bolt	SS400	KS B 1002			

### ■ Dimension & Selection Guide

Туре	Capacity (kgf)	Hardness (Hs)	Weight (kg)	Dimension(mm)						
				Α	В	С	D	Н	Level Bolt	
VM-4053	80	45	6	138	118	99	11	46.7	M12	
VM-4058	100		9	150	128	108	12	54.7	M12	
VM-4078	300		12	150	122	150	12	71.8	M14	
VM-4100	500		16	200	160	200	13	93.8	M18	

(NOTE) The mentioned size and scale can be altered to improve the quality performance and capacity of the product without any notice.

# VM-5000 Rubber Mount (Deflection: 15mm)



#### ■ Features

It is a mount with top and bottom reinforcing plates made of CR (neoprene) type synthetic rubber having excellent oil and ozone resistance. A round-shaped rib line is on the top and bottom of the mount to prevent slipping from the equipment and the guide hole for anchoring is on the base plate for easier installation. It is simple, but has the largest static deflection, which makes it the most efficient anti-vibration mount with a wide range of applications.

### Specification

No.	Name of Components	Material	Standard			
1	Base Plate	SS400	KS D 3503			
'	base Plate	CR	KS M 6617			
2	Body	CR	KS M 6617			
3	Level Bolt	SS400	KS B 1002			

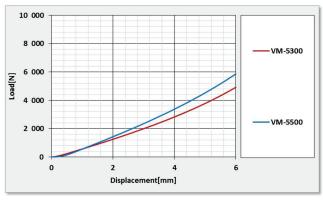
#### ■ Dimension & Selection Guide

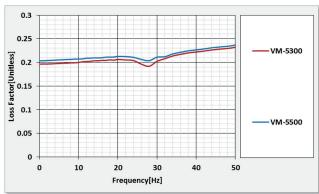
Туре	Capacity Hardness (kgf) (Hs)	Spring	Weight	Dimension(mm)							
			Constant (kgf/mm)	(kg)	А	В	С	D	Е	Н	Level Bolt
VM-5050	300	60±5	20	0.26	94	78	60	11	50	46	M10
VM-5065	500		34	0.52	122	102	82	13	66	60	M12
VM-5085	1000		67	0.84	150	128	104	13	87	65	M12
VM-5115	2000		133	1.54	188	164	130	14	114	68	M12

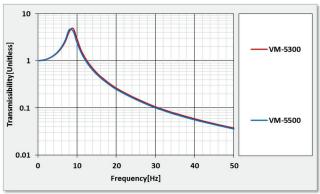
(NOTE) The mentioned size and scale can be altered to improve the quality performance and capacity of the product without any notice.

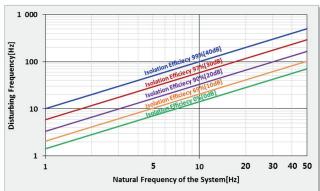
# VM-5000 Rubber Mount

#### ■ VM-5000 Test Data









## Explanation(Commonness)

1. Vibration Transmissibility(Tr)

Vibration Transmissibility is the amplitude ratio of Output to Input.

$$T_r = \frac{\textit{Output Amplitude}}{\textit{Input Amplitude}} = \sqrt{\left(\frac{1}{1-\eta^2}\right)^2} \;, \\ \eta = \frac{\textit{Disturbing Frequency of the equipment}}{\textit{Natural Frequency of the Isolator(Damping(c) = 0)}}$$

2. Natural Frequency( $F_{n}$ ) of Vibration Isolation System

The mass and spring stiffness dictate a natural frequency of the system.

$$F_n = \frac{1}{2\pi} \sqrt{\frac{k}{m}}$$

3. Isolation Efficency(E)

Isolation Efficiency in percent transmission is related to Vibration Transmissibility  $E = 100(1 - T_r)$ 

ex) Disturbing Frequency of the equipment=100 Hz, Natural Frequency of the isolator=10Hz

 $T_r = \sqrt{\left(\frac{1}{1 - \eta^2}\right)^2} = \sqrt{\left(\frac{1}{1 - \left(\frac{100}{10}\right)^2}\right)^2} = 0.101 \quad E = 100(1 - T_r) = 100(1 - 0.101) = 99(\%)$ 

#### ■ Installation Features

