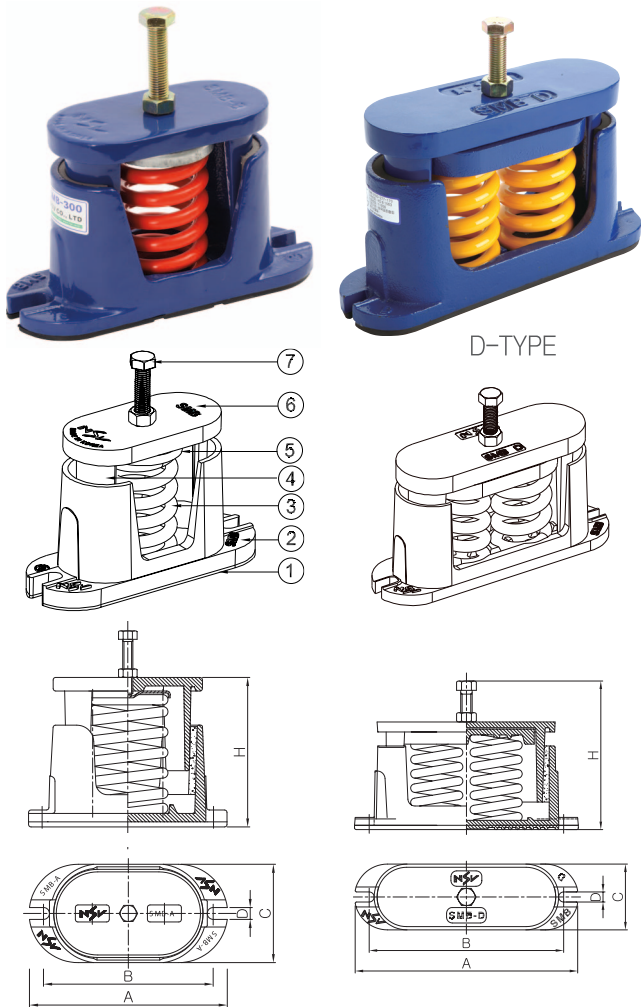


SMB Spring Mount (Deflection : 25mm)



D-TYPE

■ Features

As an enclosed spring mount, it has the spring between upper and bottom housings. An anchor hole is on the bottom housing and the tap is on the top housing, which allows level control of the bolt with a level bolt and nut to be used. Plus, the spring cap with a bolt guided hole is at the top of the spring to distribute the load transferred from the level bolt and the anti-frictioner is attached between upper and bottom housings, which somewhat reduces attenuation and friction caused by left-right and top-down relative displacement when the equipment is running. There is a CR pad attached on the bottom of the bottom housing to compensate disadvantages of the spring transferring high frequency due to a kind of surging effect.

■ Usage

- ◆ For pumps, refrigerators, compressors and power generators
- ◆ For ventilators
- ◆ For air conditioning units
- ◆ For equipment with a large horizontal reaction

■ Specification

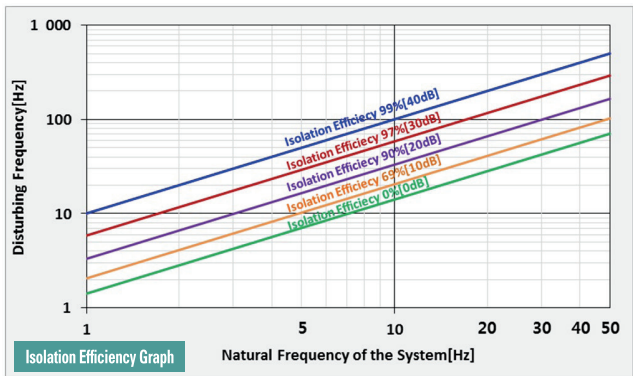
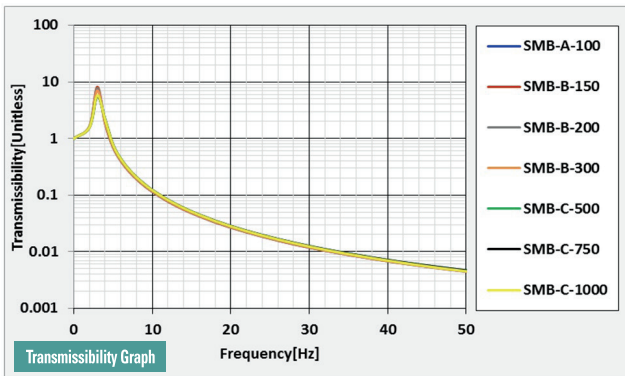
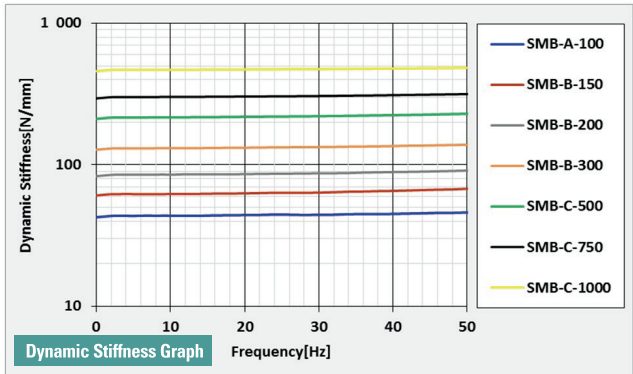
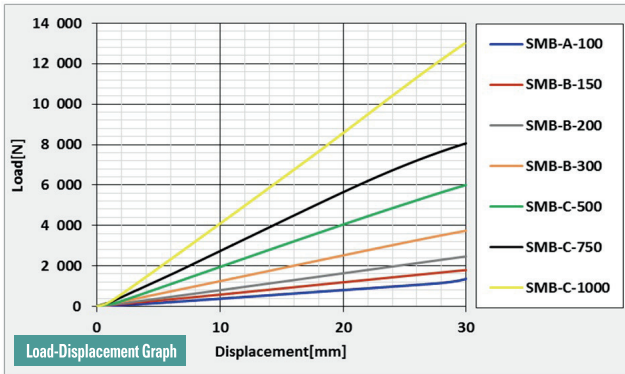
No.	Name of Components	Material	Standard
1	Non Skid Pad	CR	KS M 6617
2	Lower Housing	GC	KS D 4301
3	Coil Spring	SUP9	KS B 2402
		HSW3	KS B 2403
4	Anti-Frictioner	Sponge	-
5	Spring Cap	SS400	KS D 3503
6	Upper Housing	GC	KS D 4301
7	Level Bolt	SS400	KS B 1002

■ Dimension & Selection Guide

Type	Capacity (kgf)	Spring Constant (kgf/mm)	Weight (kg)	Color	Dimension(mm)					
					A	B	C	D	H	Level Bolt
SMB-A-10	10	0.4	1.16	Pink	139	117	57	12	102	M10 x 60
SMB-A-25	25	1	1.20	Yellow						
SMB-A-50	50	2	1.34	Red						
SMB-A-75	75	3	1.34	Black						
SMB-A-100	100	4	1.30	Blue						
SMB-B-100	100	4	3.64	Blue	205	170	76	13	135	M12 x 65
SMB-B-150	150	6	3.64	Brown						
SMB-B-200	200	8	3.70	White						
SMB-B-300	300	12	3.94	Orange						
SMB-B-400	400	16	3.86	Pink						
SMB-C-500	500	20	6.00	Green	228	196	93	13	150	M16 x 80
SMB-C-600	600	24	6.06	Blue						
SMB-C-750	750	30	6.14	Black						
SMB-C-1000	1000	40	6.32	Yellow						
SMB-D-1200	1200	48	13.38	Blue						
SMB-D-1500	1500	60	13.54	Black	306	277	94	13	170	M16 x 80
SMB-D-2000	2000	80	13.88	Yellow						

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

SMB Test Data



Explanation(Commonness)

1. Vibration Transmissibility(T_r)

Vibration Transmissibility is the amplitude ratio of Output to Input.

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

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 Efficiency(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

