



RoHS Compliant

NBK®

No.E-9942

Built-in Vibration Isolation Mounts (Lightweight Type)

Material Plate: SPHC Bolt: SUM23

Surface Treatment Trivalent chrome plating

This mount is for incorporation into other equipment and uses expanded polyurethane vibration isolation material which offers excellent vibration isolation.

Features

Isolates low-frequency vibrations

- Able to isolate low-frequency vibrations by using expanded polyurethane, which surpasses rubber-based vibration isolation materials.

Suitable for a wide range of loads

- Suitable for a wide range of loads from 11 N to 580 N.

Wide variety of vibration isolation materials

- 2 to 4 different types of vibration isolation materials are available for each size. This allows you to minimize differences in size even for different loads.

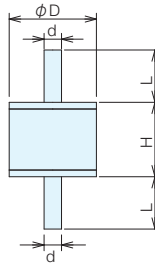
Applications

Isolation of vibrations from external sources

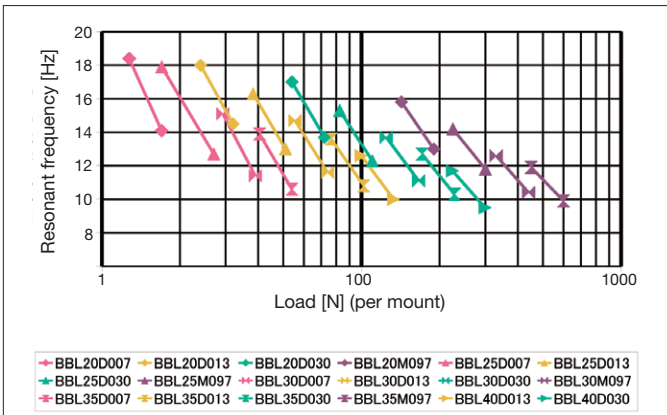
- Isolates transmission of vibrations from external sources such as to precision measuring instruments, inspection equipment, and machining tools.

Suppression of vibrations transmitted to external devices

- Suppresses vibrations from vibrations sources such as pumps and generators from being transmitted to external devices.



Characteristic Data



Selection Points

Read the resonant frequencies of the mounts depending on the load from the table on the left and select the mount where the resonant frequency is 1/2 (0.5 times) or less the frequency of the vibration you want to isolate.

Selection Examples
If you want to isolate the vibrations from a pump running at 1,800 rpm with a load of 50 N on each mount

- The vibration frequency generated by the pump is 1,800 rpm/60 seconds = 30 Hz. Therefore, select mounts that have a resonant frequency of 30 Hz/2 = 15 Hz or less.
- The BBL25D013 (resonant frequency of approx. 13 Hz with a 50 N load) or BBL35D007 (resonant frequency of approx. 11 Hz with a 50 N load) are suitable for this case.

Jig Set-up Systems (Q-lock)

Base Elements

Clamp Units

Clamping Parts

Mechanical Parts

Machine Vises

Surface Plates and Measurement Instruments

Index

Specifications

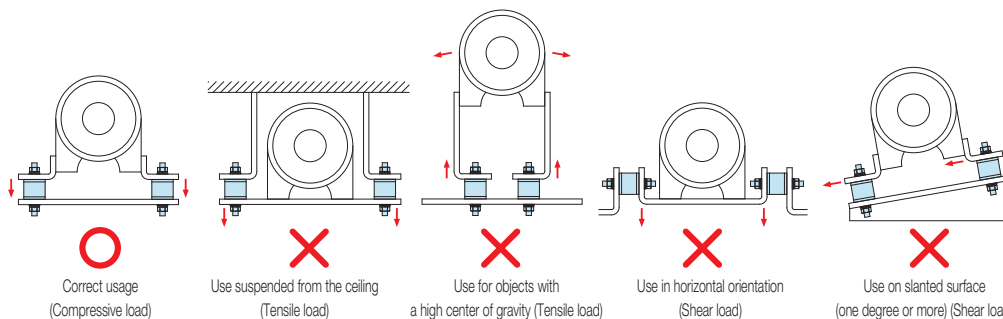
Order No.	No.	Vibration Isolation Material Color	Size [mm]				Allowable Load N	Resonant frequency [Hz]*1	Target Vibration Frequency [Hz]*2	Vibration Isolation Material Deformation [mm]*3	Weight (g)
			D	d (Coarse Thread)	H	L					
109396	BBL20D007	Pink	20	M5 × 0.8	18.6	15.5	11 - 16	14	28 -	2	21
109397	BBL20D013	Dark yellow					23 - 31	15	29 -	2	21
109398	BBL20D030	Dark green					52 - 70	14	27 -	2	22
109399	BBL20M097	Dark magenta					130 - 180	13	26 -	2	22
109400	BBL25D007	Pink	25	M6 × 1.0	21.6	17.5	16 - 26	13	25 -	2	35
109401	BBL25D013	Dark yellow					37 - 50	13	26 -	2	35
109402	BBL25D030	Dark green					80 - 100	12	25 -	2	37
109403	BBL25M097	Dark magenta					210 - 290	12	24 -	3	38
109404	BBL30D007	Pink	30	M6 × 1.0	25.6	17.5	28 - 38	11	23 -	2	44
109405	BBL30D013	Dark yellow					53 - 72	12	23 -	3	46
109406	BBL30D030	Dark green					110 - 150	11	22 -	3	48
109407	BBL30M097	Dark magenta					320 - 430	10	21 -	3	51
109408	BBL35D007	Pink	35	M8 × 1.25	28.6	22.5	39 - 52	11	21 -	3	73
109409	BBL35D013	Dark yellow					73 - 98	11	22 -	3	75
109410	BBL35D030	Dark green					150 - 210	10	21 -	3	79
109411	BBL35M097	Dark magenta					440 - 580	10	20 -	4	83
109412	BBL40D013	Dark yellow	40	M8 × 1.25	32.6	22.5	95 - 120	10	20 -	3	91
109413	BBL40D030	Dark green					200 - 280	10	19 -	3	96

*1: The resonant frequency is the calculated value when the allowable load is applied.

*2: The target vibration frequency is the frequency that is subject to vibration isolation. This is based on the frequency where the vibrations when the allowable load is applied are attenuated to 1/2 to 1/3.

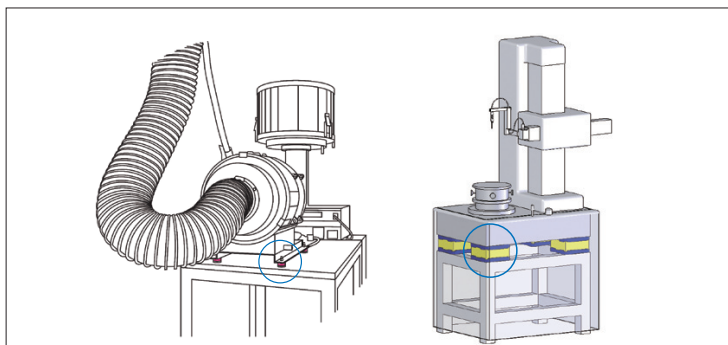
*3: The vibration isolation material deformation is the calculated value when the allowable load is applied.

Usage Warnings



- If the resonant frequency of the mount is $1/\sqrt{2}$ (0.7) times or higher than the vibration frequency you want to eliminate, damping effect will not act and the vibrations will be amplified. The mount should be used loaded under compression.
 - It cannot be used with a tensile or shear load. (Refer to the examples above)
- You should also ensure that the mounts are not loaded with tensile or shear loads during transport and storage. The mount may become damaged if subjected to tensile or shear loads.

Usage Examples



For devices with a high center of gravity, swaying of the device can be reduced by installing anti-vibration products at a position near the center of gravity inside the device.