

Housed Spring Mount



1. Compliance:

1.1. Designed to BS 1726 -1: 1987

1.2. Tolerance to BS 1726-1: 2002

1.3. SAE and Ashrae Guidelines for Vibration Isolation.

2. Application:

The Housed Spring Mounts are used for isolating floor mounted sources of noise and vibration. These are made of nitrile rubber housing, nitrile rubber pads and epoxy powder coated springs. Since springs are housed inside rubber casing, it eliminates low frequency vibrations effectively. The nitrile rubber pads provided below the casing will effectively control vibrations of audible range. These are effectively used in Axial / Centrifugal Fans, Air Handling Units, Chillers and Cooling Towers, Rotary and Multi Cylinder Compressors, Diesel Generating Sets, Mechanical Test Rigs, Isolation of Sensitive Equipment etc.

3. Product Features:

- 3.1. Oil resistant Nitrile rubber housing provides better elimination of vibration and sound.
- 3.2. Housed casing protects the springs from corrosion.
- 3.3. The horizontal stiffness of the spring is more than 80% of vertical stiffness. Also fully closed rubber casing prevents further lateral movements. This makes HSM model spring mounts highly stable and durable in all working environments.
- 3.4. The maximum deflection shall be 60% of total deflection at rated load with 50% overload capacity.
- 3.5. Provided with levelling adjustments.
- 3.6. Neoprene pads of 8-13mm are provided which ensure 3-4 mm deflection.
- 3.7. Colour Coded labels for easy identification.
- 3.8. The HSM mounts are available on following material specifications.
 - 3.8.1.Zinc plated metallic casings no suffix.
 - 3.8.2. Hot dip galvanized use HDG as suffix.
 - 3.8.3. Stainless steel use SS as suffix.





SPECIFICATION

| Part No. | Colour Code | Rated Load (Kg) | Deflection at Rated Load (mm) | А | В | С | D | E | F | G | Н | ı | J |
|------------|----------------|-----------------------|-------------------------------------|---------|-----|-----|-----|----|-----|-----|----|-----|---|
| BHSM10-S | Green | 10 | 20 | | | | | | | | | | |
| BHSM15-S | Black | 15 | 20 | 63 54 | | | | | | | | | |
| BHSM20-S | Yellow | 20 | 20 | | 60 | 76 | 38 | M8 | 48 | - | M6 | - | |
| BHSM40-S | Blue | 40 | 20 | | | | | | | | | | |
| BHSM70-S | Grey | 70 | 20 | | | | | | | | | | |
| BHSM25-A | Green | 25 | 25 | | | | | | | | | | |
| BHSM50-A | Black | 50 | 30 | 88 85 | | | | | | | | | |
| BHSM75-A | Yellow | 75 | 25 | | | | | | | | | | |
| BHSM100-A | Blue | 100 | 25 | | 0.5 | 90 | 110 | 70 | M10 | 78 | - | M8 | - |
| BHSM150-A | Grey | 150 | 25 | | 00 | | | | | | | | |
| BHSM200-A | Orange | 200 | 25 | | | | | | | | | | |
| BHSM250-A | Brown | 250 | 25 | | | | | | | | | | |
| BHSM300-A | Purple | 300 | 25 | | | | | | | | | | |
| BHSM200-B | Yellow | 200 | 25 | 127 130 | | | 180 | 95 | M16 | 111 | 1 | M12 | - |
| BHSM300-B | Blue | 300 | 25 | | | | | | | | | | |
| BHSM400-B | Brown | 400 | 25 | | | | | | | | | | |
| BHSM500-B | Orange | 500 | 25 | | | | | | | | | | |
| BHSM600-B | Green | 600 | 25 | | 400 | 150 | | | | | | | |
| BHSM700-B | Pink | 700 | 25 | | 130 | | | | | | | | |
| BHSM800-B | White | 800 | 25 | | | | | | | | | | |
| BHSM1000-B | Purple | 1000 | 25 | | | | | | | | | | |
| BHSM1200-B | Red | 1200 | 25 | | | | | | | | | | |
| BHSM1400-B | Black | 1400 | 25 | | | | | | | | | | |
| BHSM100-C | Blue | 100 | 50 | | 130 | 150 | 180 | 95 | M16 | 111 | - | M12 | - |
| BHSM200-C | Yellow | 200 | 50 | 155 | | | | | | | | | |
| BHSM300-C | Blue | 300 | 50 | | | | | | | | | | |
| BHSM400-C | Brown | 400 | 50 | | | | | | | | | | |
| BHSM500-C | Orange | 500 | 50 | | | | | | | | | | |

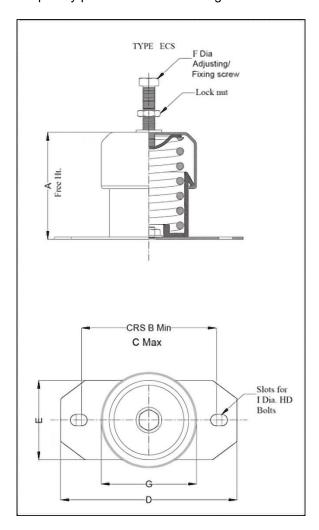




Theoretical Isolation Efficiency

| Machine Speed (rpm) | Efficiency % | | | | | | | |
|---------------------|--------------|-------------|------------|--|--|--|--|--|
| Machine Speed (rpm) | 15 mm defl. | 25 mm defl. | 50mm defl. | | | | | |
| 300 | Do Not Use | 34.0 | 75.2 | | | | | |
| 500 | 68.7 | 83.3 | 92.3 | | | | | |
| 750 | 88.1 | 93.2 | 96.7 | | | | | |
| 1000 | 93.7 | 96.3 | 98.2 | | | | | |
| 1200 | 95.7 | 97.4 | 98.7 | | | | | |
| 1500 | 97.3 | 98.4 | 99.2 | | | | | |
| 1750 | 98.0 | 98.8 | 99.4 | | | | | |
| 2000 | 98.5 | 99.1 | 99.5 | | | | | |

The above figures are theoretical values only based on the vertical natural frequency of the spring system assuming infinitely stiff structural supports. The effects of high frequency spring coil resonances on low frequency performance are also ignored.



Note:

- Due to policy of continuous improvement, the specifications are subject to change without prior notice.
- Measurements are subject to 5% tolerance.
- To achieve good sound suppression, do not overload fitting.

