minus k® technology

SUPERIOR, LEADING EDGE NEGATIVE-STIFFNESS, COST EFFECTIVE, VIBRATION ISOLATION

SM-1 Low Frequency Vibration Isolator

Weight: Approximately 155 lb (70.3 kg)	
Dimensions: 13" W x 13" D x 20.5" H (330mm W x330mm D x 521mm H)	
Load Capacities (approximate):	
Model	Payload Range
700SM-1	110 - 750 lb (50 - 340 kg)
1200SM-1	675 - 1330 lb (315 - 603 kg)
1500SM-1	800 - 1550 lb (363 - 703 kg)
1900SM-1	1200 - 1950 lb (544 - 885 kg)
2400SM-1	1800 - 2500 lb (817 - 1134 kg)
2900SM-1	2400 - 3000 lb (1089 - 1361 kg)
3400SM-1	2800 - 3600 lb (1270 - 1633 kg)
4000SM-1	3400 - 4200 lb (1542 - 1905 kg)

Performance

- Vertical natural frequency of 1/2 Hz or less can be achieved over the entire load range.
- Horizontal natural frequency is load dependent. 1/2 Hz or less can be achieved at or near the nominal load.

20 dB Transmissibility 0 2.5 Hz -20 .1 t 5.5 H .01 -40 at 20 Hz 10 times -60 30 3 4 5 7 10 20 50 .3 .4 .5 .7 1 2 80 FREQUENCY (Hz)



Low frequency vibration isolator for weight loads from 500 to 4200 lbs. and 1/2 Hz performance vertical and horizontal.

The SM-1 negative-stiffness isolator is the basic building block of the FP-1 Floor Platform and other heavy multiple isolator systems. They require no air or electricity.

This isolator has the same basic features of our all passive, negative-stiffness, manually-adjustable bench top isolators. It offers our very-low frequency isolation performance for payloads of many thousands of pounds.

The SM-1 isolator can be used alone or with any number of additional units to achieve higher capacity systems. They can be arranged in many geometrical configurations to suit your application.

If there is a need, the isolators can be customized to achieve user specific needs. Eg., different horizontal and vertical frequencies, dampening, etc. They can also be made vacuum capatible.

The SM-1 isolators can also be placed on pedestals to increase the height of the isolation system.

Typical Performance Curves: