

CS-1 Compact Suspension Passive Mechanical Vibration Isolator

Weight: Approximately 4.4 lbs. (2 kg)	
Dimension: 5.75" H x 3.5" W x 7" D (146 mm H x 89 mm W x 178 mm D)	
Approximate payload weight range	
Model	Payload Range
25CS-1	10 - 28 lb. (4.5 - 12.7 kg)
50CS-1	27 - 55 lb. (12.2 - 25 kg)
75CS-1	35 - 75 lb. (15.9 - 34 kg)
100CS-1	50 - 100 lb. (22.7 - 45.4 kg)
125CS-1	95 - 128 lb. (43.1 - 58.1 kg)
1500CS-1	122 - 160 lb. (55.4 - 72.7 kg)
Performance	
- Vertical natural frequency of 1/2 Hz or less can be achieved over the entire load range. - There is NO horizontal isolation built in to the isolator. [horizontal isolation is provided by means of the load rod, designed for each application] - For use at near room temperature. [not cryogenically compatible]	



Compact Suspension Isolators with 1/2 Hz performance vertical for weight loads from 30 to 640 lbs. [3 or 4 units per system]

The CS-1 is a compact, 0.5 Hz, passive mechanical negative-stiffness vibration isolator. Like other Minus K Technology isolators, they use **no air or electricity**. It is the first standard **sub-hertz** isolators designed to be used in suspension, not compression. The isolator mounts above the intended payload and use a load rod to connect to it.

The CS-1 is a vertical only isolator. Horizontal isolation is provided by the pendular load rod itself. The longer the load rod, the lower the horizontal resonant frequency will be [load rod varies according to customer needs].

The isolators upper mounting point can be customized to adapt to the customer's needs. They can be used in small spaces where previously getting this level of vibration isolation, was simply not possible. The CS-1 is vacuum compatible, and can be modified to be up to UHV compatibility.

Typical Performance Curves:

