

20 SERIES

Active Vibration Isolation Table



The affordable Active Vibration Isolation Table is available in a desk style configuration in the sizes shown in the ordering chart at right, although custom configurations are welcomed.

TMC's Active Vibration Isolation Table features state-of-the-art vibration isolation performance. By integrating our new CSP® (Compact Sub-Hertz Pendulum Isolation System) for horizontal vibration reduction with our PEPS-VX® Inertial Damper for vertical vibration cancellation, we have produced a superior, ultra-quiet table in six degrees-of-freedom.

This advanced isolation technology may be combined with TMC optical tables and other TMC products, as well as designed into equipment for OEM applications.

Featuring 10 dB of isolation vertically and 20 dB of isolation horizontally at 2 Hz (a frequency at which other tables amplify vibration), the Active Vibration Isolation Table is ideal for the most demanding applications in unusually severe vibration environments.

Such applications include:

- Atomic force microscopes
- Scanning probe microscopes
- Commercial interferometers
- Electro-physiology recording
- Semiconductor inspection equipment

GENERAL SPECIFICATIONS

Isolator natural frequency (low input):

Vertical = 0.5 Hz
(actively suppressed)
Horizontal = 0.5 Hz

Isolation efficiency @ 2 Hz:

Vertical = 10 dB
Horizontal = 20 dB

Net load capacity:

1,200 lb (545 kg)

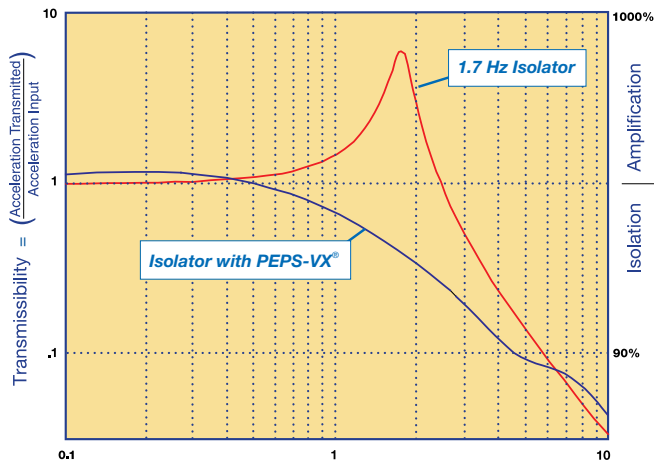
Finish: Medium texture black powder frame, stainless steel top

Facilities required:

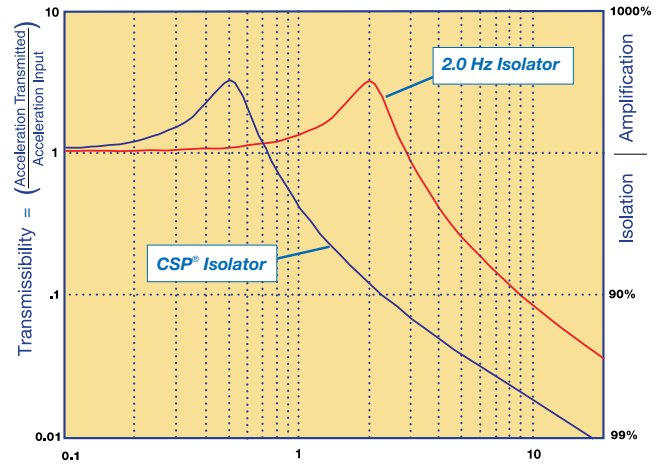
3 CFM @ 80 psi air filtered to 20 microns or less
120 VAC or \pm 15 VDC,
7 w nom. 12 w max

Features

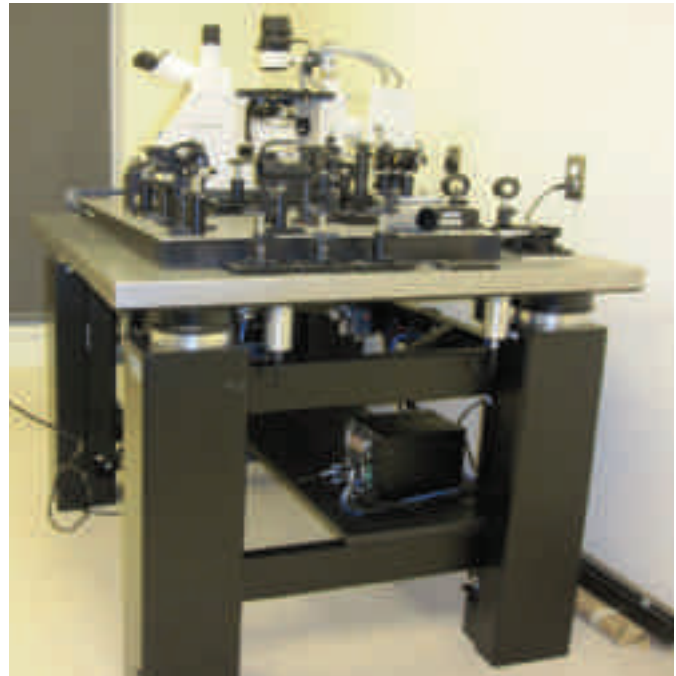
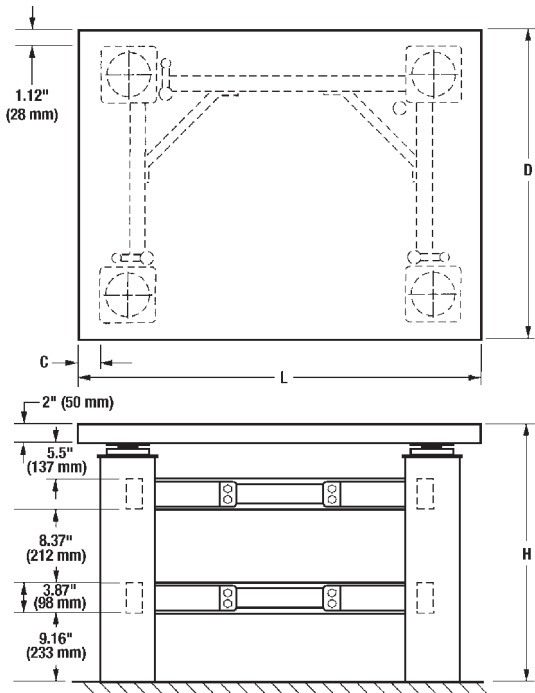
- CSP® Compact Sub-Hertz Pendulum air vibration isolation system for 0.5 Hz horizontal resonant frequency
- PEPS® Precision Electronic Positioning System for non-contacting height control of isolated surface to one micron
- PEPS-VX® Vibration Cancellation add-on to PEPS for low frequency vibration cancellation in the three vertical degrees-of-freedom
- Rigid steel frame construction in a desk-style configuration
- Highly damped, high-stiffness 2 in. thick, stainless steel laminate top
- Optional grid of tapped holes on table top



Vibration Transfer Function: Vertical



Vibration Transfer Function: Horizontal



Model 20-561 Active Table isolates Optical Microscope at Rice University Bioscience Research Collaborative.

Ordering Chart

Table Model	Description	L	D	H	C
20-561	Active table, 3 ft x 4 ft no holes	47 in. (1,194 mm)	35.75 in. (908 mm)	31 in. (787 mm)	2.2 in. (56 mm)
20-563	Active table, 3 ft x 4 ft 1/4-20 holes on 1" centers	47 in. (1,194 mm)	35.75 in. (908 mm)	32 in. (813 mm)	2.2 in. (56 mm)
20-564	Active table, 3 ft x 4 ft M6 holes on 25 mm centers	47 in. (1,194 mm)	35.75 in. (908 mm)	32 in. (813 mm)	2.2 in. (56 mm)
20-571	Active table, 3 ft x 5 ft no holes	60 in. (1,524 mm)	35.75 in. (908 mm)	31 in. (787 mm)	2.2 in. (56 mm)
20-573	Active table, 3 ft x 5 ft 1/4-20 holes on 1" centers	60 in. (1,524 mm)	35.75 in. (908 mm)	32 in. (813 mm)	2.2 in. (56 mm)
20-574	Active table, 3 ft x 5 ft M6 holes on 25 mm centers	60 in. (1,524 mm)	35.75 in. (908 mm)	32 in. (813 mm)	2.2 in. (56 mm)
Accessory Model	Description	L	D		
81-303-01	Armrest pads				
81-312-03	10 in. wide shelf	10 in. (254 mm)	38 1/2 in. (978 mm)		
81-401-01	Front support bar and mounting clamps	48 in. (1,219 mm)			
81-401-02	Front support bar and mounting clamps	60 in. (1,524 mm)			
81-402-01	Rear support bar and mounting clamps	48 in. (1,219 mm)			
81-402-02	Rear support bar and mounting clamps	60 in. (1,524 mm)			
81-29822-01	Full perimeter enclosure	48 in. (1,219 mm)	37 in. (940 mm)		