

BT Series Compact Vibration Isolation Platform

BenchTop™ Self-Leveling Pneumatic Vibration Isolation Platform



Benchtop™ isolation platforms provide top-notch tabletop vibration isolation solution for precision instrument that requires pneumatic vibration isolation. The unique Stabilizer™ design allows the platform to have superior performance compared with competitors.



Features

- Laminate or stainless steel platform for loads up to 101 kg (225 lbs)
- Integrated with CM-225 pneumatic isolators that start isolating at 5 Hz
- Integrated leveling valves for improved repositioning accuracy
- Ideal for sensitive applications that require pneumatic isolation
- Ideal for microscopes and analytical/inspection instruments

Stabilizer™ Vibration Isolation Technology

CM-225 Series Pneumatic isolators used in BT Series, featuring Stabilizer™ vibration isolation technology adapted from Newport's acclaimed Stabilizer Model S-2000 Vibration Isolators, are at the heart of the system. This technology is renowned for compact size, faster settling times, superior high-center-of-mass stability, lower natural frequency, and a patented, self-centering piston mechanism. It offers the largest compliance volume and, therefore, the best vertical isolation of any compact isolators.

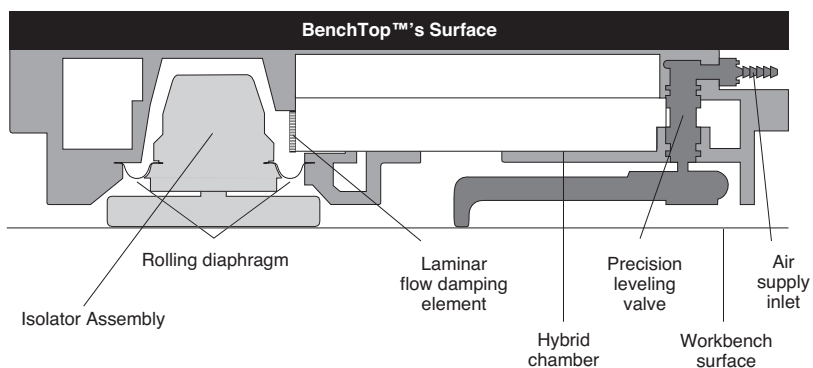


Integrated Leveling Valves for Improved Repositioning Accuracy

Four isolator modules are recessed into the bottom of the platform, achieving top-notch table top vibration isolation. Each isolator module contains a pneumatic, flexible rolling diaphragm that supports the load, thereby decoupling vibrations from the isolated platform. If the platform is disturbed, the modules automatically relevel the platform using compressed air.

Multiple Working Surface Options

BenchTop Series is ideal for providing vibration isolation in applications involving time lapse photography, video microscopy, probing and manipulation of cells under high magnification. Standard catalog platforms come with 3 working surface options: a white plastic laminated surface, stainless-steel top with or without mounting holes. Cleanroom version are also available as standard catalog products for all 3 working surface options. Please refer to the table below for the benefits of different working surface options.



	Formica Top (Chemical Resistant Laminate)	Stainless Steel Top
Advantages	High Chemical Resistance Heat exposure up to 275°F Mid-Price	Moderate to Heavy Duty High Bacterial Resistance Moderate Chemical Resistance Moderate Corrosive Resistance High Fungal Resistance High Water and Moisture Resistance Continuous heat exposure above 1500 °F (may discolor at prolonged high temperatures)
Disadvantages	Light Duty Low Bacterial Resistance Low Corrosive Resistance Low Fungal Resistance Low Water and Moisture Resistance Low Scratch Resistance Can chip at seams and get surface cuts	Low Scratch Resistance Dents easily on impact High Price
Best Applications	Biology, chemistry, pathology, and immunology labs. Labs performing experiments and tests where results depend on non-contamination and require worksurfaces that are chemical resistant, decorative and hygienic.	Biological science, chemical, clean room, food testing, hospital, medical, and pharmaceutical labs. Labs performing experiments and tests where results depend on non-contamination, require worksurfaces that can handle high temperatures and are easily cleanable.

Ergonomic Mechanical Design

No more bulky canisters to impede instrument access, restrict arm positioning or crowd workspaces. BT's hybrid-chamber design allows all vibration modules to be completely hidden within the platform. The BenchTop also minimizes fatigue. That's because its low-profile design adds only about two inches of height to your support surface.

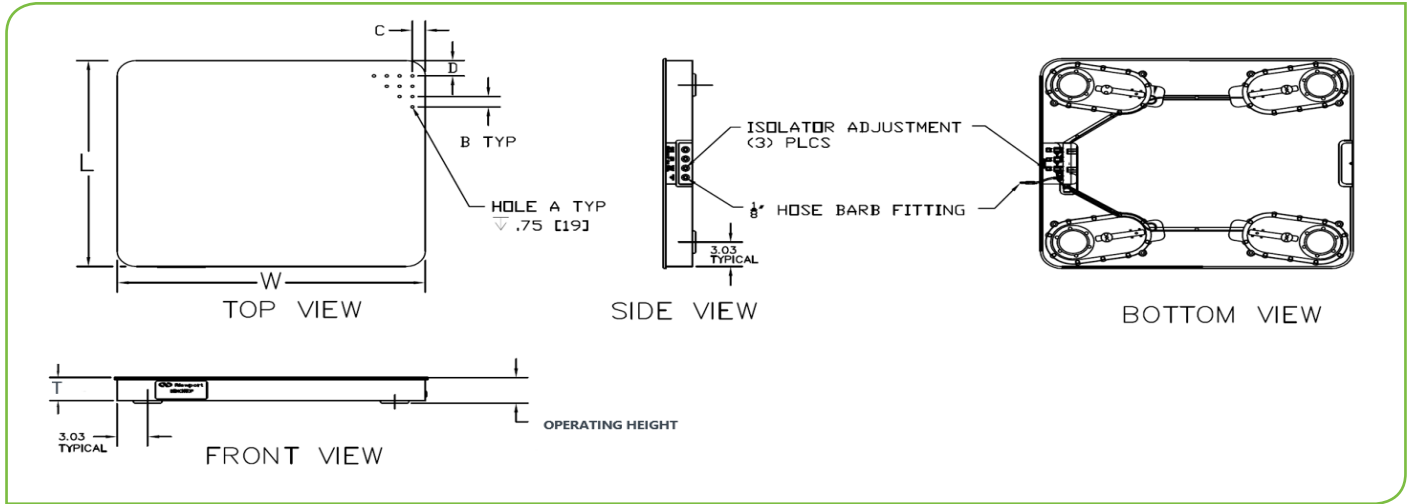


Benchtop Series

Specifications

Self-Centering	Yes
Load Capacity	up to 225 lbs
Releveling Accuracy	0.6 mm
Horizontal Isolation, Resonance)	3.6 Hz
Horizontal Amplification at Resonance	10 dB
Horizontal Isolation, 10 Hz	96%
Vertical Isolation, Resonance	3.2 Hz
Vertical Amplification at Resonance	12 dB
Vertical Amplification at Resonance	90%

Dimensional Drawing



MODEL	L IN [mm]	W IN [mm]	T IN [mm]	Hole A	B	C IN [mm]	D IN [mm]	Load Capacity lb [kg]	Surface Material	Operating Height IN [mm]			
BT(C)-1620	16.25 [412.5]	20.25 [514.4]	2.06 [52.4]	No Holes				225 [101]	Laminate with Formica Top	2.31±1.3 [58.7±3.3]			
BT(C)-2024	20.00 [508.0]	24.00 [609.6]						217 [98]					
BT(C)-2424	24.00 [609.6]	24.00 [609.6]						212 [96]					
BT(C)-2430	24.00 [609.6]	30.00 [762.0]						206 [93]					
BT(C)-2436	24.00 [609.6]	36.00 [914.4]						199 [90]					
BT(C)-1620-SSN	16.25 [412.5]	20.25 [514.4]	2.20 [55.9]								211 [95]	Laminate with Stainless Steel Top	2.45±1.3 [62.2±3.3]
BT(C)-2024-SSN	20.00 [508.0]	24.00 [609.6]									197 [89]		
BT(C)-2424-SSN	24.00 [609.6]	24.00 [609.6]									189 [85]		
BT(C)-2430-SSN	24.00 [609.6]	30.00 [762.0]									176 [79]		
BT(C)-2436-SSN	24.00 [609.6]	36.00 [914.4]									163 [74]		
BT(C)-1620-SSH	16.25 [412.5]	20.25 [514.4]	2.95 [74.9]	1/4-20	1.00 IN		1.63 [41.4]				Laminate with Stainless Steel Top	3.20±1.3 [81.3±3.3]	
BT(C)-2024-SSH	20.00 [508.0]	24.00 [609.6]					1.63 [41.4]						
BT(C)-2424-SSH	24.00 [609.6]	24.00 [609.6]					1.50 [38.1]						
BT(C)-2430-SSH	24.00 [609.6]	30.00 [762.0]					1.50 [38.1]						
BT(C)-2436-SSH	24.00 [609.6]	36.00 [914.4]					1.50 [38.1]						
M-BT(C)-1620-SSH	16.25 [412.5]	20.25 [514.4]	2.95 [74.9]	M6	25 mm		1.23 [31.2]	Stainless Steel Top	3.08 [78.2]				
M-BT(C)-2024-SSH	20.00 [508.0]	24.00 [609.6]					1.66 [42.2]						
M-BT(C)-2424-SSH	24.00 [609.6]	24.00 [609.6]					1.66 [42.2]						
M-BT(C)-2430-SSH	24.00 [609.6]	30.00 [762.0]					1.66 [42.2]						
M-BT(C)-2436-SSH	24.00 [609.6]	36.00 [914.4]					1.27 [32.3]						