

TS.140

THE NEW GENERATION

ACTIVE ANTIVIBRATION SOLUTIONS



SCIENTIFIC INSTRUMENTS

Frequency	0,7 – 1000 Hz
Load capacity	0 – max. 140 kg
Dimensions	500 x 600 x 80 mm



This medium-sized dynamic vibration isolation system is ideally suited for all applications which need more space on top plate than is achievable with the TS 150. Drilled top plates with holes in metric or non-metric grid allow mounting of various equipment on the isolated table top.

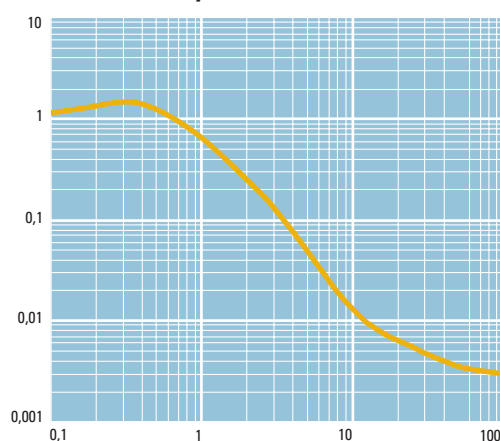
Inertial feedback is used via newly developed transducers to provide isolation from building vibrations, but also from vibration sources, placed on the system itself. No support media, like compressed air required. The new, precise automatic height adjustment mechanism stabilizes the top plate at an optimized working level even after major changes of load. Active isolation mode can be switched "ON" and "OFF" externally by a remote control (e.g. inside an acoustic enclosure).

Key Applications

- Scanning Probe Microscopy
- Scanning Near-Field Optical Microscopy
- Confocal Laser Scanning Microscopy
- Interferometry
- Metrology / Profilometry
- Nano Indentation
- Nano Lithography
- Ultrathin Film Applications
- Analytical Balances
- Bio-Physical Measurement
- Single Molecule Investigations
- Cell Micro Injection
- Patch Clamp
- IVF Techniques

The TS 140 is combining proven technical excellence with elegant and user friendly design

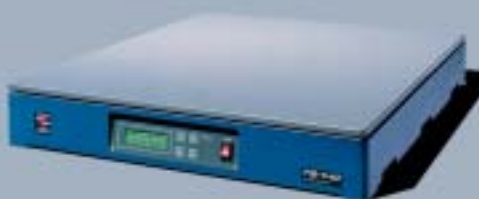
Transmissibility Curve (z)



TS 140

- The isolation of the TS 140 begins at 0,7 Hz, increasing rapidly to 40 dB beyond 10 Hz
- The lack of any low frequency resonance means much better performance than with common passive damping approaches
- The inherent stiffness of the TS 140 imparts excellent directional + positional stability
- The outstanding isolation performance of the TS 140 includes all six translational and rotational vibration modes

Technical Specifications	
Isolation	Dynamic 0.7Hz to 1kHz, purely passive beyond 1kHz
Transmissibility	See attached curve. Above 10 Hz transmissibility <0.01 (-40dB)
Maximum Load	140 kg
Size	500 x 600 x 80 mm (W x D x H)
Self-Weight	23 kg
Electrical	
Safety class	1
Power Consumption	Typically 10 W, maximum 50 W (70 VA)
Input Voltage	115 - 230 V AC \pm 10%, 50 - 60 Hz
Normal Environmental Conditions	
Protection Class	IP 20
Temperature Range	5°C - 40°C
Relative Humidity	10 - 90 % (5 - 30°C) / 10 - 60 % (30 - 40°C)
Application	Indoor
Altitude	Up to 2000 m (6.500 ft)
Table Top	
Size	500 x 600 mm (W x D)
Material	Damped aluminium sandwich construction 18 mm thick*



Front view

Side view

Top view

*Also available with aluminium top plate, tapped M6 on 25 mm centres.