

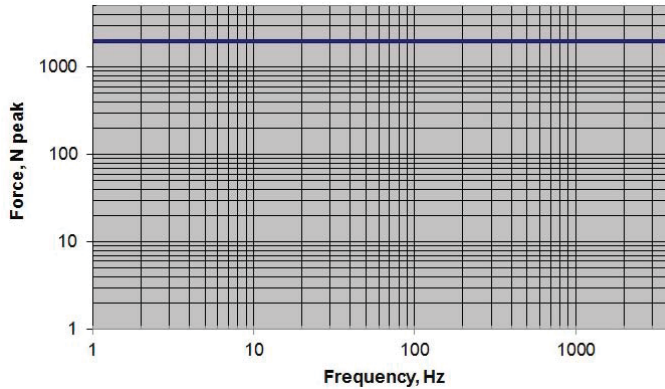
## MODAL 500 Exciter Technical Specifications

MODAL 500 in Trunnion Base  
(other base designs available)



*There's more to using and buying Modal Exciters than meets the eye. Misjudging modal testing applications can be fraught with unforeseen hazards that contaminate data and miscalculating hidden costs can be risky. MB Dynamics is the leading world-wide supplier of MODAL Exciters and MODAL Excitation Testing Applications.*

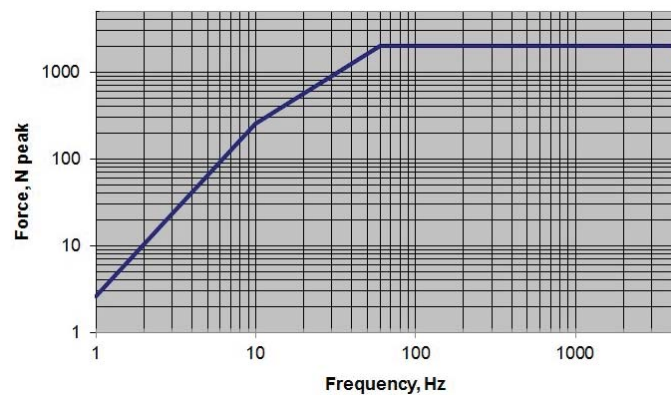
MODAL 500 Performance, Blocked Armature



Blocked Armature: high stiffness reflected by test item back into MODAL 500 and no movement of MODAL 500 body. A measure of low frequency force output

Free Armature: no stiffness reflected by test item back into MODAL 500 and no movement of MODAL 500 body. A measure of low frequency force output

MODAL 500 Performance, Free Armature



## MODAL 500, *continued*

### Technical Specifications (*Flexures for Armature Guidance*)

Force Output with Forced Air Cooling	· 2,000N pk sine excitation (450 lbf); 1,300N RMS random (290 lbf)
Force Output with Ambient Air Cooling	· 1,000N pk sine excitation (225 lbf); 650N RMS random (145 lbf)
Stroke	· 50mm peak-to-peak (2 in.)
Velocity	· 1.5m/s peak (60 inches/second)
Acceleration	· 68 g pk continuous sine
Frequency Range	· DC-1000 Hz usable to 4000 Hz
Moving Element Weight	· Less than 3.0kg (6.6 lbs.)
Driven-Axis Stiffness	· 7.5 N/mm (42 pounds/inch)
Exciter Weight, incl. Trunnion Base	· 200kg (440 pounds)
Stinger Attachment	· M6 (¼-28) female thread on shaker armature
Shaker Attachments	· Floor mount with trunnion base; suspension mount with multiple turnbuckles
Dimensions	· 457mm x 355mm Footprint x 516mm High (18"x14"x20 5/16")
Drive Cable Length	· 10m (32 ft.); up to 50m (160 ft.) optional
Accessory Kit	· Turnbuckles, wrenches, M6/M10/M4 stingers X 400mm long; (Optional bolt-on-masses for additional inertia with nuts & bolts)
Cooling	· Portable unit; optional Quiet Enclosure < 60dBA; or shop air
Force Sensor (optional)	· 2,225N (500 lbs.) tension & compress; 10 mV/lb (2248 mV/kN)

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