

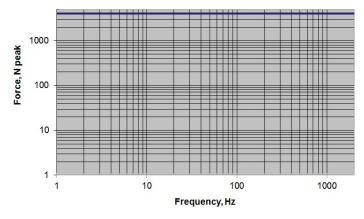
MODAL 1000 Exciter Technical Specifications

MODAL 1000 Exciter

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 worldwide supplier of MODAL Exciters and MODAL Excitation Testing Applications.



MODAL 1000 Performance, Blocked Armature



Blocked Armature: high stiffness reflected by test item back into MODAL 1000 and no movement of MODAL 1000 body. A measure of low frequency force output

Free Armature: no stiffness reflected by test item back into MODAL 1000 and no movement of MODAL 1000 body. A measure of low frequency force output

1000 - No. 20 - No. 2

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MODAL 1000 Performance, Free Armature

Frequency, Hz

1000

MODAL 1000, continued

Technical Specifications for MODAL 1000

Force Output with Forced Air Cooling
Force Output with Ambient Air Cooling

Stroke Velocity

Acceleration

Frequency Range

Moving Element Weight

Moving Element Axial Resonance

Driven-Axis Stiffness

Exciter Weight, incl. Trunnion Base

Stinger Kit (Stainless Steel)

Stinger Attachment Shaker Attachments

Dimensions in trunnion base

Drive Cable Length Power Amplifier Cooling (optional)

Accessory Kit & Inertial Mass (optional)

Force Sensor (optional)

- * 4,000N pk sine excitation (900 lbf); 2,600N RMS random (585 lbf)
- * 2,000N pk sine excitation (450 lbf); 1,300N RMS random (290 lbf)
- * 45mm peak-to-peak (1.8 in. p-p)
- * 1.75m/s peak (70 inches/second)
- * 25 g pk continuous sine (MODAL 1000 moving element only)
- * DC-2000 Hz
- * 16.4kg (36 lbs.)
- * > 2,000 Hz
- * 31 N/mm (180 pounds/inch)
- * 364kg (800 pounds)
- * $\frac{1}{2}$ " hex stingers: three 400mm long, three 200mm long; each has $\frac{3}{8-16}$ UNC threads on one end and $\frac{1}{4}-28$ UNF-2B on the other
- * Chuck (1/2" drill size) and wrench key for tightening on stingers
- * Floor mount with trunnion base; with vertical-only base; suspension mount with optional turnbuckles & trunnion base
- * 570mm X 485mm Footprint X 910mm High (to top of chuck)
- * 10m (32 ft.)
- * MB Model PVL-S (see Data Sheet; amplifier only, no field supply)
- * Portable unit; optional Quiet Enclosure < 60dBA; or shop air
- * Bolt-on-masses with nuts & bolts for mounting: 38kg and 50kg
- * 4,450N (1,000 lbs.) tension & compression; 5mV/lb (1124 mV/kN)