

Vibration Test System TV 50101-M



Picture TV 54216-M

DESCRIPTION

These exciters are specifically designed for modal and structure analysis. Modal thrusters up to 400 N (90 lbf) are excited by permanent magnets with light-weight rare earth magnets provided for mobile use. These thrusters are characterized by high cross axial stiffness.

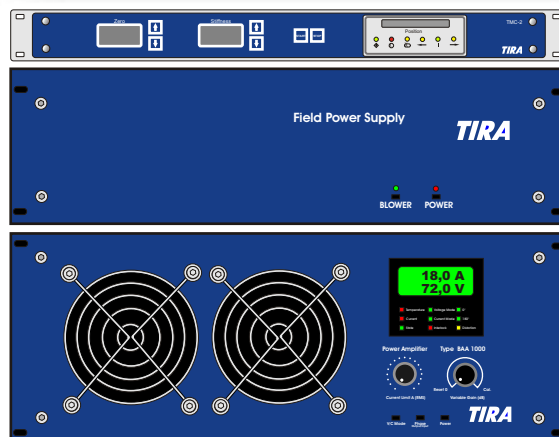
From 650 N (146 lbf) onwards, modal thrusters permit a max. displacement of 50,8 mm (2 inches) due to TMC control. TMC is an electronic armature position control system for precisely coupling the modal thruster to the specimen.

The armature datum adjustment allows the operator to offset the nominal position of the armature in relation to the body. A preload can easily be set. The axial stiffness can be adjusted electronically.

A standard feature on all modal generators is a swivel-frame. This allows a great variety of coupling options.

AMPLIFIER BAA 1000-ET

KVA ratings	1200 VA
Frequency range	DC-20 kHz
Voltage, max.	72 V
Current, max.	18 A
Load resistance	4 Ohm
Input voltage	< 5 V
Distortion	< 0.1 %
Signal to noise ratio	> 90 dB
Field voltage, max.	70 V
Field current, max.	3,2 A
Weight	76 kg (167.6 lb)
Size (WxHxD)	483 x 400 x 600 mm (19 x 15.7 x 23.6 in)



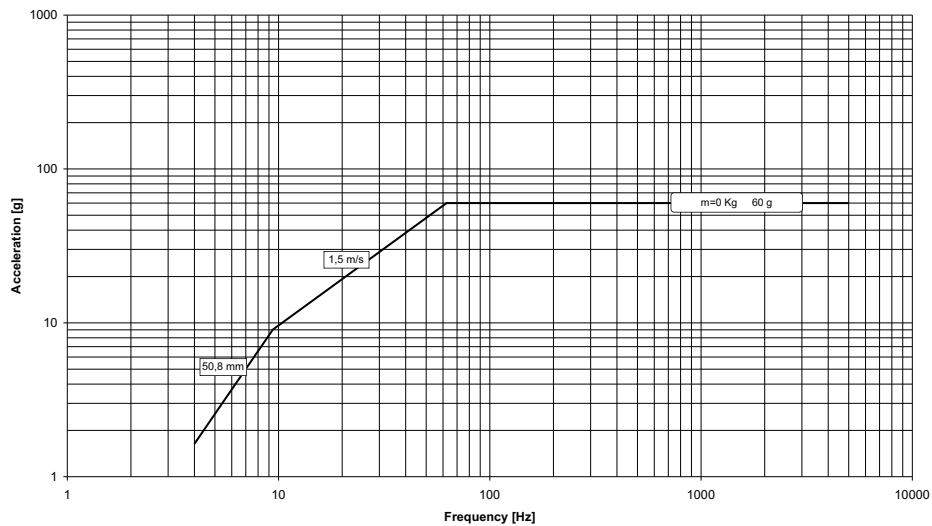
TECHNICAL SPECIFICATION VIBRATION GENERATOR S 50101- M

Rated peak force (N lbf)	Sine/Random	650/420	146/94
Frequency range (Hz)		DC-5000	DC-5000
Max. rated travel (mm inch)	Pk-Pk	50.8	2.0
Max. velocity (m/sec inch/sec)	Sine/Random	1.5/1.5	59/59
Max. acceleration (g)	Sine/Random	60/35	60/35
Max. power consumption at 230 V (kVA)		1.27	1.27
Nominal impedance (Ohm)		4	4
Suspension stiffness	Electronically adjustable		
Effective moving mass (kg lb)		1.3	3.5
Main resonance frequency (Hz)		> 3000	> 3000
Weight with trunnion (kg lb)		122	269
Stray magnetic field (mT)	without/with degauss kit	<8.5/<0.5	<8.5/<0.5
Coupling Thread (ø/mm)		M8	M8
Cooling (m ³ /h ft ³ /min)		80	47

PERFORMANCE DIAGRAM

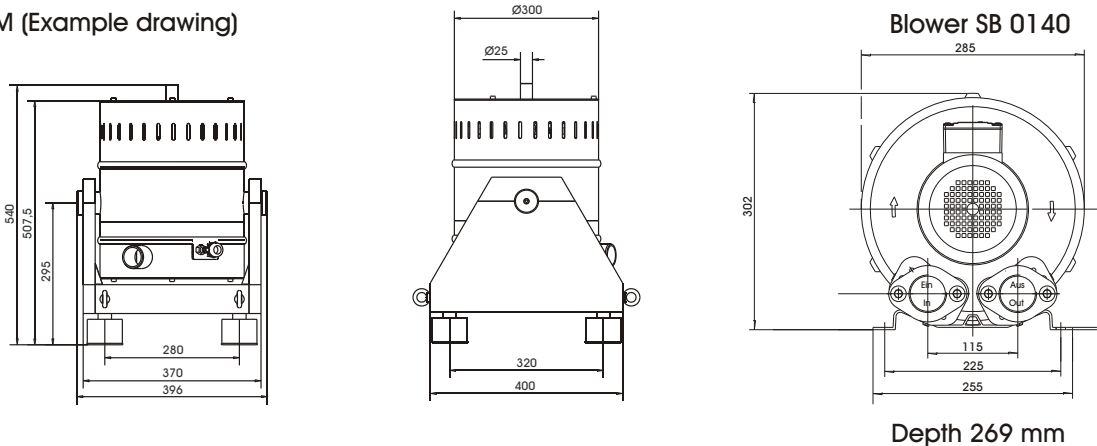
System Performance TV 50101-M

Force: 650 N max. Acceleration: 60 g max. Velocity: 1.5 m/s max. Displacement: 50,8 mm



DIMENSIONS in mm

S 50101-M (Example drawing)



Subject to modifications