

Vibration Test System TV 51140-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.

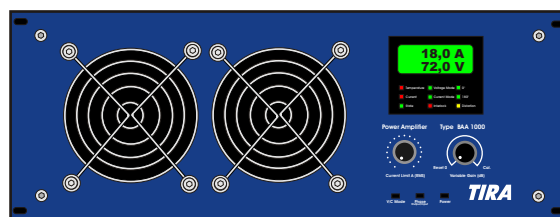
A standard feature on all modal generators is a swivel-frame. This allows a great variety of coupling options.



Picture TV 51075-M

AMPLIFIER BAA 1000

KVA ratings	1200 VA
Frequency range	2 Hz - 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
Weight	45 kg (99.2 lb)
Size (WxHxD)	483 x 190 x 600 mm (19 x 7.5 x 23.6 in)



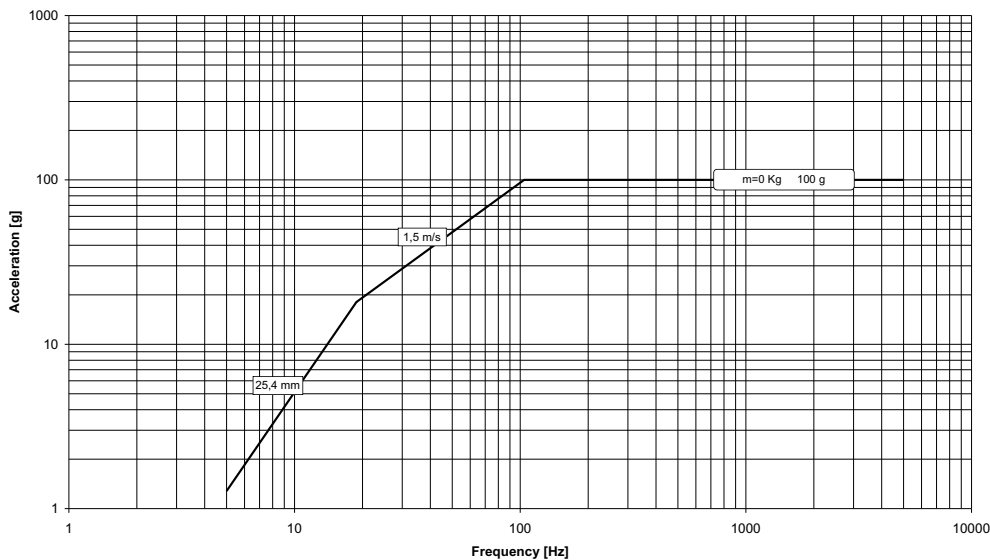
TECHNICAL SPECIFICATION VIBRATION GENERATOR S 51140-M

Rated peak force (N lbf)	Sine/Random	400/280	90/62
Frequency range (Hz)		DC-5000	DC-5000
Max. rated travel (mm inch)	Pk-Pk	25.4	1.0
Max. velocity (m/sec inch/sec)	Sine/Random	1.5/1.5	59/59
Max. acceleration (g)	Sine/Random	100/71	100/71
Max. power consumption at 230 V (kVA)		1.22	1.22
Nominal impedance (Ohm)		4	4
Suspension stiffness (N/mm lbf/inch)		4	22.8
Effective moving mass (kg lb)		0.4	0.88
Main resonance frequency (Hz)		>4000	>4000
Weight with trunnion (kg lb)		18	39.7
Coupling Thread (ø/mm)		M6	M6
Cooling (m ³ /h ft ³ /min)		80	47

PERFORMANCE DIAGRAM

System Performance TV 51140-M

Force: 400 N max. Acceleration: 100 g max. Velocity: 1.5 m/s max. Displacement: 25.4 mm

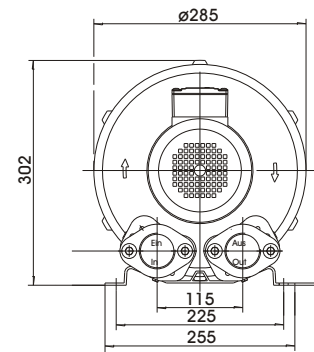


DIMENSIONS in mm

S 51140 -M (Example drawing)

Drawing not available yet

Blower SB 0140



Depth 292 mm

Subject to modifications