

Vibration Test System TV 51120-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 500

KVA ratings	500 VA
Frequency range	DC - 20 kHz
Voltage, max.	45 V
Current, max.	11.2 A
Load resistance	4 Ohm
Input voltage	< 5 V
Distortion	< 0.1 %
Signal to noise ratio	> 90 dB
Weight	25 kg (55.1 lb)
Size (WxHxD)	483 x 90 x 450 mm (19 x 3.5 x 17.7 in)



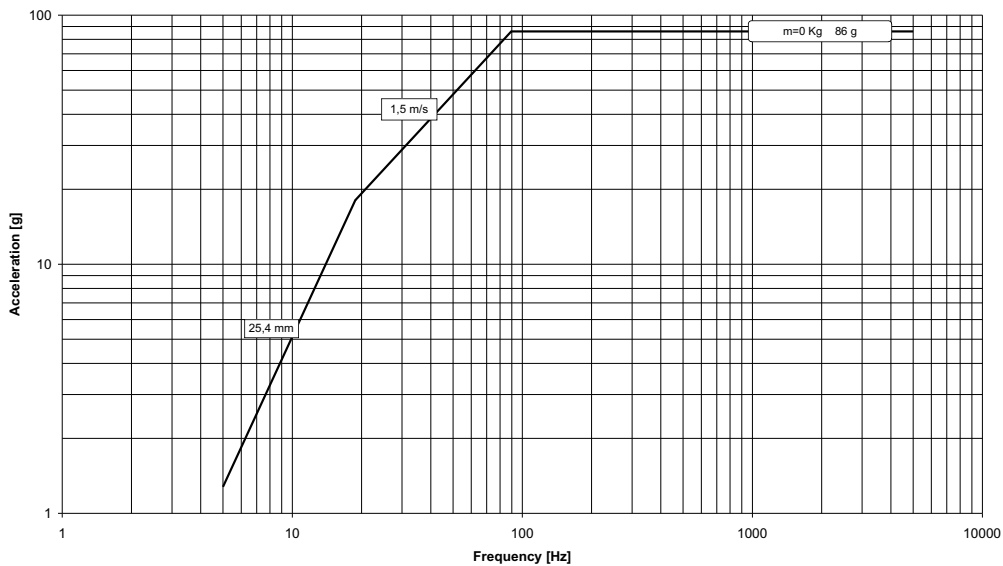
TECHNICAL SPECIFICATION VIBRATION GENERATOR S 51120-M

Rated peak force (N lbf)	Sine/Random	200/140	44/31
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	86/60	86/60
Max. power consumption at 230 V (kVA)		0.35	0.35
Nominal impedance (Ohm)		4	4
Suspension stiffness (N/mm lbf/inch)		4	22.8
Effective moving mass (kg lb)		0.23	0.51
Main resonance frequency (Hz)		>6000	>6000
Weight with trunnion (kg lb)		12	26.5
Coupling Thread (ø/mm)		M6	M6
Cooling (m ³ /h ft ³ /min)		40	24

PERFORMANCE DIAGRAM

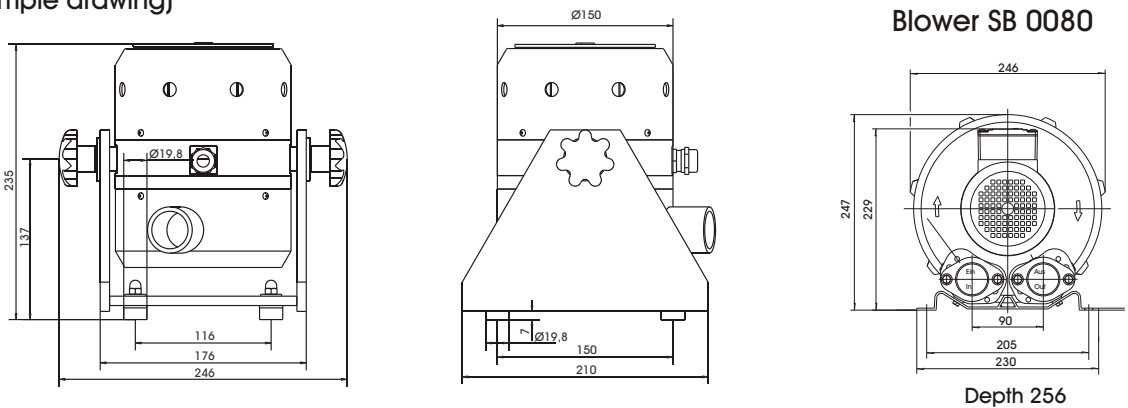
System Performance TV 51120-M

Force: 200 N max. Acceleration: 86 g max. Velocity: 1,5 m/s max. Displacement: 25,4 mm



DIMENSIONS in mm

S 51120-M (Example drawing)



Subject to modifications