

Vibration Test System TV 51140 - C



DESCRIPTION

In all fields of industry, in aviation, the automotive industry and in power stations vibration analyses and measurements for determining the vibration transmission are increasingly carried out.

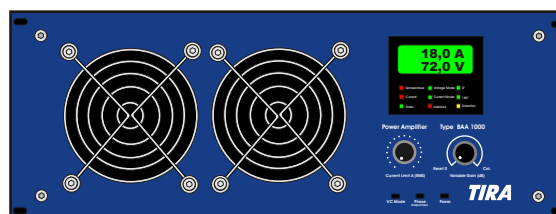
A large variety of measuring sensors is necessary to realize such investigations. These measuring sensors have to be checked for their accuracy and calibration in defined time intervals.

As most of the measuring sensors have a large measuring range and large frequency ranges, special shakers for calibrating these sensors are required.

TIRA has risen to this challenge and designed a unique shaker which meets these requirements. This newly developed shaker is equipped with a special guide system and a vibration system made of ceramic material. It is characterised by a very high utilisable frequency range up to 25 kHz and with the appropriate measuring equipment it is optimally suitable for professional calibration applications.

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)



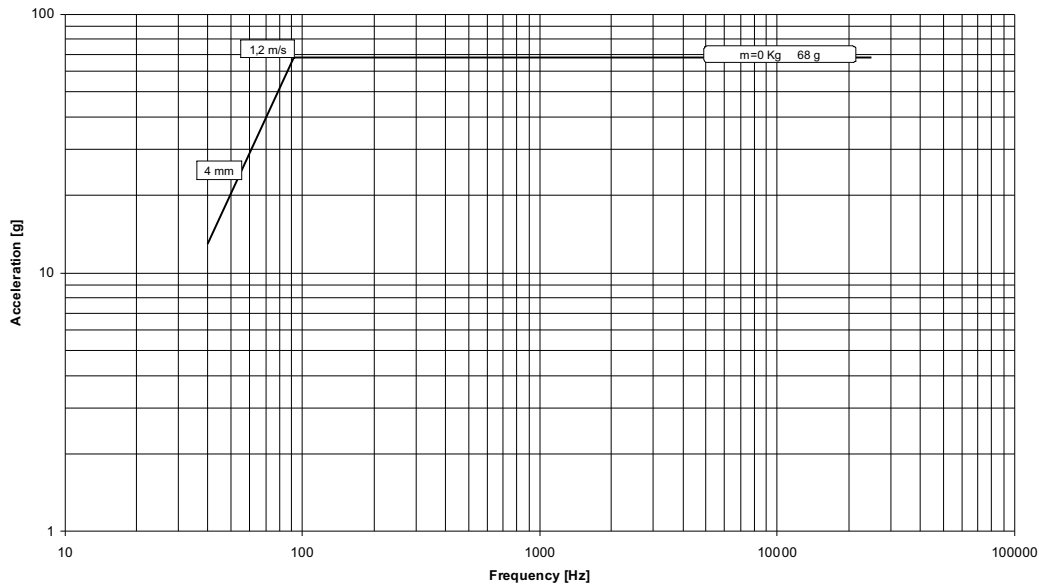
TECHNICAL SPECIFICATION VIBRATION GENERATOR S 51140-C

Rated peak force (N lbf)	Sine/Random	400/200	90/45
Frequency range (Hz)		40-25000	40-25000
Max. rated travel (mm inch)	Pk-Pk	4	0.2
Max. velocity (m/sec inch/sec)	Sine/Random	1.2/1.2	47/47
Max. acceleration (g)	Sine/Random	68/34	68/34
Max. power consumption at 230 V (kVA)		1.22	1.22
Nominal impedance (Ohm)		4	4
Effective moving mass (kg lb)		0.60	1.32
Main resonance frequency (Hz)		>19000	>19000
Weight with trunnion (kg lb)		21	46.3
Armature (ø/mm ø/inch)		54	2.1
Cooling (m³/h ft³/min)		80	47

PERFORMANCE DIAGRAM

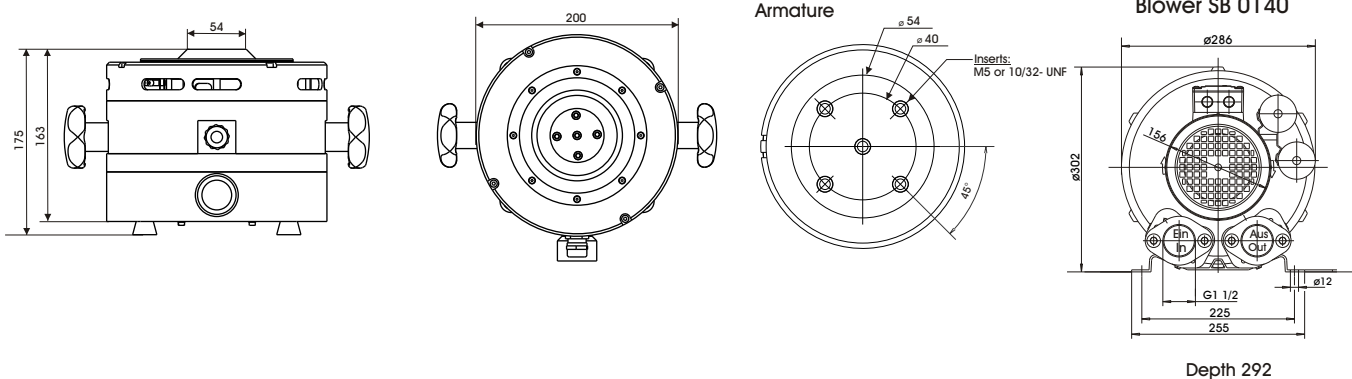
System Performance TV 51140-C

Force: 400 N max. Acceleration: 68 g max. Velocity: 1,2 m/s max. Displacement: 4 mm



DIMENSIONS in mm

S 51140-C (Example drawing)



Subject to modifications