

- **Model TV 51110: 100 N, 10.2 kgf**
- **Model TV 51120: 200 N, 20.4 kgf**

TIRA vib

Vibration generator

TIRAvib 51110
TIRAvib 51120



DESCRIPTION

The TIRA vibration generators TV 51110 and TV 51120 are designed as both stationary and portable wide band exciter sources to reproduce environmental conditions.

TIRA vibration generators are designed for continuous operation. They are fitted with a light weight rugged magnesium armature and a tested and proven suspension system which provides excellent lateral and rotational restraint as well as axial stiffness.

Several optional features make the generators available in shaker and modal shaker variations.

TIRA also offer Customer specific fixtures for test applications to complete the system.

TIRA's fully equipped package, including Digital Vibration Controller enables, the user to test under all national and international standards such as DIN, ISO, ASTM, BS, MIL, IEC, etc...

POWER AMPLIFIER

FOR TIRAvib 51110

sinus continuous rating 120 VA
voltage 22 V
current 5.5 A
distortion < 0.1 %
weight 8 kg
size (WxHxD) 483x90x450mm

FOR TIRAvib 51120

sinus continuous rating 500 VA
voltage 45 V
current 11.2 A
distortion < 0.1 %
weight 25 kg
size (WxHxD) 483x90x450mm

MODAL SHAKER



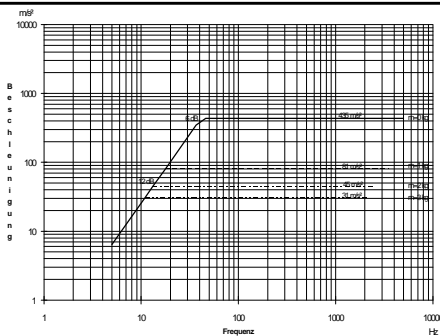
SUSPENSION SYSTEM



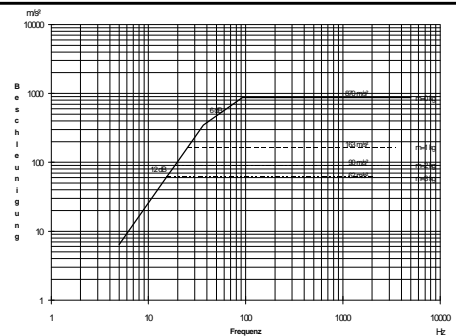
Technical Specification

		TIRAvib 51110	TIRAvib 51120
Rated peak force [N (kgf)]	Sine/Random	100 (10.2) / 50 (5.1)	200 (20.4) / 100 (10.2)
Frequency range [Hz]		2 - 7000	2 - 7000
Max. rated travel [mm]		13	13
Max. velocity [m/s]	Sine/Random	1.5 / 1.5	1.5 / 1.5
Max acceleration [g]	Sine/Random	43 / 30	87 / 61
Rated current [A]		5.5	11.2
Nominal impedance [W]		4	4
Suspension stiffness [N/mm]		5	5
Effective moving mass [g]		230	230
Main resonance frequency Hz]		> 6500	> 6500
Weight with trunnion [kg]		10	10
Cooling [m³/h]		-	90

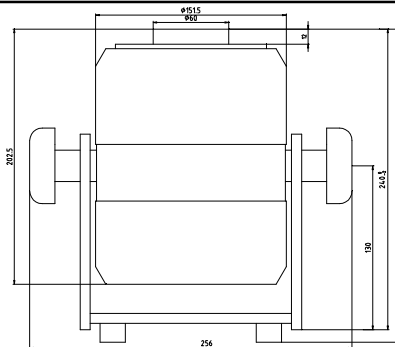
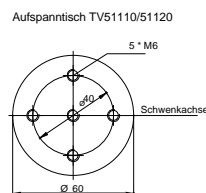
PERFORMANCE DIAGRAM TV 51110



PERFORMANCE DIAGRAM TV 51120



DIMENSIONS



TV 51110/51120

MANUFACTURER



- ◆ MEASURING
- ◆ TESTING
- ◆ BALANCING
- ◆ CNC

Eisfelder Straße 23-25
D-96528 Schalkau
Telefon +49 36766 / 280-0
Telefax +49 36766 / 280-99
e-mail: ST@tira-gmbh.de
www: www.tira-gmbh.de



PRODUCT RANGE

- Shaker 9 N - 245 kN
- Servohydraulic up to 1000 kN
- Longstroke systems up to 600 mm
- Amplifier, digital / analog
- Modal shaker
- Vibrations control system
 - Sine, Random, Shock, Mixed mode
- Oil film slip table for horizontal test
- Climate and temperature system
- Headexpander and special construction